



INTERNATIONAL HAZAR
SCIENTIFIC RESEARCHES
CONFERENCE - II

ABSTRACT BOOK

EDITORS:

Assoc. Prof. Dr. Irade HALILOVA

Alina AMANZHLOVA

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II. INTERNATIONAL HAZAR SCIENTIFIC RESEARCHES CONFERENCE

April 10 - 12, 2021
Baku, Azerbaijan
Khazar University



ABSTRACT BOOK

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Assoc. Prof. Dr. Irade HALILOVA

Alina AMANZHLOVA

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CONGRESS ID

INTERNATIONAL HAZAR SCIENTIFIC RESEARCHES CONFERENCE - II

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DATE-PLACE

April 10 - 12, 2021

Baku, Azerbaijan, Khazar University

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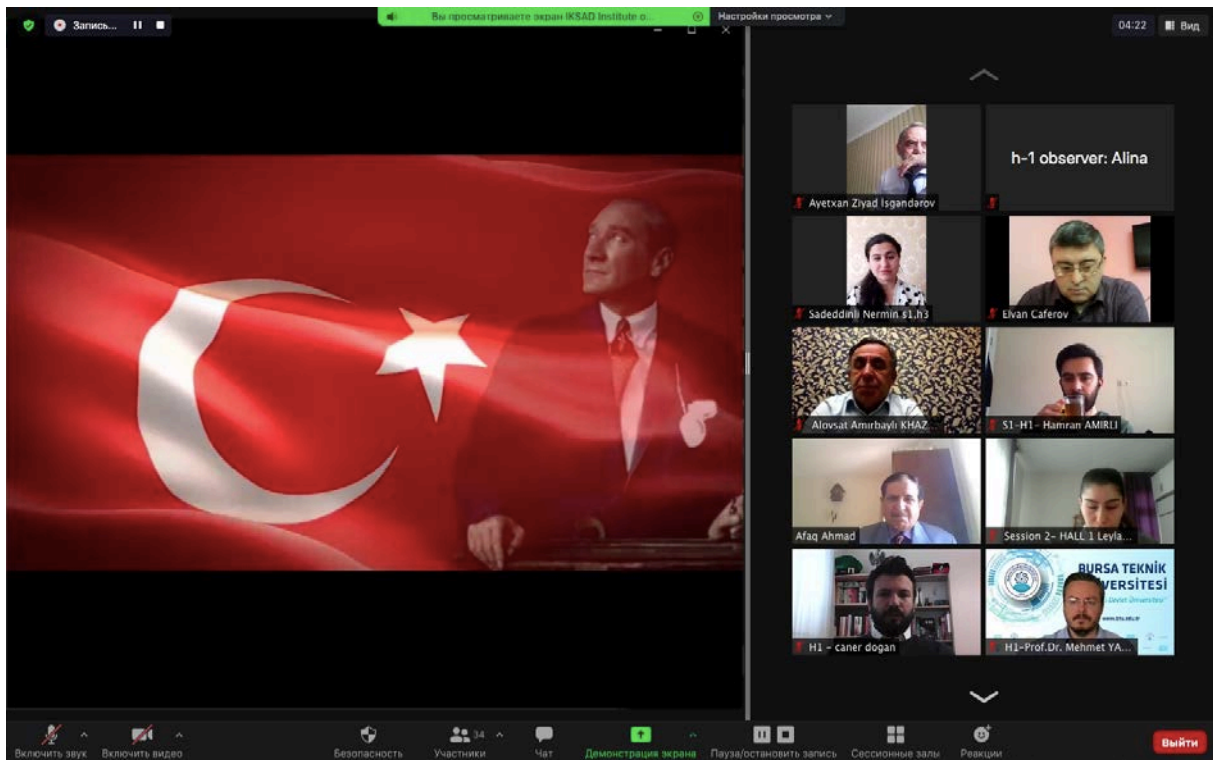
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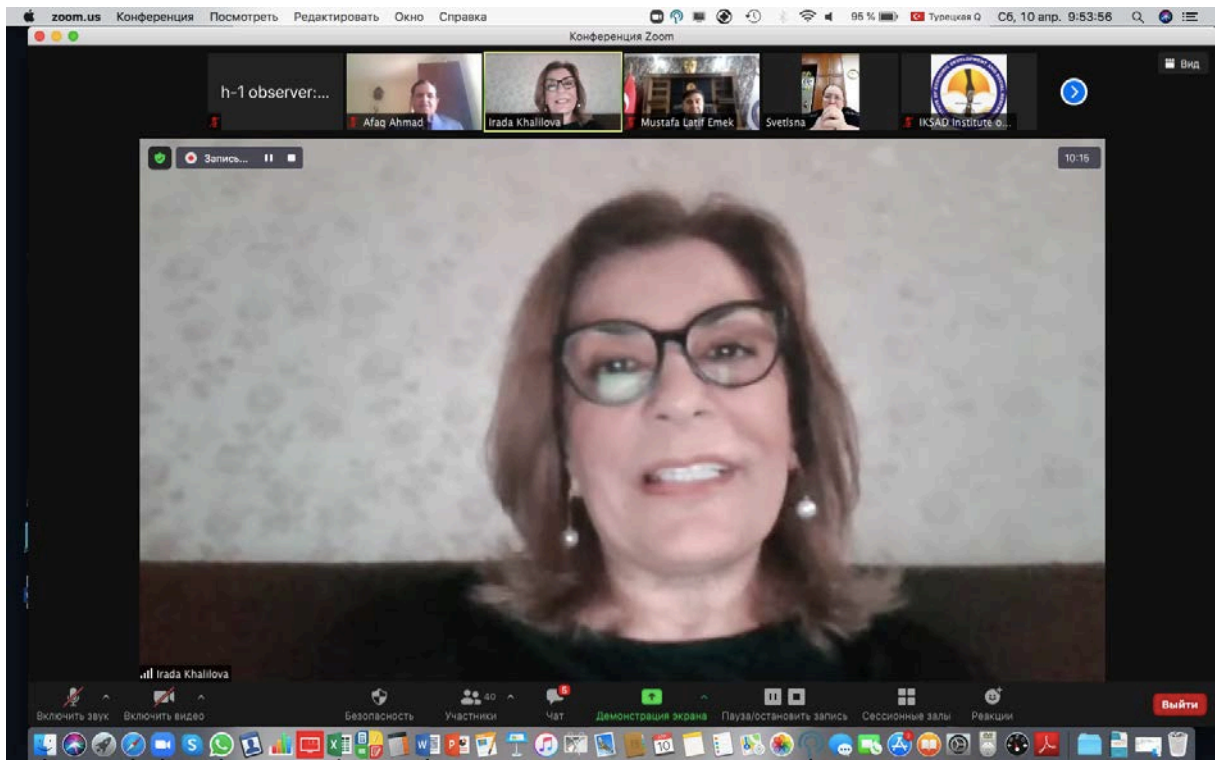
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Zoom Meeting - Hall-3

Recording... Remaining: 09:54:09

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Observer HALL-3

Elvan Caferov

HOLL-3, prof.Hacer Huseynova

xuraman efendiyeva

Ayeban Ziyad Isgandarov

Sadeddinli Nermin st.h3

Alovzat Amirbayli KHAZAR Universiti

Irada Khalilova

Elnarə Həsənova

Qəmər Babayeva

Irada Hajiyeva

Samira Əmirahova

Participants: 13

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Zoom Meeting

Recording... Remaining: 08:45:38

Participants (12)

Q. Find a participant

- Observer Hall-3 (Co-host, me)
- HALL-3 Iosefina Blazsani Batto
- IK Irada Khalilova (Co-host)
- S Svetlina
- HP HOLL-3, prof.Hacer Huseynova
- AA Alovzat Amirbayli KHAZAR Univer...
- AZ Ayeban Ziyad Isgandarov
- H3 SAFFET CENGIZ
- IH Irada Hajiyeva
- QB Qəmər Babayeva
- SH Sadeddinli Nermin st.h3
- X xuraman efendiyeva

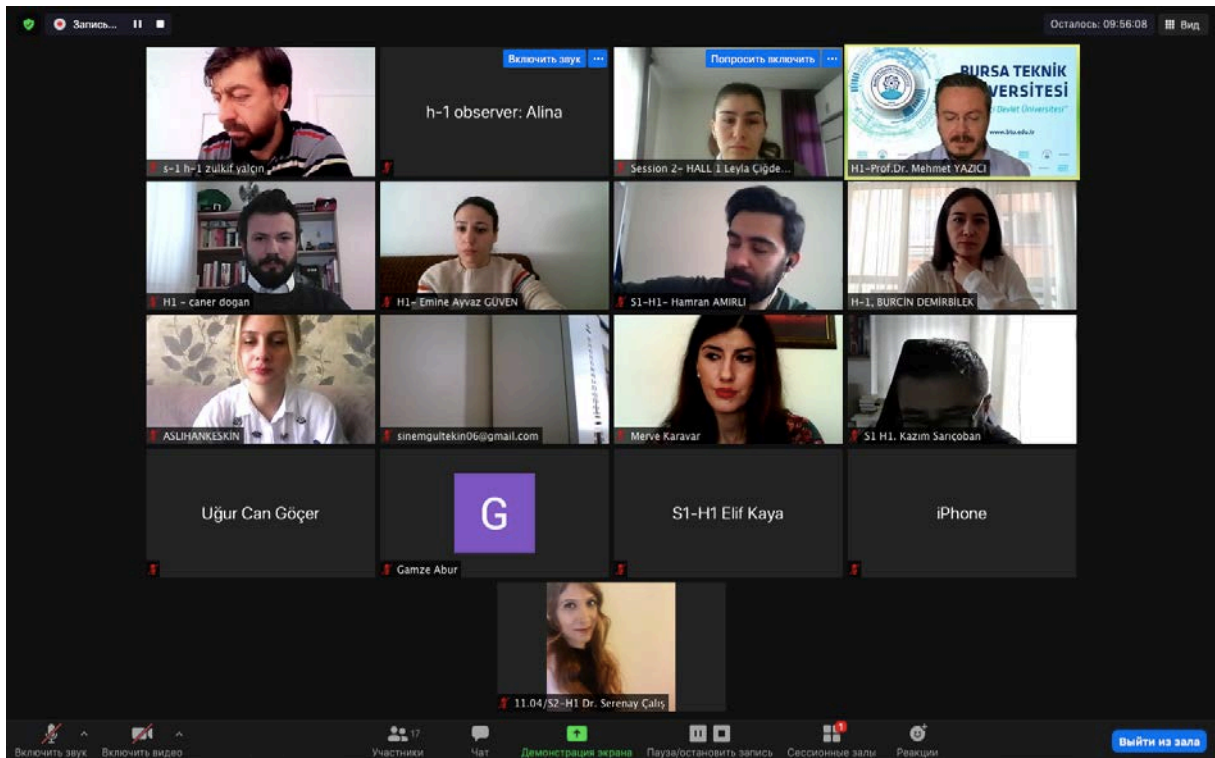
Romanian Language and Culture Center, Baku

Translations

- Dec. 2018, Heyter Aliyev, Mənimə, ISBN 978-9952-28-442-3, pp. 61-64
- Oct 2019-May 2020, Ana Blandiana Festival, poems translations, subscriptions, coordination of student's papers
- Oct 2018-May 2019, Ana Blandiana Festival, poems translations, subscriptions, coordination of student's papers
- May 2019, Ana Blandiana prize for translation by the student Gökən
- May 2019, Ana Blandiana Creation and Interpretation Festival, May 2019, Brno, poems are published in Dobra jazyka. Festival de poezie și interpretare Ana Blandiana. Traduceri 2019. Antologie, Carmen Buzăni, Mișla Munteanu, Mariana Ciobanu Iordan. Editura Vatra Viești, Făguraș, 2019. ISBN 978-606-686-213-6, pp. 72-76

HALL-3 Iosefina Blazsani Batto

Mute All Reclaim Host





Recording

Вы просматриваете экран Session-2 Hall-2

Настройки просмотра

Осталось: 01:40:04

Microsoft PowerPoint (Product Activation Failed)

NON-ZERO CROSS-SECTION CORRELATION OF INDIVIDUAL EFFECTS

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Department of Computer Science and Mathematics, Nigeria Police Academy, 27/11, Kano, Nigeria

E-mail: olusunmi@pda.eding, olusunmi@pda.com

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Session-2 Hall-2, Dr. Olusunmi T. Olorunpomi

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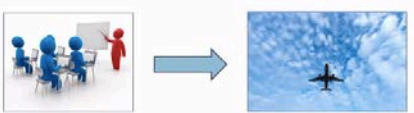
Вы просматриваете экран Hall 1, Dr. M.Melih

Настройки просмотра

Осталось: 03:57:48

AIM OF THE RESEARCH

to define the problems of CRM trainings' contribution to flight safety, whereby to offer the recommendations in order to solve these problems.



Hall 1, Dr. M.Melih BASDE

h-1 observer: Alina

H1- Cengiz Mesut BÜKEÇ

H1 moderator: ONUR ARAZ

H1- Munever SANCA

H-1, ENESKAYMAZ

H1-Hilal Oztay

H1-Muhammet DEMIRBAS

S-3 H-1, BUGRA YILMAZ

S-3, H-1 Ebra Nur ZUREL

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Вы просматриваете экран Hall-4-Nazia Jamil

Осталось: 08:57:24

Bacterial plastics: Production, Structure, Molecular basis and Application

Dr. Nazia Jamil

Institute of Microbiology and Molecular Genetics
University of the Punjab, Lahore-54590, Pakistan.
nazia.mmg@pu.edu.pk
ORCID NO: <https://orcid.org/0000-0003-4252-7954>

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Вы просматриваете экран H4-Uğur Can Göçer

Осталось: 09:41:20

AMAÇ

Bu çalışmamızın amacı, fonksiyonel spor ekipmanları (bosu topu, direnç bandı, sağlık topu, kettlebell, yer merdiveni) ile yapılan kuvvet antrenmanlarının genç erkek basketbolcularda denge ve anaerobik performans üzerine etkisini araştırmaktır.

PURPOSE

The purpose of this study is to investigate the effects of strength training with functional sport equipments (bosu ball, resistance band, medicine ball, kettlebell, agility ladder) on balance and anaerobic performance in young male basketball players.

h-4 observer: Alina

H4-SÜMEYYE BARUT

H4-BURCU AKÇA

H4-Uğur Can Göçer

H4-Ayşe EROĞLU

H-4 Muhammed Yar

Poprosite включить

h4: Serkan Kızılca

session1-Hall-4-Nazia Jamil

Включить звук Включить видео Участники Чат Демонстрация экрана Пауза/остановить запись Сессионные залы Реакции **Выйти из зала**

Вы просматриваете экран H-4 Muhammad Yar

Осталось: 09:14:52

Assessing Angiogenic activity of 2dDR

2dDR increases VEGF production by HAECs

A

Days	Control	2dDR 100 μ M	2dDR 1 mM
1	~0.5	~1.0	~1.5
3	~0.5	~1.2	~1.8
5	~0.5	~1.0	~1.5

B

Days	Control Media	Control Dressing	Alginate + 5% 2dDR	Alginate + 10% 2dDR	Alginate + 15% 2dDR
1	~0.5	~0.5	~0.5	~0.5	~0.5
3	~0.5	~0.5	~1.5	~3.5	~5.5
7	~0.5	~0.5	~0.5	~0.5	~0.5

A. Quantification of VEGF production by HAECs in response to direct 2dDR treatment (100 μ M and 1 mM). (B) VEGF production of HAECs when B.2dDR, 2dLR, and DG were released from alginate dressings. (***) $p \leq 0.001$, (**) $p \leq 0.01$, (*) $p \leq 0.05$, not significant (ns) $p \geq 0.05$, $n = 3$.

Microvascular Research. 2020 Jun 25:104035.

Участники Чат Демонстрация экрана Пауза/остановить запись Сессионные залы Реакции **Выйти из зала**

Вы просматриваете экран Shahryar Sorooshian

Осталось: 06:02:43

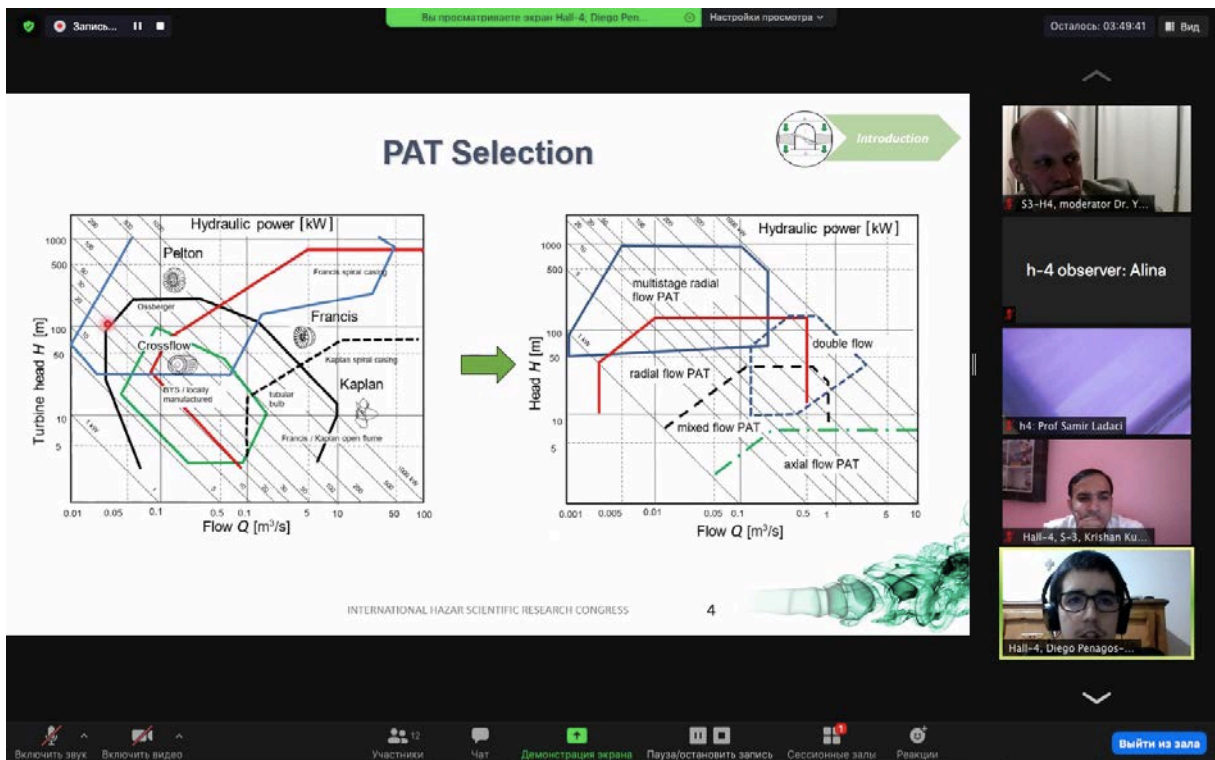
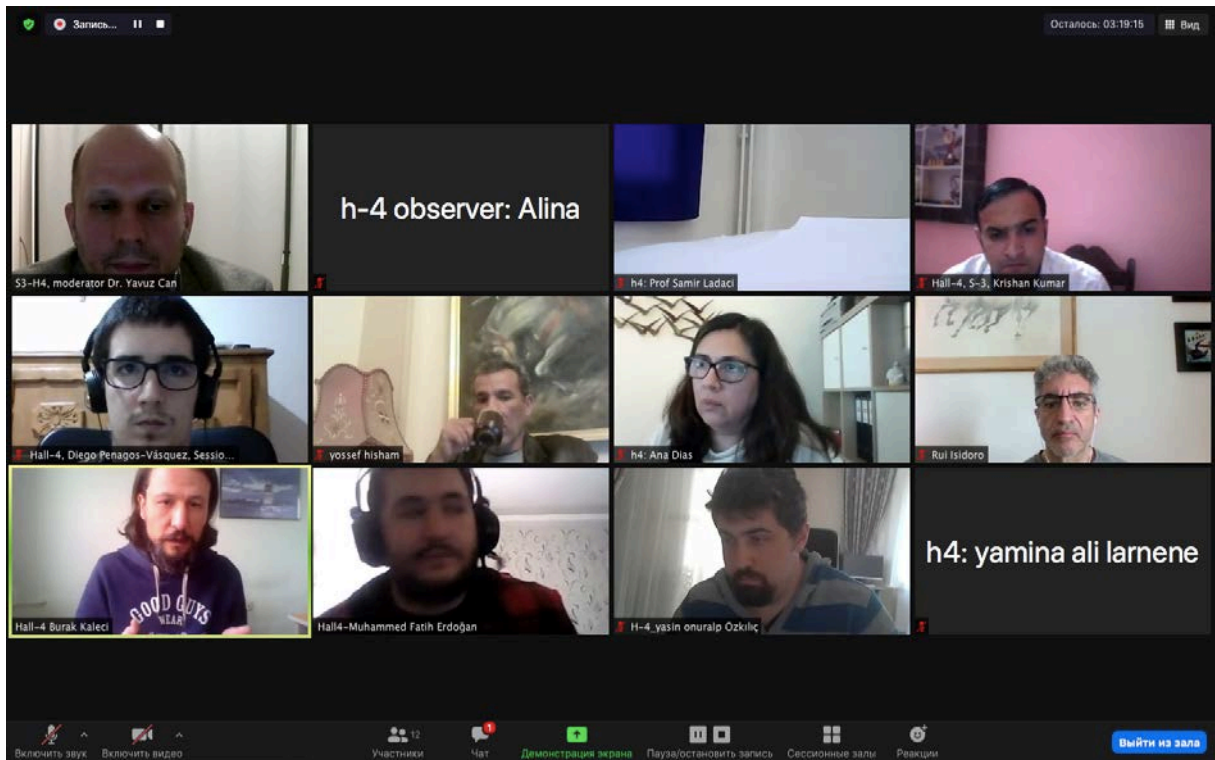
A CASE STUDY ON MANAGEMENT OF A DIGITAL TRANSFORMATION PROJECT FOR A TRADITIONAL BUSINESS

Mehrdad Parsaee,
Shila Khademi Sharifabad,
Shahryar Sorooshian

Shahryar (Shah.)

Shahryar Sorooshian

Участники Чат Демонстрация экрана Пауза/остановить запись Сессионные залы Реакции **Выйти из зала**



Вы просматриваете экран Hall-3, Ayesha Rafiq

Осталось: 09:49:45

PowerPoint Slide Show - International Hazar Congress - PowerPoint

International Hazar Scientific Researches and Conference-II

h-1 observer: Alina

ΔΕΡΜΕΝΤΖΗΣ

E.Ə.Nəgijevə

h3: Rakesh Kulkarni

Session - I, H-3, Tooba J.

h3: Rutuja Mandavkar

Shusen Lin

Prof. Dr. Mohammad...

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Выйти из зала

Запись... Вы просматриваете экран Sadia Jumana

Осталось: 08:09:18

INTERNATIONAL HAZAR SCIENTIFIC RESEARCHES CONFERENCE-II

Finite Difference Solution of Blasius Problem and Heat Transfer Under Bio-magnetic Fluid

Sadia Anjum Jumana and M. Ferdows





Research Group of Fluid Flow Modelling and Simulation
Department of Applied Mathematics
University of Dhaka
Dhaka-1000, Bangladesh

Sadia Jumana

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Выйти из зала


Запись... | Осталось: 07:38:38 | Вид

 h-1 observer: Alina	E.Ə.Nağiyeva	ΔΕΡΜΕΝΤΖΗΣ	
Hall-3, Ayesha Rafiq	h3: Rakesh Kulkarni	Shusen Lin	Prof. Dr. Mohammad... OLOWOPOROKU O...
h3: Rutuja Mandavkar	 Nathaniel Ogunseye	 Oluwaseun Olowoporoku	 Session-1, H-3, Tooba JABEDN

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Запись... | Осталось: 06:13:23 | Вид



S2_H4_Aysun Demirdogen

h-4 observer: Alina

- David_OLAYUNGO, Hall-...
- S2_H4_Aysun Demirdogen
- H4_Ayşenur Erdil
- H4 moderator: Pr. GRAA A...

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Вы просматриваете экран Dr. Ebubekir Dirican... Настройки просмотра

Осталось: 09:39:27 Вид

MEME KANSER KAN ÖRNEKLERİNDE
ACE-2 GEN EKSPRESYONU

EXPRESSION of the ANGIOTENSIN CONVERTING ENZYME 2 (ACE-2) GENE In BLOOD of BREAST CANCER PATIENTS

BAYBURT ÜNİVERSİTESİ
2008

Assist. Prof. Dr. Ebubekir DİRİCAN, PhD.
Bayburt University
2021

meral ekim

H-2 OBSERVER

Zafer Cengiz ER

H2 - Batuhan GENCER

Dr. Ebubekir Dirican...

Выключить звук

Выключить звук

Участники 12 Чат Демонстрация экрана Пауза/остановить запись Сессионные залы 6 Реакции

Выйти из зала

Осталось: 08:20:48 Вид

meral ekim

H-2 OBSERVER

H-2 Ömer Faruk ASLAN

H2-NURHAN ERKAYA

H2-Fatma Zehra ÖZDEN

H-2 ÖZGÜR YEŞİLYURT

Dr. Ebubekir Dirican-HALL2

H2 - Batuhan GENCER

H-2 moderator: meral ekim

sinemgultekin06@gmail.com

Abdullah Yıldızbaşı

Ana Dias

Rui Isidoro

Участники 13 Чат Демонстрация экрана Пауза/остановить запись Сессионные залы Реакции

Выйти из зала

Вы просматриваете экран HALL-2, Ulviyya I... | Настройки просмотра | Осталось: 05:28:42 | Вид

Data Mining Type for Semi - Structured Data

To extract data from big data, it is necessary to apply data mining techniques to large amounts of semi-structured data. However, many data mining technologies today are not designed to work with such documents. Therefore, data extraction technologies need to be adapted to work with this type of data. The possibility of different semi-structured data types and their "flexible" nature make it important to consider both the content and the structured data of semi-structured data when applying these technologies. Therefore, there are two main complementary approaches: "*structure mining*" and "*content mining*".

Structural mining- is the process of separating information from structure. There are two types of semi-structured data structures: physical and logical. Referring to Figure 2, element "tags" define its physical structure, and nesting there defines its logical structure.

Content mining- is the process of separating information from the content of a document. Content is a series of indivisible and unstructured parts i.e. paragraphs, figures, images, etc. contains. If we try to explain it with XML, the content can be attributed to the part between the start (<...>) and end (<... />) tags. Content mining is an advanced text analysis that integrates the properties of semi-structured documents as a semantic link transmitted by text content.

H2-Elvan Deniz
H-2 OBSERVER
HALL-2, Ulviyya Ibra...
Ismail Ceylan
H2-Seher Lort Tosun

Включить звук | Включить видео | Участники | Чат | Демонстрация экрана | Пауза/остановить запись | Сессионные залы | Реакции | Выйти из зала

Вы просматриваете экран H2-YUSUF ZALAOĞLU | Настройки просмотра | Осталось: 05:06:08 | Вид

SUPPORT OF MN ADDITION TO CRACK PROPAGATION ALONG GRAIN BOUNDARIES IN BI-2212 SUPERCONDUCTING SYSTEM

by
YUSUF ZALAOĞLU

April 11, 2021

H2-YUSUF ZALAOĞLU
H-2 OBSERVER
HALL-2, Ulviyya Ibra...
Ismail Ceylan
AYSU

Включить звук | Включить видео | Участники | Чат | Демонстрация экрана | Пауза/остановить запись | Сессионные залы | Реакции | Выйти из зала

Вы просматриваете экран h2: DR. Abid Huss... Настройки просмотра

Осталось: 03:27:13 Вид

CFPT-1-7-3-6_ABD_HUSSANAN (Protected View) - PowerPoint Muhammad Nasir

File Home Insert Draw Design Transitions Animations Slide Show Review View MathType Help Tell me what you want to do

Governing Equations

We define the similarity variables

$$\eta = y \sqrt{\frac{a}{\nu_f}}, u = axF'(\eta), v = -\sqrt{ax\nu_f}F(\eta), N = ax \sqrt{\frac{a}{\nu_f}}G(\eta), \theta(\eta) = \frac{T - T_\infty}{T_0 - T_\infty}$$

We obtain the following set of momentum equations

$$\left(\frac{1}{(1-\phi)^{3.5}} + K \right) F''(\eta) + \left(1 - \phi + \phi \frac{\rho_L}{\rho_f} \right) F(\eta)F'(\eta) - \left(1 - \phi + \phi \frac{\rho_L}{\rho_f} \right) F'^2(\eta) - M \left(1 + \frac{3(\sigma-1)\phi}{\sigma+2-(\sigma-1)\phi} \right) F'(\eta) + KG'(\eta) = 0,$$

$$\left(\frac{1}{(1-\phi)^{3.5}} + \frac{K}{2} \right) G'(\eta) + \left(1 - \phi + \phi \frac{\rho_L}{\rho_f} \right) F(\eta)G'(\eta) - \left(1 - \phi + \phi \frac{\rho_L}{\rho_f} \right) F'(\eta)G(\eta) - K(2G(\eta) + F''(\eta)) = 0.$$

12

Включить звук Включить видео Участники 7 Чат Демонстрация экрана Пауза/остановить запись Сессионные залы Реакции Выйти из зала

Вы просматриваете экран Jyoti Gupta Настройки просмотра

Осталось: 03:19:36 Вид

Introduction

INTRODUCTION

- ▶ The red fox is one of the most widely distributed wild carnivores world wide(Eurasia, North America, and Australia) [1, 2]. It is a opportunistic predators, but the rabbits is primary prey for red foxes due to moderate size and accessibility[3].
- ▶ Rabbit hemorrhagic disease (RHD) is a highly infectious disease and caused high rabbit mortality in China(1984), Europe(1988) and Spain(1991)[4, 5]. It is a horizontally transmitted disease with no recovery [6, 4, 5]. It is not genetically inherited[6].
- ▶ The use of RHD as a biocontrol agent to control the rabbit pest population in Australia(1993) and New Zealand(1997) results rabbit numbers started a decline initially. But its long-term effects are a decline in the abundance of healthy red foxes and an increase in alternative prey species [7].

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Zoom Meeting

Recording...

Remaining: 08:49:43

Hall-5 Observer

H5- Ozge Doğanay ERBAŞ K...

H5 moderatör: OZCAN ŞAHİN

H5-Esra Tuğçe ŞENTÜRK

H5-ZUHAL ADALI

H-5 sadi akyuz

H5 H-5 SINEM OZTURK ERDEM

Abbas Fadhi Abdul qader

H5- Semih AÇIKBAŞ

H5 ZEKİ MUT

nuray kos

H-5 HM

TR 11:04 12.4.2021

Zoom Meeting

Recording...

Remaining: 09:14:26

Hall-5 Observer

H5- Ozge Doğanay ERBAŞ K...

H5 moderatör: OZCAN ŞAHİN

H5-ZUHAL ADALI


H5- Semih AÇIKBAŞ

H5 sadi akyuz

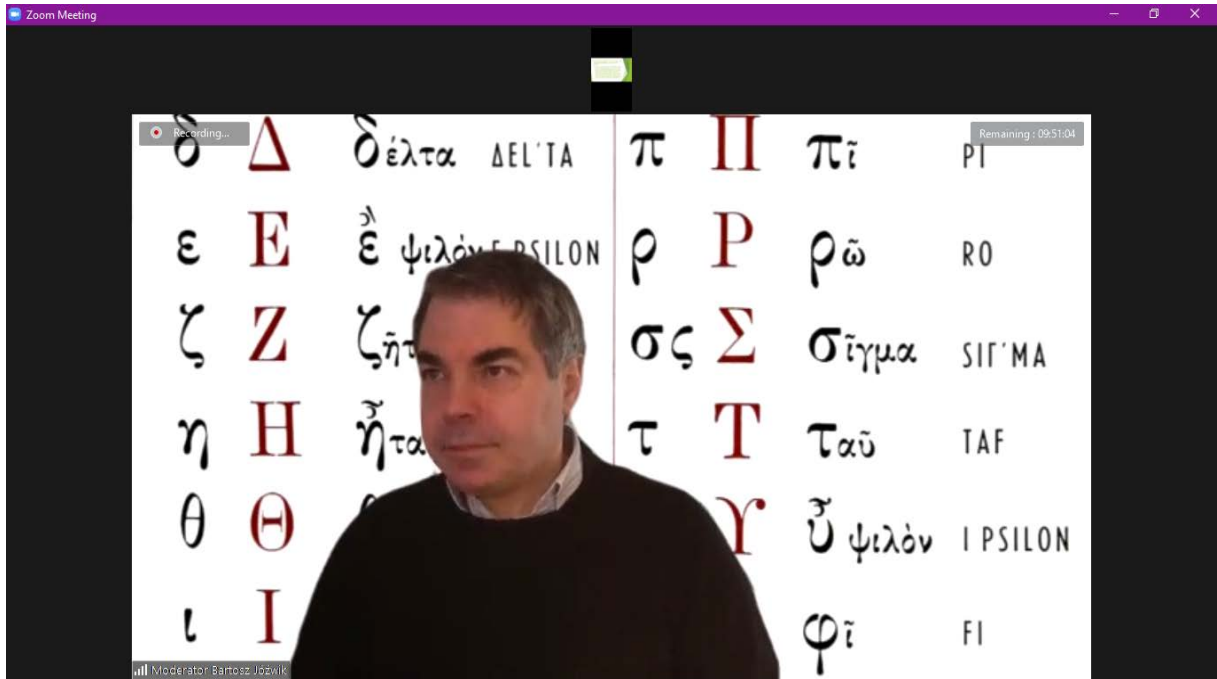
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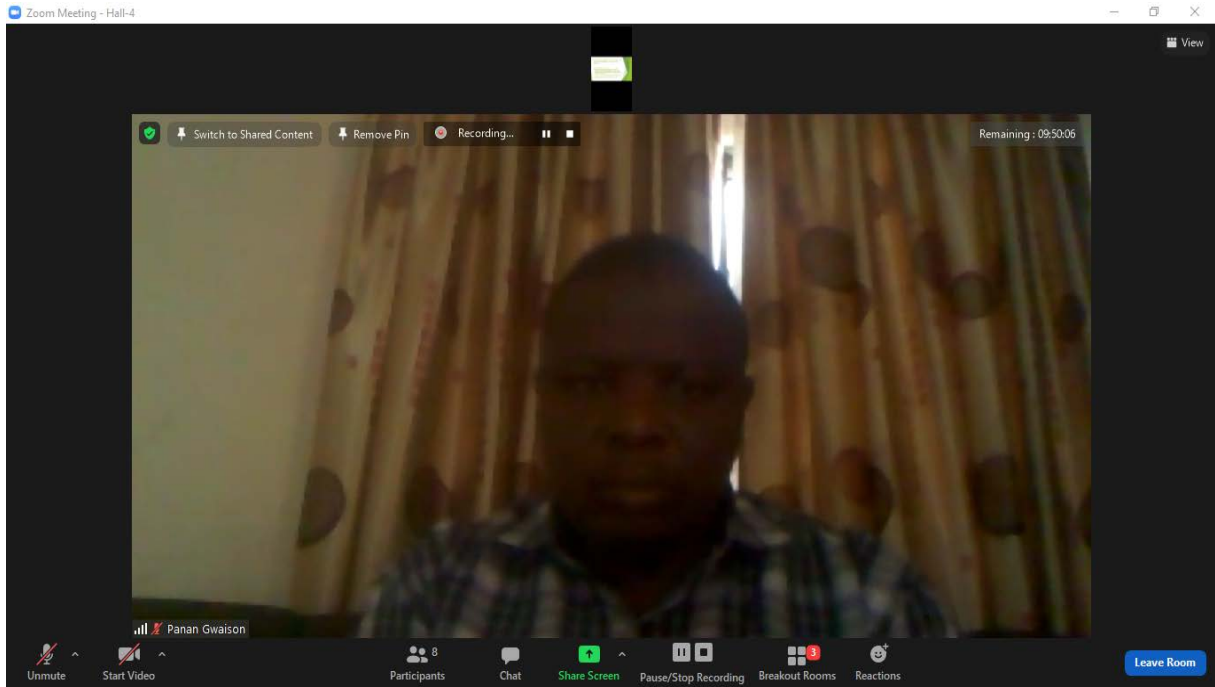
- Üretici ile alıcı arasında, ürünlerin nihai alım ve satış koşullarının bir sözleşme ile önceden düzenlenmesi ve karşılıklı olarak taahhüt edilmesidir.

Between the producer and the buyer, the final purchase and sale conditions of the products are pre-arranged in a contract and mutually committed.



TR 10:39 12.4.2021





Zoom Meeting - Hall-4

H-4 Observer Sa...
Moderator Bart...
s1h4 Moham...
Hall-4 Dr. ADHY...
s 1, hall 4, Re...
Panah Gwais...

Recording... PPT-khazar_We-are-the-Covid-19's-victims-too - Microsoft PowerPoint

Remaining: 09:25:11

1 We are the Covid-19's victims too:
A Qualitative Study of the informal, Micro, Small, and Medium Enterprises (MSME), whose Victimized by Covid-19
By: Dr. Adily Firdaus.
Presented In: INTERNATIONAL HAZAR SCIENTIFIC RESEARCHES CONFERENCE-II
April 10-12, 2021
Baku, Azerbaijan, Khazar University

2 Introduction
3 The research focus is
4 Research Methods
5 Research Findings

Click to add notes

Unmute Start Video Participants 12 Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Zoom Meeting - HALL-1 / SALON-1

You are viewing H1-ÖZGE KARAKAYA SUZAN's screen View Options

Recording... Remaining: 09:35:38

COVID-19

- Koronavirus (COVID-19) bugüne dek tüm dünyada 134 milyona yakın kişiyi etkilemiş ve 2,90 milyondan fazla kişinin ölümüne neden olmuştur.
- Coronavirus (COVID-19) has affected nearly 134 million people worldwide and caused the deaths of more than 2.90 million people so far.

Şu anda çocukların daha hafif semptomlara sahip olduğu ve yetişkinlere kıyasla hastaneye yatma olasılığının daha düşük olduğu bilinmektedir.
Clinical manifestations of children's COVID-19 cases were less severe than those of adult patients. It is known that children are less likely to be hospitalized than adults.

<https://covid19.who.int/> Erişim tarihi: 11.04.2021
Dong, Y., Mo, X., Hu, Y., Qi, X., Jiang, P., Jiang, Z., & Tong, S. (2020). Epidemiology of COVID-19 among children in China. *Pediatrics*

H1- Esra OZ...
H1- OBSERVER...
H1- Mehmet...
H1- ÖZGE KARA...
h1 moderator...

2 unassigned participants

Unmute Start Video Participants 10 Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Aramak için buraya yazın

10:18
11.04.2021

Zoom Meeting - HALL-1 / SALON-1

Recording... Remaining: 04:36:45

h1 moderator: Assoc.Prof. S... H-1 OBSERVER h1: GOKKIZ S2 H1:Dr. Serenay Çalgı S2-H1- Hacı Mehmet Yeğiltaş

H-1 Melike SOYDAN H-1 Selin Aycan SEZER H1-MENŞURE ALKİŞ KÜÇÜK... H-1 Lütfiye Timur Gamze Sarmaşık Abur

H1-Mustafa ÇINAR Mute Jones Saksana S2H1-Erol TAŞ S2-h1 Erdem KAYA

Mute Start Video Participants 14 Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Aramak için buraya yazın 15:17 11.04.2021

Zoom Meeting - HALL-1 / SALON-1

You are viewing h1: Dr. Bhavtosh Awasthi's screen View Options Remaining: 03:42:00

Role of queuing theory model in effective business Strategies planning

Bhavtosh Awasthi
Assistant Professor
Department of Mathematics
JECRC University, Jaipur-303905 Rajasthan (India)
Email: bhavtosh123@gmail.com

h1: Dr. Bhavtosh... h-1 observer S3-H1-Fath... Sedat İlhan Ask to Unmute Dr Binyam Zi...

Unmute Start Video Participants 6 Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Aramak için buraya yazın 16:12 11.04.2021

Recording

H-4 Observer Sa... Moderator Bart... Hall-4 Dr. ADHY... s1h4 Moham... ADENOMON Panan Gwai...

Adenomon-Advancement of Statistical Computing in North Central Nigeria.pptx - Microsoft PowerPoint

File Home Insert Design Transitions Animations Slide Show Review View

Paste New Slide Section Clipboard Slides

Font Paragraph Drawing Editing


Slides Outline

4

5

6

7



Click to add notes

Slide 7 of 9 "Office Theme" English (UK) 50%

Zoom Meeting - HALL-3 / SALON-3

You are viewing H-3 Cengizhan SARI's screen

View Options

Recording...

Remaining: 09:41:45

Participants (13)

Find a participant

observer h3 : Nurlan (Co-host, me)

H-3 Cengizhan SARI

Ahmet YIKILMAZ

h3 moderator: Şebnem Aslan

Ayşe Özdemir

Azra Y. Jadallah

Chinara Gahramanova

H-3 Aysu önal

H-3 Gulshah HUR

H-3_Kibra OLAGAN

H-3-MEHMET ALTUN

H-3-Sümeyra Topal

H-3 Ferhat BOLUKÇU


6 unassigned participants

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Mute All Reclaim Host

SONUÇ VE ÖNERİLER

- ✓ Obezitenin erken dönemde teşhis edilip uygun önlemlerin alınması, metabolik ve kardiyovasküler hastalık riskini azaltacaktır.
- ✓ İrisinin keşfedilmesiyle, bu miyokinin obezite ve tip 2 diyabet başta olmak üzere birçok hastalığın tedavisinde kullanılabilecek yeni bir potansiyel ajan olabileceği umudu doğmuştur.



Zoom Meeting

Recording...

Remaining: 09:18:43

Participants (15)

Find a participant

observer h3 : Nurlan (Co-host, me)

Chinara Gahramanova

h3 moderator: Şebnem Aslan

H-3-Sümeyra Topal

Ahmet DİNÇ

Ahmet YIKILMAZ

Ayşe Özdemir

Azra Y. Jadallah

H-3 Aysu önal

H-3 Cengizhan SARI

H-3 Gulshah HUR

H-3_Kibra OLAGAN

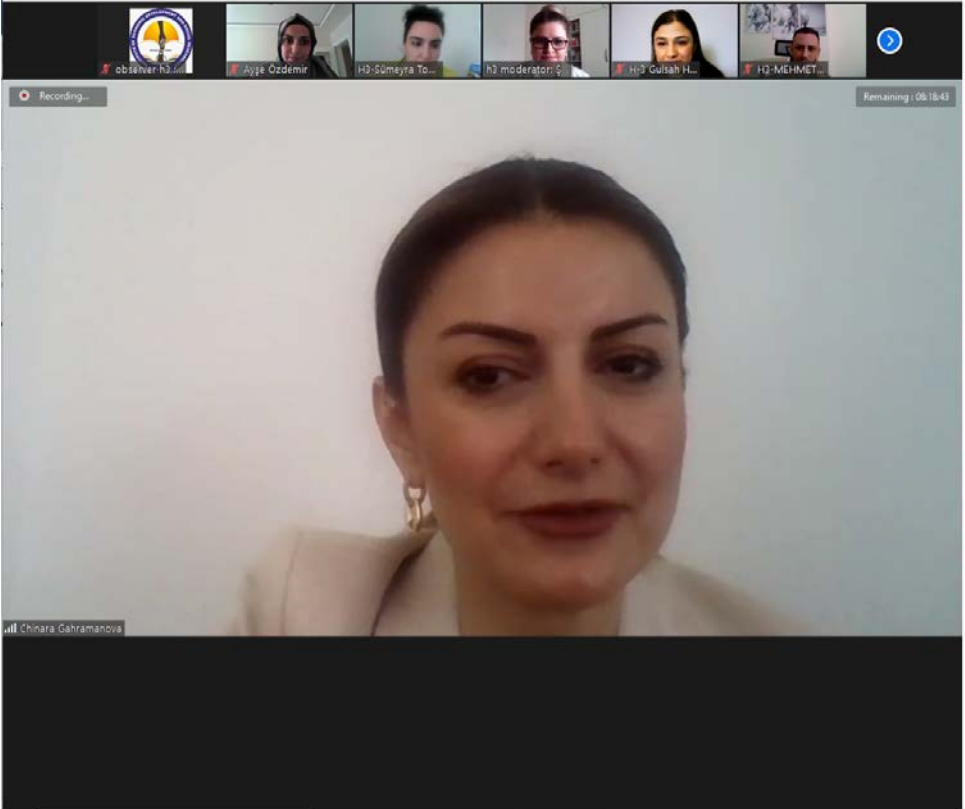
H-3-Ferhat BOLUKÇU

H-3-MEHMET ALTUN

Nursan Çınar

Mute All Reclaim Host

Chat



Zoom Meeting - H3-1-3 / SALON-3

You are viewing H3-Leman ALLAHVERDIYEVA's screen. View Options

Recording

Remaining: 06:19:44

Participants (11)

Find a participant

- H3 observer: Nurlan (Host, me)
- H3-Leman ALLAHVERDIY...
- IKSAD Institute of E... (Co-host)
- H-3 Yunus EKICI
- H3-Fuat BAŞÇIĞIÇI
- H-3, Musa ATGÜR
- H3-Derya Çiñi Şimşek
- H3-Fatihnur Terlemez
- H3-Şafak Çöze
- hulya yakar
- S2-H3 moderator: Rasim Soylu

Unmute Start Video

Participants Chat Share Screen Record Breakout Rooms Reactions

Leave Room Mute All

Windows

Zoom Meeting

Recording...

Remaining: 03:37:42

Participants (12)

Find a participant

- H3 observer: Nurlan (Co-host, me)
- Hall-3, Hilario Martines Arano
- H-3 moderator, Adem Volcu
- DM Dr. Muhammad Imran Chaudhry
- CS Carla Santos
- HM h3: MuwafaqMahdi
- HG Hall-3, Geselle Garcia Beltrán
- Hall-3, José Alberto Arano-Martí...
- HO Hall-3, Osvaldo Borja
- M mohammed.alavi
- Cristina Dias
- HC Hall-3 Cristina Flores

Mute All Reclaim Host

INSTITUTO POLITÉCNICO NACIONAL

Sección de Estudios de Posgrado e Investigación
Escuela Superior de Ingeniería Mecánica y Eléctrica – Unidad Zacatenco

**"FUZZY LOGIC AND CHAOTIC ATTRACTORS IN
DECISION-MAKING FUNCTIONS"**

by

**M.S. Hilario Martines Arano
M.S. José Alberto Arano Martínez**

Mexico City April 11th

Zoom Meeting - HALL-3 / SALON-3 You are viewing Hall-3, Geselle Garcia Beltrán's screen View Options

Recording... Remaining: 03:22:43 View

Third-order nonlinear optical measurement: Two-wave mixing method

The superposition of two coherent and polarized laser beams originates an induced optical birefringence resulting from the optical Kerr effect.

The high-irradiance of the pump beams promotes the modification of the state of polarization of the probe beam.

That results in changes in the transmittance of the optical Kerr effect system and changes in the refractive index of the material.

Hall-3, Geselle Garcia Beltrán

1 unassigned participant

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Participants (13)

Find a participant

- h3 observer: Nurlan (Co-host, me) 🔇
- HG Hall-3, Geselle Garcia Beltrán 🔇
- DM Dr. Muhammad Imran Chaudhry 🔇
- CS Carla Santos 🔇
- HM H-3 moderator, Adem Yolcu 🔇
- HM h3: MuwafaqMahdi 🔇
- H Hall-3, Mohammed Alavi 🔇
- Hall-3, Hilario Martines Arano 🔇
- Hall-3, José Alberto Arano-Martínez 🔇
- HO Hall-3, Osvaldo Borja 🔇
- TA Timothy A. OGUNLEYE from NIG... 🔇
- Cristina Dias 🔇
- HC Hall-3 Cristina Flores 🔇

Mute All Reclaim Host

Zoom Meeting Recording... Remaining: 03:11:22

SOME NEW RESULTS FOR UNSTEADY MASS AND HEAT TRANSFER OF NON-NEWTONIAN FLUID

Preliminary

Tensors

Hall-3, Dr. Muhammad Imran Chaudhry

1 unassigned participant

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Participants (15)

Find a participant

- h3 observer: Nurlan (Co-host, me) 🔇
- DM Dr. Muhammad Imran Chaudhry 🔇
- CS Carla Santos 🔇
- HM H-3 moderator, Adem Yolcu 🔇
- HO H-3 OBSERVER Marina Kountouri 🔇
- HM h3: MuwafaqMahdi 🔇
- Hall 1 and Hall 2, Prof. Dr. Moham... 🔇
- H Hall-3, Mohammed Alavi 🔇
- HG Hall-3, Geselle Garcia Beltrán 🔇
- Hall-3, Hilario Martines Arano 🔇
- Hall-3, José Alberto Arano-Martínez 🔇
- HO Hall-3, Osvaldo Borja 🔇
- TA Timothy A. OGUNLEYE from NIG... 🔇
- Cristina Dias 🔇
- HC Hall-3 Cristina Flores 🔇


Mute All Reclaim Host

Zoom Meeting

Recording... Remaining : 02:49:02

Introduction ...

- In Nigeria, the first case of new coronavirus disease was reported on 27th February, 2020 in south-western part of the country through a 44-year old Italian citizen, who was later tracked, retained, treated, and discharged. Since then, it has been spreading rapidly through many contacts he had met within the shortest period of his stay in Nigeria. Today, this new COVID-19 has affected many, both male and female including the rich and the poor. A total of 163,736 have been affected by COVID-19 pandemic.



Timothy A. OGUNLEYE from NIGERIA

Zoom Meeting - Hall-3 You are viewing S2-H3- Moderator-Ph.D. BERTAN B...'s screen View Options

Recording... Remaining : 06:47:30

Experimental protocol

A total of twenty-two rats were randomly divided into four groups as follows:


Group I (n = 5): Intact control animals

Group II (n = 6): Control animals given Vit U (50 mg/kg/day, for three consecutive days) by gavage technique.

Group III (n = 5): Animals administered a single dose of GalN (500 mg/kg) intraperitoneally.

Group IV (n = 6): Animals given Vit U 1 h before treatment with GalN.

At the end of the third day, all the animals were sacrificed under anesthesia, 6 h after GalN administration and brain tissues were dissected out.



Qamar Babayeva

2 unassigned participants

Unmute Start Video Participants 7 Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Zoom Meeting - Hall-3

You are viewing H3-Md. Ariful Islam's screen

View Options

Recording... Remaining: 03:04:22

MD. ARIFUL ISLAM
UNIVERSITY OF RAJSHAHI
DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR
BIOLOGY
BANGLADESH

Participants (12)

Find a participant

- observer h3: Nurlan (Co-host, me)
- H3-Md. Ariful Islam
- Prof. Dr. Ali Bilgili
- Dr. Latife Ceyda IRKIN (Şamil...)
- Erol Taş
- h3: sakine yalçın
- H3-Serkan BAKIRCI
- Hall 3 Doç. Dr. Bayrak Hanedan
- Hall-3, S-3, Dr. Rida Batool
- N. Tekin Onder
- s-3,h-3, yahia amina
- S3,H3-Beyhan TAŞ

Zoom Meeting - Hall-3

Participants 12

Chat

Share Screen

Pause/Stop Recording

Breakout Rooms

Reactions

Leave Room

Mute All

Reclaim Host

Zoom Meeting - Hall-3

You are viewing Konul Qehremanova's screen

View Options

Recording... Remaining: 02:51:10

Mikroorganizm-
biodestruktörlerin seçilmesi

Participants (12)

Find a participant

- observer h3: Nurlan (Co-host, me)
- Konul Qehremanova
- Dr. Latife Ceyda IRKIN (Şamil...)
- h3: sakine yalçın
- H3-Md. Ariful Islam
- H3-Serkan BAKIRCI
- Hall 3 Doç. Dr. Bayrak Hanedan
- Hall-3, S-3, Dr. Rida Batool
- N. Tekin Onder
- Prof. Dr. Ali Bilgili
- s-3,h-3, yahia amina
- S3,H3-Beyhan TAŞ

Zoom Meeting - Hall-3

Participants 12

Chat

Share Screen

Pause/Stop Recording

Breakout Rooms

Reactions

Leave Room

Mute All

Reclaim Host

Zoom Meeting - Hall-3 You are viewing Hall-3, S-3, Dr. Rida Batool's screen View Options

Recording... Remaining: 00:45:49 View

Participants (13)

Find a participant

- observer h3: Nurlan (Co-host, me)
- HS Hall-3, S-3, Dr. Rida Batool
- DL Dr. Latife Ceyda IRKIN (Şamli...)
- HS h3: sakine yalçın
- HA H3-Md. Ariful Islam
- HB H3-Serkan BAKIRCI
- HS Hall 3 Doç. Dr. Başak Hamedan
- KQ Konul Qehremanova
- N. Tekin Onder
- PD Prof. Dr. Ali Bilgili
- s-3,h-3, yahia amina
- ST S3,H3-Beyhan TAŞ
- U Uğur Can

Win Wind

Mute All Reclaim Host

Leave Room

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions

Zoom Meeting - Hall-3 You are viewing H3-Serkan BAKIRCI's screen View Options

Recording... Remaining: 00:28:00 View

Participants (13)

Find a participant

- observer h3: Nurlan (Co-host, me)
- HB H3-Serkan BAKIRCI
- DL Dr. Latife Ceyda IRKIN (Şamli...)
- HS h3: sakine yalçın
- HA H3-Md. Ariful Islam
- HS Hall 3 Doç. Dr. Başak Hamedan
- HS Hall-3, S-3, Dr. Rida Batool
- KQ Konul Qehremanova
- N. Tekin Onder
- PD Prof. Dr. Ali Bilgili
- s-3,h-3, yahia amina
- ST S3,H3-Beyhan TAŞ
- U Uğur Can

Win Wind

Mute All Reclaim Host

Leave Room

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions

Önemli, Dikkatle Okuyunuz Lütfen

- ❖ Kongremizde Yazım Kurallarına uygun gönderilmiş ve bilim kurulundan geçen bildiriler için online (video konferans sistemi üzerinden) sunum imkanı sağlanmıştır.
- ❖ Online sunum yapabilmek için <https://zoom.us/join> sitesi üzerinden giriş yaparak "Meeting ID or Personal Link Name" yerine ID numarasını girerek oturuma katılabilirsiniz.
- ❖ Zoom uygulaması ücretsizdir ve hesap oluşturmaya gerek yoktur.
- ❖ Zoom uygulaması kaydolmadan kullanılabilir.
- ❖ Uygulama tablet, telefon ve PC'lerde çalışıyor.
- ❖ Her oturumdaki sunucular, sunum saatinden 5 dk öncesinde oturuma bağlanmış olmaları gerekmektedir.
- ❖ Tüm kongre katılımcıları canlı bağlanarak tüm oturumları dinleyebilir.
- ❖ Moderatör - oturumdaki sunum ve bilimsel tartışma (soru-cevap) kısmından sorumludur.

Dikkat Edilmesi Gerekenler- TEKNİK BİLGİLER

- ◆ Bilgisayarınızda mikrofon olduğuna ve çalıştığına emin olun.
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- ◆ Kabul edilen bildiri sahiplerinin mail adreslerine Zoom uygulamasında oluşturduğumuz oturuma ait ID numarası gönderilecektir.
- ◆ Katılım belgeleri kongre sonunda tarafınıza pdf olarak gönderilecektir
- ◆ Kongre programında yer ve saat değişikliği gibi talepler dikkate alınmayacaktır

IMPORTANT, PLEASE READ CAREFULLY

- ❖ To be able to attend a meeting online, login via <https://zoom.us/join> site, enter ID "Meeting ID or Personal Link Name" and solidify the session.
- ❖ The Zoom application is free and no need to create an account.
- ❖ The Zoom application can be used without registration.
- ❖ The application works on tablets, phones and PCs.
- ❖ The participant must be connected to the session 5 minutes before the presentation time.
- ❖ All congress participants can connect live and listen to all sessions.
- ❖ Moderator is responsible for the presentation and scientific discussion (question-answer) section of the session.

Points to Take into Consideration - TECHNICAL INFORMATION

- ◆ Make sure your computer has a microphone and is working.
 - ◆ You should be able to use screen sharing feature in Zoom.
 - ◆ Attendance certificates will be sent to you as pdf at the end of the congress.
 - ◆ Requests such as change of place and time will not be taken into consideration in the congress program.
- Before your login to Zoom please indicate your name surname, **session number** and hall number,

exp. H-1, HILMI KEMAL ALTUN



Meeting ID: 889 1283 8607

Passcode: 306258



Meeting ID: 889 1283 8607

Passcode: 306258

PARTICIPANT COUNTRIES (32):

Turkey, Azerbaijan, Morocco, Pakistan, Nigeria, Algeria, India, Poland, Bangladesh, China, United Kingdom, Australia, Greece, Malaysia, Indonesia, Sweden, Iran, Slovakia, New Zealand, Ethiopia, Ukraine, Mexico, Hungary, United Arab Emirates, South Korea, Iraq, Oman, Colombia, Egypt, Germany, Senegal, Romania

TOTAL NUMBER OF PAPERS: 289

THE NUMBER OF PAPERS FROM TURKEY: 141

OTHER COUNTRIES: 148

-OPENING CEREMONY-

10.04.2021



Ankara Local Time : 09:40



Baku Local Time : 10:40

Dr. Mustafa LATIF EMEK

Chairman of the Institute of Economic Development and Social Researches
(IKSAD)

Assoc. Prof. İrade Halilova

Rector of Khazar University

10.04.2021

SESSION-1 HALL-1

Turkey Time

10:00-12:30

Moderator: Prof. Dr. Mehmet YAZICI

TITLE	AUTHOR(S)	AFFILIATION
E-TİCARETTE ELEKTRONİK ÖDEME SİSTEMLERİNİN KULLANIMI: TÜRKİYE ÖRNEĞİ	Prof. Dr. Mehmet YAZICI	Bursa Teknik University
THE PLACE OF CORPORATE REPUTATION COMPONENTS IN THE ADVERTISEMENT: THE SAMPLE OF KOÇ HOLDING ADVERTISEMENTS	Research Assistant Merve KARAVAR	Nişantaşı University, Public Relations and Advertising Department
RELATIONSHIP BETWEEN FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH: PANEL CAUSALITY OECD COUNTRY ANALYSIS	Lect. Dr. Emine Türkan AYVAZ GÜVEN	Manisa Celal Bayar University
SELECTING A CARGO COMPANY WITH SWARA AND GRAY RELATIVE ANALYSIS METHODS	Assoc. Prof. Dr. Engin ÇAKIR	Aydın Adnan Menderes University
	Yasemin ŞANAL	Aydın Adnan Menderes University
TURKEY'S EXPORT COMPETITIVENESS IN THE LOW, MEDIUM AND HIGH TECHNOLOGY GOODS: AN ANALYSES FOR THE TERM 2000-2019	Assist. Prof. Dr. Kazım SARIÇOBAN	Burdur Mehmet Akif Ersoy University
	Elif KAYA	Kilis 7 Aralık University
THE IMPACT OF COVID-19 PANDEMIC ON INTERNATIONAL TRADE	Assist. Prof. Dr. Hazar DÖRDÜNCÜ	Nişantaşı University
THE IMPACT OF THE COVID-19 PANDEMIC ON A DISCIPLINE SOCIETY RESPECTIVE TO CULTURAL FEAR	Assoc. Prof. Dr. Emrah ARĞIN	Malatya Turgut Özal University, Faculty of Art Design and Architecture, Visual Communication Design Department
	Assist. Prof. Dr. İsmail BAYDİLİ	Fırat University, TBMYO, Department of Audiovisual Techniques and Media Production
THE EFFECT OF UNIVERSITY STUDENTS' SOCIAL INTELLIGENCE LEVELS ON SELF-SUFFICIENCY PERCEPTIONS: A FIELD RESEARCH IN TURKEY, AZERBAIJAN AND POLAND	Prof. Dr. İsmail BAKAN	Kahramanmaraş Sutcu Imam University
	Hamran AMIRLI	Kahramanmaraş Sutcu Imam University
TURKEY'S TRANSBOUNDARY WATER POLICY: THE EXAMPLE OF MERİC-ERGENE RIVER BASIN	Dr. Burçin Demirbilek	Çankırı Karatekin University
MEDIATING EFFECT OF THE PSYCHOLOGICAL CONTRACT BREACH IN BETWEEN ORGANIZATIONAL CYNICISM AND ORGANIZATIONAL TRUST	Prof. Dr. Edip ÖRÜCÜ	Bandırma Onyedli Eylül University
	Caner DOĞAN	Bandırma Onyedli Eylül University
COMPARISON OF THE ACCOUNTING SYSTEMS OF THE TURKISH REPUBLICS	Ashlhan KESKİN	Munzur University
	Assist. Prof. Dr. Zülkif YALÇIN	Munzur University

10.04.2021

SESSION-1 HALL-2

Nigeria Time (-2)	Turkey Time	Pakistan Time (+2)	Morocco Time (-2)
08:00-10:30	10:00-12:30	12:00-14:30	08:00-10:30

Moderator: Dr. Nabil EL FEZAZI

TITLE	AUTHOR(S)	AFFILIATION
ANALYSIS OF STEER-BY-WIRE VEHICLES VIA T-S FUZZY CONTROL APPROACH	Dr. Nabil EL FEZAZI	Sidi Mohammed Ben Abdellah University, Faculty of Sciences Dhar El Mehraz, Department of Physics, LISAC, Fez, Morocco
	Dr. Youssef EL FEZAZI	Sidi Mohammed Ben Abdellah University, Faculty of Sciences Dhar El Mehraz, Department of Physics, LISAC, Fez, Morocco
	Dr. Nabil EL AKCHIOUI	University of Abdelmalek Essaadi, Faculty of sciences and Technology, LRDSI, Al Hoceima, Morocco
ON THE EIGENGRAPH FOR p -BIHARMONIC EQUATIONS WITH RELICH POTENTIALS AND WEIGHT	Mohamed LAGHZAL	Department of Mathematics Faculty of Sciences Dhar El Mahraz University Sidi Mohamed Ben Abdellah Atlas Fez Morocco
	Abdelouahed EL KHALIL	Department of Mathematics and Statistics, College of Science Imam Mohammad Ibn Saud Islamic University (IMSIU) Riyadh KSA
	My Driss MORCHID ALAOUI	Department of Mathematics Faculty of Sciences and Technologies Moulay Ismail University, Errachidia Morocco
	Abdelfattah TOUZANI	Department of Mathematics Faculty of Sciences Dhar El Mahraz University Sidi Mohamed Ben Abdellah Atlas Fez Morocco
MODELING AND OPTIMIZATION OF SURFACE ROUGHNESS AND CUTTING FORCE WHEN MACHINING INCONEL 718 USING THE RSM AND DF METHODS	Kouahla Ilyas	Université 8 Mai, Algérie
	Prof. Yaltese Mohamed Athmane	Université 8 Mai, Algérie
	Dr. Belhadi Salim	Université 8 Mai, Algérie
ARABIC CONSONANTS CLASSIFICATION ACCORDING TO PLACES OF ARTICULATION	Youssef Elfahm	IMII Laboratory, Hassan First University of Settat, Morocco
	Badia Mounir	LAPSSII Laboratory, Superior School of Technology, Safi, Morocco
	Ilham Mounir	LAPSSII Laboratory, Superior School of Technology, Safi, Morocco
	Laila Elmaazouzi	LAPSSII Laboratory, Superior School of Technology, Safi, Morocco
MODULATION DOMAIN SPECTRAL SUBTRACTION FOR SPEECH ENHANCEMENT USING COHERENT DEMODULATION TECHNIQUE	Nesrine Abajaddi	IMII Laboratory, Faculty of Sciences & Technics, University, Hassan First, Settat, Morocco
	Badia Mounir	LAPSSII Laboratory Graduate School of Technology, University, Cadi Ayyad, Safi, Morocco
	Ilham Mounir	LAPSSII Laboratory Graduate School of Technology, University, Cadi Ayyad, Safi, Morocco
	Laila Elmaazouzi	LAPSSII Laboratory Graduate School of Technology, University, Cadi Ayyad, Safi, Morocco
	Abdelmajid Farchi	IMII Laboratory, Faculty of Sciences & Technics, University, Hassan First, Settat, Morocco
IMPROVING THE NETWORK LIFETIME IN SOLAR ENERGY HARVESTING SYSTEM FOR WIRELESS SENSOR NETWORKS	Saïd El Abdellaoui	LAPSSII, Technology High School, Cadi Ayyad University, B.P. 89, Safi, Morocco LRIT, Unité Associée au CNRST (URAC 29), Faculty of Sciences, Mohammed V University - Agdal, Rabat, Morocco
	Youssef Fakhri	LRIT, Unité Associée au CNRST (URAC 29), Faculty of Sciences, Mohammed V University - Agdal, Rabat, Morocco LARIT, équipe Réseaux et Télécommunications, Faculty of Sciences, Ibn Tofail University, Kenitra, Morocco
CLIMATE CHANGE PERCEPTIONS AND ADAPTATIONS OF PASTORALISTS IN MOROCCO'S ARID RANGELANDS	SNAIBI W.	Laboratory Communication, Education, Digital Usage and Creativity, ETIGGE Research Team, Mohammed Premier University, Oujda, Morocco Morocco's National Institute of Agronomic Research, CRRAO, Oujda, Morocco
	MEZRHAB A.	Laboratory Communication, Education, Digital Usage and Creativity, ETIGGE Research Team, Mohammed Premier University, Oujda, Morocco

	SY O.	Geomatics and Environment Laboratory, Assane Seck University, Ziguinchor, Senegal
MACHINING PARAMETERS OPTIMIZATION OF ALLOY STEEL AISI 4140 USING TOPSIS COMBINED WITH AHP	Hadjela Salah	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), University 8 may 1945, Guelma, Algeria
	Dr. Belhadi Salim	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), University 8 may 1945, Guelma, Algeria
	Pr. Ouelaa Nouredine	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), University 8 may 1945, Guelma, Algeria
	Pr. Yaltese Mohamed Athmane	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), University 8 may 1945, Guelma, Algeria
MRAC ADAPTIVE CONTROL DESIGN FOR AN f15 AIRCRAFT PITCH ANGULAR MOTION USING dYNAMICS iNVERSION AND FRACTIONAL ORDER FILTERING	Prof. Dr. Samir Ladaci	National Polytechnic School of Constantine, 25100, Constantine Algeria Signal Processing Laboratory, UMC university, Constantine 25000, Algeria
	Ms. Amani R. Ynineb	National Polytechnic School of Constantine, 25100, Constantine Algeria
PHOTOCATALYSIS: AN EFFECTIVE TOOL FOR TREATMENT OF DYES CONTAMINATED WASTEWATER	Dr. Muhammad Saeed	Department of Chemistry, Government College University Faisalabad, Jhang Road, Faisalabad 38000 Pakistan

10.04.2021
SESSION-1 HALL-3

Turkey Time	Azerbaijan Time (+1)
10:00-12:30	11:00-13:30

Moderator: Prof. Dr. Hajar Huseynova

TITLE	AUTHOR(S)	AFFILIATION
VERBS IN THE AZERBAIJANI LANGUAGE	Prof. Hajar Huseynova	Azerbaijan State Pedagogical University, Faculty of Philology
CHILDREN'S OBRAZ IN ZAUR USTAC'S POEMS	Ayətəxan Ziyad (İsgəndərov)	Azərbaycan Dövlət Pedaqoji University
THE PROBLEM OF SYNONYMY IN ARABIC AND THE PLACE OF SYNONYMY IN LANGUAGE	Arş. Gör. Saffet Cengiz	KTO Karatay University
INTRA-GENRE CHANGES OF TONGUE-TWISTERS IN AZERBAIJANI FOLKLORE	Bilal Alarli HUSEYNOV	"Teacher of Jalilabad Branch of ASPU, Doctor of Philosophy in Philology,
COMMUNICATIVE TEACHING OF ENGLISH IN SECONDARY SPECIAL SCHOOLS	Ph.D. Svetlana Mammadova	Azerbaijan State Pedagogical University, Philology faculty
LANGUAGE SITUATION OF BAKU CITY	Assoc. Prof. Dr. Jahid KAZIMOV	"Institute of Linguistics named after Nasimi, the National Academy of
DERIVATIVES OF XANTHOGENIC ACIDS AS ANTICORROSIVE AND ANTIOXIDANT ADDITIVES	Mustafayev Nazim Pirməmməd oğlu	Laboratoriya rəhbəri, kimya elmləri doktoru, professor, Azərbaycan Milli Elmlər Akademiyasının Aşqarlar Kimyası İnstitutu
	Novotorjina Nelya Nikolayevna	Aparıcı elmi işçi, dosent, Azərbaycan Milli Elmlər Akademiyasının Aşqarlar Kimyası İnstitutu
	Ramazanova Yulduz Böyükağa qızı	Aparıcı elmi işçi, dosent, Azərbaycan Milli Elmlər Akademiyasının Aşqarlar Kimyası İnstitutu
	Musayeva Bella İskəndər qızı	Baş elmi işçi, Azərbaycan Milli Elmlər Akademiyasının Aşqarlar Kimyası İnstitutu
INTANGIBLE HERITAGE AS A WAY TO STRENGTHEN CULTURAL COOPERATION	Dr. Iosefina BLAZSANI-BATTO	Doktorant, Azərbaycan Memarlıq və İnşaat Universiteti
BOZQURD IMAGE IN UYGUR OGUZ NAMES	Sadəddinli Nərmin Məmməd rasul qızı	Azerbaijan University of Languages, Faculty of International Relations and Regional Studies, Foreign Languages Department, Baku / Romanian Language Institute, Bucharest, Romania
BOZQURD IMAGE IN UYGUR OGUZ NAMES	Sadəddinli Nərmin Məmməd rasul qızı	Bakı Avrasiya Universitetinin Folklorşünaslıq ixtisası üzrə doktorantı

10.04.2021

SESSION-2 HALL-1

Turkey Time Azerbaijan Time (+1)

13:00-15:30

14:00-16:30

Moderator: Prof. Dr. Abdulhamit SİNANOĞLU

TITLE	AUTHOR(S)	AFFILIATION
CHALLENGES REGARDING THE EXPRESSIONS OF TURKISH CAUSATIVE VOICE VERBS IN TEACHNG RUSSIAN AS A FOREIGN LANGUAGE	Assoc. Prof. Dr. Leyla Çığdem DALKILIÇ	Ankara University
PROJECT BASED LANGUAGE LEARNING: A BOON TO THE ONLINE MODE OF EDUCATION	Dr. Akkara Sherine	HOD Languages and Rankings, Hindustan Institute of Technology and Science, Padur
	Supriya Mariam Joseph	English Department, Hindustan Institute of Technology and Science, Padur
	Stanislaus Ayyadurai	English Department, Hindustan Institute of Technology and Science, Padur
THEOLOGICAL FUNDAMENTALS OF GUIDANCE AND HERESY IN THE CONTEXT OF HUMAN FREEDOM IN ISLAMIC THEOLOGY	Assoc. Prof. Dr. Recep Önal	Giresun University
SEMANTIC ANALYZES FROM IMAM BIRGIVİ'S THOUGHT SYSTEM: EXAMPLE OF CONCEPTS OF 'FAITH, BLASPHEMY, BID'AH AND TAKFIR'	Assoc. Prof. Dr. Recep Önal	Giresun University
THE GERMAN ROMANTIC PERIOD UNDERSTANDING BASED ON THE EXAMPLE OF "THE LIFE OF A MISCHIEVOUS"	Lec. Dr. Coşkun DOĞAN	Trakya University
UNDERSTANDING OF GERMAN CLASSICAL LITERATURE AND JOHANN WOLFGANG VON GOETHE	Lec. Dr. Coşkun DOĞAN	Trakya University
SIMPLE SENTENCES SET UP WITH GERUNDIAL	Assist. Prof. Dr. Melike Somuncu	Siirt University
THE FEAST OF GENRES: HETEROGLOSSIA IN THE NOVEL 'THE PERFECT TREATMENT TO CURE YOUR LONELINESS	Lec. Dr. Zehra ERGEÇ	Kilis 7 Aralık University
REVIEW OF SOPHIST-PHILOSOPHER DEFINITIONS IN PLATO'S SOPHIST DIALOGUE AND THE RELATIONSHIP OF THE PHILOSOPHER WITH THE TRUTH	Meliha Selin DÜRMÜŞ	Kocaeli University
İSLAM'DA İMAN VE AKAİD FARKLILIĞI VE AKAİDİN İMANLAŞTIRILMASI TARTIŞMALARI	Prof. Dr. Abdulhamit SİNANOĞLU	Kahramanmaraş Sütçüimam University
ABOUT THE FIRST MEDIEVAL CILIES OF MUGAN PROVINCE AND HAMASHARA	Alasgar Agakhasan oglu Mirzazada	Lənkəran Dövlət Universitetinin doktorantı

10.04.2021 SESSION-2 HALL-2

Nigeria Time (-2)	Turkey Time	Pakistan Time (+2)	Morocco Time (-2)
11:00-13:30	13:00-15:30	15:00-17:30	11:00-13:30

Moderator: Prof. Afaq Ahmad

TITLE	AUTHOR(S)	AFFILIATION
ARDL BOUNDS TEST OF GREENHOUSE GAS EMISSIONS	Olorunpomi, O.T.	Department of Computer Science and Mathematics, Nigeria Police Academy, Kano; Nigeria.
	Olorunpomi, C. K.	Department of Statistics, Kwara State University, Malete, Kwara; Nigeria
	Asongo, S. T	Department of Economics and Management Science, Nigeria Police Academy, Kano; Nigeria
NON-ZERO CROSS-SECTION CORRELATION OF INDIVIDUAL EFFECTS	Olorunpomi, O.T.	Nigeria Police Academy, Department of Computer Science and Mathematics, P.M.B 3473, Wudil, Kano State, Nigeria.
COMPARATIVE ANALYSIS OF APRIORI AND FP-GROWTH ALGORITHMS FOR FREQUENT PATTERN MINING USING APACHE SPARK	Shan Ahmed Usmani	Department of Computer Science and Information Technology, NEDUET, Karachi, Pakistan
	Syed Khurram Kamran	Department of Computer Science and Information Technology, NEDUET, Karachi, Pakistan
	Muhammad Zeeshan	Department of Computer Science and Information Technology, NEDUET, Karachi, Pakistan
	Noman Islam	Iqra University, Karachi, Pakistan
	Zamin Ali Khan	Iqra University, Karachi, Pakistan
A RESILIENT TINY IOT SENSOR NETWORK BASED BATTERY LIFE SIMULATION FOR REMOTE COMMUNICATION	Dr. Zameer Gulzar	Department of Computer Applications, BSA Crescent Institute of Science and Technology (Deemed to be University), India
	Dr. Fathima Almahri	University of Technology and Applied Sciences Salalah, Oman
PREDICTIVE DATA MINING FOR HEART DISEASE PREDICTION	A. Logeswari	Assistant Professor, Department of Information Technology, Dr. Mahalingam College of Engineering and Technology, Pollachi, India
	A. Ameer Suhail	Student, Bachelor of Information Technology, Dr. Mahalingam College of Engineering and Technology, Pollachi, India
	K. Ajeeth	Student, Bachelor of Information Technology, Dr. Mahalingam College of Engineering and Technology, Pollachi, India
	N. Dhinesh	Student, Bachelor of Information Technology, Dr. Mahalingam College of Engineering and Technology, Pollachi, India
DESIGNING OF CRC POLYNOMIALS FOR 5G-NR	Prof. Afaq Ahmad	Electrical and Computer Engineering Department, Sultan Qaboos University, Muscat, Oman
	Dr. Sayyid Samir Al-Busaidi	Electrical and Computer Engineering Department, Sultan Qaboos University, Muscat, Oman
	Dr. Medhat Awadalla	Electrical and Computer Engineering Department, Sultan Qaboos University, Muscat, Oman
	Dr. Sabir Hussain	Department of Electronics and Communication Engineering, Osmania University, Hyderabad, India
	Shaik Mazhar Hussain	Department of Electronics and Communication, Middle East College, Muscat, Sultanate of Oman
THE ROLE OF WEBSITE PERSONALIZATION IN CREATING URGE TO BUY IMPULSIVELY: A CONCEPTUAL FRAMEWORK	Abu Bashar	Research Scholar, IMS Unison University, Dehradun, India
	Dr. Shalini Singh	Assistant Professor, IMS Unison University, Dehradun, India
	Dr. Vivek Kumar Pathak	Assistant Professor, IMS Unison University, Dehradun, India

IMAGE CAPTIONING USING CNN ALGORITHM	Dr. A.B. Arockia Christopher	Dr.Mahalingam College of Engineering and Technology Pollachi, India
	DEEPAK.S	Department of IT Dr.Mahalingam College of Engineering and Technology Pollachi, India
	GURUPRASATH.M	Department of IT Dr.Mahalingam College of Engineering and Technology Pollachi, India
	MAGUDESWARAN.P	Department of IT Dr.Mahalingam College of Engineering and Technology Pollachi, India
ELECTRONIC ELECTORAL SYSTEM USING BLOCKCHAIN TECHNOLOGY	S. Abinaya	Dr.Mahalingam college of Engineering and Technology, pollachi,Tamil Nadu, India
	S. Nivedha	Dr.Mahalingam college of Engineering and Technology, pollachi,Tamil Nadu, India
	P. Kirubha	Dr.Mahalingam college of Engineering and Technology, pollachi,Tamil Nadu, India
ASSESSMENT OF STREET TRADING AND TRAFFIC DELAY SITUATION IN LAGOS STATE, NIGERIA: THE COMPUTER VILLAGE EXPERIENCE	Gbenga Felix ODEYEMI	Department of Surveying and Geo-informatics, Federal Polytechnic Ede, Osun State, Nigeria
	Wheneyon Peter SURU	Department of Surveying and Geo-informatics, Federal Polytechnic Ede, Osun State, Nigeria
	Oluwaseun Ayodele OLOWOPOROKU	Department of Urban and Regional Planning, Obafemi Awolowo University Ile-Ife Nigeria
FOOD CONSERVATION MANAGEMENT SYSTEM	Prof. Afaq Ahmad	Electrical and Computer Engineering Department, Sultan Qaboos University, Muscat, Oman
	Dr. Firdous Kausar	Electrical and Computer Engineering Department, Sultan Qaboos University, Muscat, Oman
	Dr. Medhat Awadalla	Electrical and Computer Engineering Department, Sultan Qaboos University, Muscat, Oman

10.04.2021
SESSION-2 HALL-3

Turkey Time	Azerbaijan Time (+1)
13:00-15:30	14:00-16:30

Moderator: Assist. Prof. Dr. Bertan Boran BAYRAK

TITLE	AUTHOR(S)	AFFILIATION
MOTOR OIL FOR AUTOTRACTOR DIESELS BASED ON REGENERATION PRODUCTS OF UTILIZED ENGINE OIL	Ramazanova Yulduz Boyukaga gizi	Leading Researcher, Associate Professor, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Yusifzadeh Gulshan Galib gizi	Researcher, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Shamilzadeh Tamilla Israfil gizi	Researcher, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Dadashova Tarana Adil gizi	Researcher, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Shukurova Matanat Intigam gizi	Senior Assistant, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
BIS(1,3-DIBROMOISOPROPIOXY) METHANE AS SYNTHON	Farzaliyev Vagif Medjid oglu	Institute director, academician, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Efendiyeva Khuraman Gadir gizi	Leading Researcher, Associate Professor, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Mustafayev Nazim Pirmammad oglu	Head of the laboratory, doctor of chemical sciences, professor, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Safarova Mehpare Rasul gizi	Chief Researcher, Institute of Additive Chemistry, National Academy of Sciences of Azerbaijan
	Akchurina Tanzila Khasanovna	Leading Researcher, Associate Professor, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
SYNTHESIS AND STUDY OF THIOCYANATE DERIVATIVES CONTAINING DIFFERENT FUNCTIONAL GROUPS AS BIOCIDES TO COOLANT	Musayeva Bella İskender gizi	Leading Researcher, Associate Professor, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Farzaliyev Vagif Medcid oglu	Institute director, academician, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Ismayilova Gunay Geray gizi	Junior Researcher, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Novotorjina Nelya Nikolayevna	Leading Researcher, Associate Professor, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Akchurina Tanzila Khasanovna	Leading Researcher, Associate Professor, Institute of Additive Chemistry of the National Academy of Sciences of Azerbaijan
	Safarova Mehpare Rasul gizi	Chief Researcher, Institute of Additive Chemistry, National Academy of Sciences of Azerbaijan
	Mustafayeva Yegana Sabir gizi	Engineer, Institute of Additive Chemistry, National Academy of Sciences of Azerbaijan
THE EFFECT OF ADDITIVES BASED ON VARIOUS ALKYLPHENOLS ON THE PROPERTIES OF ENGINE OILS	Qədirov Əli Əşrəf oglu	Aparıcı elmi işçi, kimya üzrə fəlsəfə doktoru, dosent, Azərbaycan Milli Elmlər Akademiyasının Aşqarlar Kimyası İnstitutu
	Nağıyeva Elmira Əli qızı	Baş elmi işçi, texnika elmləri doktoru dosent, Azərbaycan Milli Elmlər Akademiyasının Aşqarlar Kimyası İnstitutu

INTERNATIONAL HAZAR SCIENTIFIC RESEARCHES CONFERENCE - II
April 10 - 12, 2021
Baku, Azerbaijan, Khazar University
CONGRESS PROGRAM

	Kazımzadə Əli Kazım oğlu	Laboratoriya rəhbəri, kimya elmləri doktoru, dosent, Azərbaycan Milli Elmlər Akademiyasının Aşqarlar Kimyası İnstitutu
	Nəsirova Sahilə İkrəm qızı	Mühəndis, Azərbaycan Milli Elmlər Akademiyasının Aşqarlar Kimyası İnstitutu
	Məmmədیارova Xədicə Nizami qızı	Elmi işçi, Azərbaycan Milli Elmlər Akademiyasının Aşqarlar Kimyası İnstitutu
KINETIC CALCULATIONS OF METHYLENE BLUE ADSORPTION ON OLIVE (OLEA EUROPAEA) TREE SAWDUST GROWN IN BORNOVA DISTRICT OF IZMIR PROVINCE	Ali Rıza KUL	Yüzüncü Yıl University
	Sema KAPTANOĞLU	Yüzüncü Yıl University
	Ahmet SELÇUK	Yüzüncü Yıl University
	Hasan ELİK	Yüzüncü Yıl University
	Nuran BAZANCİR	Yüzüncü Yıl University
	Hasan ERGE	Yüzüncü Yıl University
THERMODYNAMIC AND ISOTHERM CALCULATIONS OF METHYLENE BLUE ADSORPTION STUDIES ON OLIVE (OLEA EUROPAEA) TREE SAWDUST GROWN IN BORNOVA DISTRICT OF IZMIR PROVINCE	Ali Rıza KUL	Yüzüncü Yıl University
	Sema KAPTANOĞLU	Yüzüncü Yıl University
	Ahmet SELÇUK	Yüzüncü Yıl University
	Hasan ELİK	Yüzüncü Yıl University
	Nuran BAZANCİR	Yüzüncü Yıl University
	Hasan ERGE	Yüzüncü Yıl University
SYNTHESIS, QUANTUM CHEMICAL CALCULATION AND BIOLOGICAL ACTIVITY OF 4-PHENYL-5-(THIOPHEN-2-YL)-4H-1,2,4-TRIAZOLE-3-THIOL	Rebaz Omar	Department of Chemistry, Faculty of Science & Health, Koya University, Iraq
	Metin Koparir	Firat University, Faculty of Science, Department of Chemistry, Turkey
THE ROLE OF VITAMIN U AGAINST BRAIN DAMAGE INDUCED BY D-GALACTOSAMINE	Dastagul MAHMARZAYEVA	İstanbul University- Cerrahpaşa
	Assist. Prof. Dr. Bertan Boran BAYRAK	İstanbul University- Cerrahpaşa
	Assist. Prof. Dr. İsmet Burcu TÜRKYILMAZ	İstanbul University- Cerrahpaşa
	Prof. Dr. Özlem SAÇAN	İstanbul University- Cerrahpaşa
	Prof. Dr. Refiye YANARDAĞ	İstanbul University- Cerrahpaşa
SENSITIVE TO HYDROGEN PEROXIDE FOR BIOSENSOR CONSTRUCTION PLATINUM/ POLYANILINE ELECTRODE PREPARATION	Assist. Prof. Dr. Sinan Mithat MUHAMMET	Gazi University
SENSITIVE TO HYDROGEN PEROXIDE FOR BIOSENSOR CONSTRUCTION PLATINUM/ POLYPYRROLE ELECTRODE PREPARATION	Assist. Prof. Dr. Sinan Mithat MUHAMMET	Gazi University

10.04.2021

SESSION-3 HALL-1

Turkey Time

16:00-18:30

Moderator: Asst. Prof. Dr. Onur ARAZ

TITLE	AUTHOR(S)	AFFILIATION
DETERMINING THE CONTRIBUTION OF CRM TRAININGS ON FLIGHT SAFETY IN TURKEY	Dr. Kpt. Plt. Mahmut Melih BAŞDEMİR	Turkish Airlines
	Dr. Cengiz Mesut BÜKEÇ	Bahçeşehir University
IMPROVEMENT OF RECOVERY TIME FOR RESISTIVE SFCL USED IN POWER SYSTEMS	Buğra Yılmaz	Fırat University
	Prof. Dr. Muhsin Tunay Gençoğlu	Fırat University
WHY SHOULD FUZZY LOGIC APPLICATIONS BE USED IN SCIENCE EDUCATION?	Münevver SANCA	Van Yüzüncü Yıl University
	Assoc. Prof. Dr. Hüseyin ARTUN	Van Yüzüncü Yıl University
CONSUMER PROFILES BASED ON SUSTAINABLE CONSUMPTION BEHAVIOR	Lec. Dr. Hilal ÖZTAY	Kastamonu University
INVESTIGATION OF THE EFFECTS ON MULTI-MACHINE POWER SYSTEMS OF DFIG BASED WIND TURBINES	Assoc. Prof. Dr. M. Kenan DÖŞOĞLU	Düzce University
	Muhammet DEMİRBAŞ	Beykent University
INVESTIGATION OF SMALL SIGNAL STABILITY IN POWER SYSTEMS WITH DIFFERENT TG MODELS AND UPFC-POD	Muhammet DEMİRBAŞ	Beykent University
	Assoc. Prof. Dr. M. Kenan DÖŞOĞLU	Düzce University
EFFICIENCY IN SOLAR ENERGY SYSTEMS	Ebra Nur ZUREL	Bingöl University
	Dr. Muzaffer ASLAN	Bingöl University
OPTIMIZATION OF THREE-TUNED MASS DAMPER FOR MULTI STORY BUILDIND UNDER EARTHQUAKE EXCITATIONS	Asst. Prof. Dr. Onur ARAZ	Gümüşhane University, Faculty of Engineering and Natural Sciences, Department of Civil Engineering
ECONOMIC LOAD DISPATCH PROBLEM USING A MAYFLY OPTIMIZATION ALGORITHM	Enes KAYMAZ	Düzce University
	Prof. Dr. Uğur GÜVENÇ	Düzce University
	Assoc. Prof. Dr. M. Kenan DÖŞOĞLU	Düzce University
VOLTAGE STABILITY ANALYSIS WITH DIFFERENT AUTOMATIC VOLTAGE REGULATOR MODELS IN POWER SYSTEMS	Enes KAYMAZ	Düzce University
	Assoc. Prof. Dr. M. Kenan DÖŞOĞLU	Düzce University
	Prof. Dr. Uğur GÜVENÇ	Düzce University

10.04.2021
SESSION-3 HALL-2

Algeria Time (-2)	Turkey Time
14:00-16:30	16:00-18:30

Moderator: Dr. Abdelkader Rouibah

TITLE	AUTHOR(S)	AFFILIATION
ENERGY IN SMART FARMS	Brahim Lejdel	University of EL-Oued, Algeria
GENETIC ALGORITHM TO FIND OPTIMAL PATH ACCORDING TO TIME AND DISTANCE	Brahim Lejdel	University of EL-Oued, Algeria
HEAT FLUX OPTIMIZATION IN SOLAR CONCENTRATOR RECEIVER BASED ON GENETIC ALGORITHMS TO IMPROVE THEIR ENERGY EFFICIENCY	Dr. Abdelkader Rouibah	Faculty of Science and Technology, University of Djelfa, 17000 DZ, Algeria
	Prof. Dr. Ahmed Hafaifa	Applied Automation and Industrial Diagnostics Laboratory, Faculty of Science and Technology, University of Djelfa, 17000 DZ, Algeria
	Prof. Dr. Djamel Benazzouz	Mechanics Laboratory of Systems and Solids, Faculty of Engineering Sciences, Boumerdès University, 35000, Algeria
FAULT DETECTION AND DIAGNOSIS SYSTEM FOR A THREE-PHASE INVERTER USING ARTIFICIAL NEURAL NETWORK	ABID Mimouna	L2GEGI Laboratory, University of Tiaret, Tiaret, Algeria
	SAADI LARIBI Souad	L2GEGI Laboratory, University of Tiaret, Tiaret, Algeria
	M'hamed LARBI	L2GEGI Laboratory, University of Tiaret, Tiaret, Algeria
	Belkacem BELABBAS	L2GEGI Laboratory, University of Tiaret, Tiaret, Algeria
	Amine SOBHI	L2GEGI Laboratory, University of Tiaret, Tiaret, Algeria
FAULT TOLERANT CONTROL OF THREE PHASE INVERTER IN GRID CONNECTED PHOTOVOLTAIC SYSTEM	ABID Mimouna	L2GEGI Laboratory, University of Tiaret, Tiaret, Algeria
	LARIBI Souad	L2GEGI Laboratory, University of Tiaret, Tiaret, Algeria
	SEBAA Morsli	L2GEGI Laboratory, University of Tiaret, Tiaret, Algeria
	ALLAOUI Tayeb	L2GEGI Laboratory, University of Tiaret, Tiaret, Algeria
OPTIMIZATION OF CUTTING CONDITIONS DURING FINISHING TURNING OF TITANIUM ALLOY Ti-6Al-4V USING GRA METHOD	Mr. Younes Belbellaa	8 May 1945 University, Guelma, Algeria
	Prof. Nabil Kribes	8 May 1945 University, Guelma, Algeria
	Prof. Mohamed Athmane Yaltese	8 May 1945 University, Guelma, Algeria
DETECTING HIGH LEVELS OF STAGE FRIGHT AT STUDENTS USING COMPUTATIONAL INTELLIGENCE TECHNIQUES	Konstantinos Mastrothanasis	University of the Aegean, Department of Primary Education, Greece
	Konstantinos Zervoudakis	Technical University of Crete, School of Production Engineering and Management
	Prof. Dr. Maria Kladaki	University of the Aegean, Department of Primary Education
BIOMEDICAL IMAGING AND ANALYSIS THROUGH DEEP LEARNING	Siranjeevi M	Dr.Mahalingam College of Engineering and Technology
	Vignesh Prabhu V	Dr.Mahalingam College of Engineering and Technology
	Navin Karthik M	Dr.Mahalingam College of Engineering and Technology
A REAL TIME NEURAL NETWORK APPROACH FOR DETECTING DISTRIBUTED DENIAL OF SERVICE ATTACK	Yakub Kayode Saheed	School of Information Technology & Computing, American University of Nigeria, Yola, Nigeria
	Rilwan Dauda Magaji	Department of Computer Science, Shehu Idris College of Health Sciences and Technology, Makarfi, Kaduna State Nigeria

CONTROL OF THREE-PHASE PERMANENT MAGNET SYNCHRONOUS MACHINE BASED ON INTEGRAL BACKSTEPPING CONTROL TECHNIQUE	PHD student. KARBOUA DJALOUL	Laboratory of Applied automation and Industrial Diagnosis (LAADI), Faculty of Science and rechnology, University of Djelfa, Algeria
	Belgacem Toual	Laboratory of Applied automation and Industrial Diagnosis (LAADI), Faculty of Science and rechnology, University of Djelfa, Algeria
	Djeddi Ahmed Zohair	Laboratory of Applied automation and Industrial Diagnosis (LAADI), Faculty of Science and rechnology, University of Djelfa, Algeria
	Abdellah Kouzou	Laboratory of Applied automation and Industrial Diagnosis (LAADI), Faculty of Science and rechnology, University of Djelfa, Algeria
FLOW ANALYSIS OF A SUPERSONIC BELL NOZZLE USING THE CHARACTERISTIC APPROACH	PhD Student N. Boughazi	"Department of Mechanical Engineering, LMANM, Université 8 Mai 1945, BP 401, 24000 Guelma, Algeria
	Prof. Dr. A. Haddad	"Department of Mechanical Engineering, LMANM, Université 8 Mai 1945, BP 401, 24000 Guelma, Algeria
	BSc Student M. Laib	Department of Mechanical Engineering, Université 8 Mai 1945, BP 401, 24000 Guelma, Algeria

10.04.2021

SESSION-3 HALL-3

Turkey Time	Azerbaijan Time (+1)	Bangladesh Time (+3)	Algeria Time (-2)
16:00-18:30	17:00-19:30	19:00-21:30	14:00-16:30

Moderator: Prof. Dr. Ali BİLGİLİ

TITLE	AUTHOR(S)	AFFILIATION
SUSTAINABLE SOURCE OF LIFE: MICROALGAE	Latife Ceyda İRKİN	Canakkale Onsekiz Mart University
PHYTOPLANKTON COMPOSITION AND FUNCTIONAL GROUPS IN A SHALLOW PLATEAU LAKE (ÇİĞ LAKE LOCAL WETLAND, NORTHERN TURKEY)	Prof. Dr. Beyhan TAŞ	Ordu University
	MSc. Burcu KARAKAYA	Ordu University
BIOREMEDIATION BY MICROORGANISMS OF TERRITORIES CONTAMINATED WITH VARIOUS POLLUTANTS	K.Kakhrmanova	AMEA Ə.Quliyev adına Aşqarlar Kimyası İnstitutu
	A. Almamedova	AMEA Ə.Quliyev adına Aşqarlar Kimyası İnstitutu
	S.Osmanova	AMEA Ə.Quliyev adına Aşqarlar Kimyası İnstitutu
STUDYING THE FUTURE URBAN EXPANSION IN THE CITY OF ELMA, USING GEOGRAPHIC INFORMATION SYSTEMS AND REMOTE SENSING TECHNIQUES	Dr. Amina Yahia	GTU Institute, University of Oum El Bouhaghi, Algeria
	Nail Kechichel	GTU Institute, University of Oum El Bouhaghi, Algeria
	Abdelmalek Hatti	GTU Institute, University of Oum El Bouhaghi, Algeria
	Prof. Dr. Abdelkader Adla	GTU Institute, University of Oum El Bouhaghi, Algeria
PHYTOCHEMICAL ANALYSIS AND ANTIOXIDANT STUDY OF BOMBAX CEIBA YOUNG ROOT	Md. Ariful Islam	Department of Biochemistry and Molecular Biology, University of Rajshahi, Rajshahi-6205, Bangladesh
SCREENING OF EXOPOLYSACCHARIDES PRODUCING BACTERIAL STRAINS FOR PLANT GROWTH PROMOTING POTENTIAL ISOLATED FROM HOT SPRING	Noor-e-Saba Naz Tahir	Institute of Microbiology and Molecular Genetics, University of the Punjab, Lahore, 54590, Pakistan
	Rida Batool	Institute of Microbiology and Molecular Genetics, University of the Punjab, Lahore, 54590, Pakistan
IN VITRO FEEDING AND COLONIZATION OF HYALOMMA EXCAVATUM AND HYALOMMA MARGINATUM TICK SPECIES	Serkan BAKIRCI	Aydın Adnan Menderes University, Faculty of Veterinary Medicine, Department of Parasitology
	Hüseyin Bilgin BİLGİÇ	Aydın Adnan Menderes University, Faculty of Veterinary Medicine, Department of Parasitology
	Selin HACILARLIOĞLU	Aydın Adnan Menderes University, Faculty of Veterinary Medicine, Department of Parasitology
	Hasan EREN	Aydın Adnan Menderes University, Faculty of Veterinary Medicine, Department of Parasitology
	Tülin KARAGENÇ	Aydın Adnan Menderes University, Faculty of Veterinary Medicine, Department of Parasitology
DERMATOPHYTOSIS IN DOGS AND TREATMENT CHOICES	Ali Bilgili	Ankara University Faculty of Veterinary Medicine, Department of Pharmacology and Toxicology, Ankara, Turkey
	Başak Hanedan	Atatürk University Faculty of Veterinary Medicine, Department of Internal Medicine
	Muhammed Haydar Uysal	Ankara University Department of Pharmacology and Toxicology, Health Sciences Institute, Ankara, Turkey
THE EFFECT OF SEXED OR CONVENTIONAL SEMEN USE ON PREGNANCY RATES IN HIGH MILK YIELD DAIRY COWS	Dr. Nail Tekin ÖNDER	Department of Reproduction and Artificial Insemination, Faculty of Veterinary Medicine, Kafkas University, Paşaçayır/Kars Merkez/Kars, 36300, Turkey
	Assoc. Prof. Dr. Selim ALÇAY	Department of Reproduction and Artificial Insemination, Faculty of Veterinary Medicine, Kafkas University, Paşaçayır/Kars Merkez/Kars, 36300, Turkey
EFFECTS OF SEPIOLITE USAGE IN DIETS ON SOME EGG TRAITS AND EGG CHOLESTEROL CONTENT IN LAYING HENS	Prof.Dr. Sakine YALÇIN	Ankara University, Faculty of Veterinary Medicine
	Prof.Dr. Suzan YALÇIN	Selçuk University, Faculty of Veterinary Medicine

11.04.2021

SESSION-1 HALL-1

Turkey Time

10:00-12:30

Moderator: Assist. Prof. Dr. Mehmet Selim ÇÖMEZ

TITLE	AUTHOR(S)	AFFILIATION
MEDIAL OVERHANG OF THE TIBIAL COMPONENT DOES NOT SIGNIFICANTLY AFFECT POSTOPERATIVE FUNCTIONAL OUTCOME FOLLOWING TOTAL KNEE ARTHROPLASTY FUNCTIONAL OUTCOME FOLLOWING TOTAL KNEE ARTHROPLASTY	Mehmet Ekinci	Department of Orthopaedics and Traumatology, Haseki Education and Training Hospital, Istanbul, Turkey
	Mehmet Ersin	Department of Orthopaedics and Traumatology, Haseki Education and Training Hospital, Istanbul, Turkey
HYPOGAMMAGLOBULINEMIA AND SARS-COV-2: A CASE REPORT	Assist. Prof. Dr. Mehmet Selim ÇÖMEZ	Hatay Mustafa Kemal University
A RARE COMPLICATION PNEUMOTORAX: SINGLE CENTER EXPERIENCE IN PATIENTS WITH PACEMAKER APPLIED	Ahmet Acıpayam	Kahramanmaraş Sütçü İmam University
PAIN MANAGEMENT IN COVID-19 DIAGNOSED CHILDREN	Sinem Yalınzoğlu Çaka	Sakarya University, Faculty of Health Science, Department of Pediatric Nursing, Turkey
	Özge Karakaya Suzan	Sakarya University, Faculty of Health Science, Department of Pediatric Nursing, Turkey
	Nursan Çınar	Sakarya University, Faculty of Health Science, Department of Pediatric Nursing, Turkey
DETERMINATION OF INSIDENTAL RENAL ARTERY STENOSIS WITH MOVING BED CONTRAST ENHANCED MAGNETIC RESONANCE ANGIOGRAPHY USED IN THE DIAGNOSIS OF PERIPHERAL ARTERY DISEASE	Assist. Prof. Dr. Esra Özgül	Afyonkarahisar Health Sciences University
	Prof. Dr. Nefise Çağla Tarhan	TOBB ETU University
	Prof. Dr. Fatih Boyvat	Başkent University
DIFFUSION-WEIGHTED IMAGING FINDINGS OF BRAIN PARENCHYMA IN PEDIATRIC INTRACRANIAL HYPERTENSION	Esra Meltem KAYAHAN ULU	Özel Medikal Park Samsun Hastanesi, Radyoloji Bölümü
	Hülya İNCE	Özel Medikal Park Samsun Hastanesi, Çocuk Nörolojisi Bölümü
	Özlem TERZİ	Ondokuz Mayıs Üniversitesi Tıp Fakültesi, Halk Sağlığı Anabilim Dalı
EARLY MDCT FINDINGS IN COVID-19 DISEASE: CAN VASCULAR ENLARGMENT BE A PATOGNOMONIC FIND?	Dr. Melike Ruşen Metin	İstanbul Medipol University
EVALUATION OF PATIENTS WHO RECEIVE HEALTH SERVICE AT HOME AND DIE DUE TO COVID-19	Uzm. Dr. Esra Kurt CANPOLAT	Adıyaman Eğitim ve Araştırma Hastanesi, Başhekimlik
	Assoc. Prof. Dr. Umut GÜLAÇTI	Adıyaman Eğitim ve Araştırma Hastanesi, Acil Tıp
MACROPHAGE TARGETING VIA TOPICAL DRUG DELIVERY FOR THE TREATMENT OF CUTANEOUS LEISHMANIASIS	Fakhar-ud-Din	Department of Pharmacy, Quaid-i-Azam University Islamabad, Pakistan
	PhD Sibgha Batool	Department of Pharmacy, Quaid-i-Azam University Islamabad, Pakistan
	Fatima Zahid	Department of Pharmacy, Quaid-i-Azam University Islamabad, Pakistan
	Gul Majid Khan	Department of Pharmacy, Quaid-i-Azam University Islamabad, Pakistan Islamia College University Peshawar, Khyber Pakhtoonkhwa, Pakistan
CARE OF BABIES WITH MACROSOMIA AND MACROSOMIA IN INFANTS OF DIABETIC MOTHERS	Seda TECİK	Sakarya University
	Prof. Dr. Nursan ÇINAR	Sakarya University

11.04.2021 SESSION-1 HALL-2

Turkey Time

10:00-12:30

Moderator: Assoc. Prof. Dr. Meral Ekim

TITLE	AUTHOR(S)	AFFILIATION
DYSTOCIA DUE TO FETAL ASCITES IN IVESI SHEEP	Tuğra AKKUŞ	Harran University, Faculty of Veterinary Medicine, Department of Obstetrics and Gynecology, Şanlıurfa, Turkey.
	F. Zehra ÖZDEN	Harran University, Faculty of Veterinary Medicine, Department of Obstetrics and Gynecology, Şanlıurfa, Turkey
	Ömer YAPRAKCI	Harran University, Faculty of Veterinary Medicine, Department of Obstetrics and Gynecology, Şanlıurfa, Turkey.
ANALYSIS OF NON-TRAUMA RELATED ORTHOPEDICS CONSULTATIONS	Uzman Dr. Batuhan Gencer	Ankara Şehir Hastanesi, Ortopedi ve Travmatoloji Kliniği
EXPRESSION of the ANGIOTENSIN CONVERTING ENZYME 2 (ACE-2) GENE in BLOOD of BREAST CANCER PATIENTS	Assist. Prof. Dr. Ebubekir DİRİCAN	Bayburt University, Health Services Vocational School, Bayburt, Turkey
DIAGNOSIS AND TREATMENT OF PRIMARY VENOUS ANEURYSMS	Assoc. Prof. Dr. Meral Ekim	Bozok University
	Prof. Dr. Hasan Ekim	Bozok University
TURKISH ADAPTATION OF THE SCALE OF BREASTFEEDING ATTITUDE AND PARTICIPATION OF FATHERS: VALIDITY AND RELIABILITY STUDY	Assist. Prof. Dr. Hale Uyar	Aydin Adnan Menderes University
	Ebe Sinem Gültekin	Zonguldak Gynecology and Pediatrics Hospital
OUR VACUUM ASSISTED CLOSURE THERAPY CASE RESULTS	Assist. Prof. Dr. Zafer Cengiz ER	Bozok University
	Assist. Prof. Dr. Sameh ALAGHA	Bozok University
OCCUPATIONAL HEALTH AND SAFETY AT HEIGHT WORKS	Fatma Sümeyye SARIŞEN	Ankara Yıldırım Beyazıt University
	Rümeysa SARIŞEN	Ankara Yıldırım Beyazıt University
	Dr. Dilek ÖZTAŞ	Ankara Yıldırım Beyazıt University
	Abdullah YILDIZBAŞI	Ankara Yıldırım Beyazıt University
	Ergün ERASLAN	Ankara Yıldırım Beyazıt University
OCCUPATIONAL HEALTH AND SAFETY IN WORKING WITH SCREENED VEHICLES	Rümeysa SARIŞEN	Ankara Yıldırım Beyazıt University
	Fatma Sümeyye SARIŞEN	Ankara Yıldırım Beyazıt University
	Dr. Dilek ÖZTAŞ	Ankara Yıldırım Beyazıt University
	Abdullah YILDIZBAŞI	Ankara Yıldırım Beyazıt University
	Ergün ERASLAN	Ankara Yıldırım Beyazıt University
AN EVALUATION ON THE MANAGERIAL STRUCTURE AND PROJECTS OF ORGANIZATIONS RELATED TO FAMILY AND SOCIAL SERVICES	Assist. Prof. Dr. Özgür YEŞİLYURT	Muş Alparslan University
	Ömer Faruk ASLAN	Muş Alparslan University
PROTECTIVE EFFECT OF BORON COMPOUNDS AGAINST BRAIN DAMAGE CAUSED BY RADIATION IN THE RATS	Assist. Prof. Dr. Nurhan Erkaya	Aksaray University

11.04.2021

SESSION-1 HALL-3

Turkey Time

10:00-12:30

Moderator: Prof. Dr. Şebnem ASLAN

TITLE	AUTHOR(S)	AFFILIATION
THE EFFECTS OF EXERCISE-INDUCED IRISIN MYOKINE ON OBESITY	Aysu ÖNAL	Ankara University
	Cengizhan SARI	Mus Alparslan University
INVESTIGATION OF THE EFFECT OF PARTICIPATING IN SPORTS ACTIVITIES ON LIFE SKILLS OF HIGH SCHOOL STUDENTS	Mehmet ALTUN	Marmara University
	Assoc. Prof. Dr. Mehmet Mustafa YORULMAZLAR	Marmara University
	Assoc. Prof. Dr. Mahmut AÇAK	İnönü University
EVALUATION OF PRE-SCHOOL TEACHER CANDIDATES 'OPINIONS ABOUT PHYSICAL EDUCATION AND GAME TEACHING COURSE	Assist. Prof. Dr. Ahmet YIKILMAZ	Iğdır University
	Assoc. Prof. Dr. Fikret ALINCAK	Gaziantep University
FEVER MANAGEMENT IN CHILDREN	Lec. Gülşah Hür	Karabük University
	Prof. Dr. Nursan Çınar	Sakarya University
THE IMPORTANCE OF TOPIRAMATE USE IN MIGRAINE PROPHYLAXIS	Kübra OLAGAN	
	Ayşe Kübra KARABOĞA ARSLAN	Erciyes University
EVALUATION OF THE OPINIONS OF PHYSICAL EDUCATION TEACHERS ON SUPPORT AND TRAINING COURSES	Assist. Prof. Dr. Ahmet YIKILMAZ	Iğdır University
	Assoc. Prof. Dr. Fikret ALINCAK	Gaziantep University
HEALTH WORKFORCE RESOURCES IN DEVELOPING COUNTRIES	Prof. Dr. Şebnem ASLAN	Selçuk University
	Azza Yhya JADALLAH	Selçuk University
HEALTH EXPENDITURES, HOSPITAL BED CAPACITY AND HEALTHCARE EMPLOYMENT AND MORTALITY FROM COVID-19 IN OECD COUNTRIES	Prof. Dr. Şebnem ASLAN	Selçuk University
	Ayşe ÖZDEMİR	Selçuk University
COMPARISON OF CANCER CASES IN EUROPEAN COUNTRIES AND TURKEY	Prof. Dr. Şebnem ASLAN	Selçuk University
	Ferhat BOLUKÇU	Selçuk University
HOW DID THE PANDEMIC PROCESS AFFECT THE SITUATION OF HOME ACCIDENTS IN CHILDREN?	Lec. Sümevra Topal	Kahramanmaraş Sutcu Imam University
	Prof. Dr. Nursan Çınar	Sakarya University
PRESERVING THE PURITY OF OUR LANGUAGE IS ONE OF THE URGENT ISSUES OF LINGUISTICS	Assoc. Prof. Dr. Chinara GAHRAMANOVA	Azerbaijan State University of Economics, Department of Azerbaijani Language, Baku

11.04.2021 SESSION-1 HALL-4

United Kingdom Time (-2)	Turkey Time	Pakistan Time (+2)	Australia Time (+8)
11:00-13:30	10:00-12:30	12:00-14:30	18:00-20:30

Moderator: Assist. Prof. Dr. Burcu AKÇA

TITLE	AUTHOR(S)	AFFILIATION
THE EFFECT OF MOTIVATIONAL INTERVIEWS ON PERCEPTION OF BIRTH AND SELF-EFFICACY IN NULLIPARS WITH TRAUMATIC BIRTH PERCEPTION	Lec. Sümeyye BARUT	Firat University Faculty of Health Sciences Midwifery Department, Elazığ, Turkey
	Assoc. Prof. Tuba UÇAR	Inonu University Faculty of Health Sciences Midwifery Department, Malatya, Turkey
THE EFFECT OF STRENGTH TRAINING WITH FUNCTIONAL SPORT EQUIPMENTS ON YOUNG MALE BASKETBALL PLAYERS' PERFORMANCE	Uğur Can GÖÇER	Gaziantep University
	Prof. Dr. Mürsel BİÇER	Gaziantep University
	Assoc. Prof. Dr. Burak GÜNER	Gaziantep University
MULTIPLE SYSTEM INFLAMMATORY SYNDROME AND NURSING MANAGEMENT RELATED TO COVID-19 IN CHILDREN	Lec. Ayşe EROĞLU	Sakarya University
	Prof. Dr. Nursan ÇINAR	Sakarya University
DEOXY-SUGAR RELEASING PRO-ANGIOGENIC DRESSINGS TO ACCELERATE HEALING IN BURNS INJURIES AND DIABETIC FOOT ULCER WOUNDS	Muhammad Yar	Interdisciplinary Research Center in Biomedical Materials (IRCBM), COMSATS University Islamabad Lahore Campus, Lahore,54000, Pakistan
	Lubna Shahzadi	Interdisciplinary Research Center in Biomedical Materials (IRCBM), COMSATS University Islamabad Lahore Campus, Lahore,54000, Pakistan
	Azra Mehmood	Center of Excellence in Molecular Biology (CEMB), Lahore, 54000, Pakistan
	Muhammad Imran Raheem	Interdisciplinary Research Center in Biomedical Materials (IRCBM), COMSATS University Islamabad Lahore Campus, Lahore,54000, Pakistan
	Sabiniano Román	The Kroto Research Institute, Materials Science and Engineering, North Campus, University of Sheffield, Broad Lane, Sheffield, S3 7HQ, UK
	Aqif Anwar Chaudhry	Interdisciplinary Research Center in Biomedical Materials (IRCBM), COMSATS University Islamabad Lahore Campus, Lahore,54000, Pakistan
	Ihtesham ur Rehman	Interdisciplinary Research Center in Biomedical Materials (IRCBM), COMSATS University Islamabad Lahore Campus, Lahore,54000, Pakistan
	C.W. Ian Douglas	Unit of Oral and Maxillofacial Pathology, School of Clinical Dentistry, University of Sheffield, Claremont Crescent, Sheffield, South Yorkshire, S10 2TA, United Kingdom
	Iain Ralph	Cannenta Pty Ltd., 11/118 Church St Hawthorn VIC 3122 Australia
DOJO AND TRADITIONAL MARTIAL ARTS: A SOCIAL COMMUNITY FOR PHYSICAL ACTIVITY AND HEALTH PREVENTION IN LATER AGE	Sheila MacNeil	The Kroto Research Institute, Materials Science and Engineering, North Campus, University of Sheffield, Broad Lane, Sheffield, S3 7HQ, UK
	Danilo Contiero	University of the West of Scotland
THE SHOCK OF COVID-19 ON THE FOOD AND MARINE INDUSTRIES	Dr. Theodoros Daglis	National Technical University of Athens

EPIGALLOCATECHIN-3-GALLATE-LOADED PLGA-PEG NANOPARTICLES AS A PROMISING ANTI-SEIZURE STRATEGY AGAINST EPILEPSY DISORDERS	Amanda Cano, Ph.D.	Department of Pharmacy, Pharmaceutical Technology and Physical Chemistry
BACTERIAL PLASTICS: PRODUCTION, STRUCTURE, MOLECULAR BASIS AND APPLICATION	Dr. Nazia Jamil	Institute of Microbiology and Molecular Genetics
POLY (PYRROLE-CO-O-ANISIDINE) SYNTHESIZED ON ZNFE COATED CARBON STEEL SURFACE	Abdurrahman AKDAG	Harran University, Vocational School of Health Services, Sanliurfa, 63300, Turkey
EVALUATION OF BODY AWARENESS OF INDIVIDUALS WHO DO REGULAR SPORTS AND THOSE WHO DO NOT DO AND THEIR POSTURE LEVELS	Serkan KIZILCA	Firat University, Elazığ, TURKEY
	Cengiz ARSLAN	Firat University, Elazığ, TURKEY
GAMMA-RAY TRANSMISSION FACTORS OF RED SOILS IN THE REGION BETWEEN THE OLTU-SENKAYA DISTRICTS	Assist. Prof. Dr. Burcu AKÇA	Ardahan University

11.04.2021
SESSION-1 HALL-5

Nigeria Time (-2)	Turkey Time	Poland Time (-1)	Azerbaijan Time (+1)	Malaysia Time (+5)
08:00-10:30	10:00-12:30	09:00-11:30	11:00-13:30	15:00-17:30

Moderator: Prof. Dr. Kinga Flaga-Gieruszyńska

TITLE	AUTHOR(S)	AFFILIATION
POLISH MODEL OF ELECTRONIZATION OF THE EXAMINATION PROCEDURE IN CIVIL CASES	Kinga Flaga-Gieruszyńska	Professor of University of Szczecin, Faculty of Law and Administration, University of Szczecin, Poland
THE ELECTRONIZATION OF ENFORCEMENT PROCEEDINGS IN CIVIL CASES IN POLAND - CURRENT STATE AND PROSPECTS	Joanna Studzińska	Professor of Kozminski University in Warsaw, Head of Division of civil proceedings, Department of Civil Law, Kozminski University, Poland
MODEL OF TELEMEDICINE SERVICES ON THE EXAMPLE OF POLAND	Aleksandra Klich	Faculty of Law and Administration, University of Szczecin, Poland
ANALYSING THE COVID-19 SITUATION FROM EMPLOYEES' LENS: A CASE OF INDIA'S TOURISM SECTOR	Pinaz Tiwari	Doctoral Researcher, Department of Tourism and Hospitality Management, Jamia Millia Islamia, New Delhi-110025
TOURISTS' PREFERENCES IN TOURISM DESTINATION SELECTION IN MALAYSIA	Marlisa Abdul Rahim	Faculty of Hospitality, Tourism & Wellness, Universiti Malaysia Kelantan, Kampus Kota, Pengkalan Chepa, Kota Bharu, Kelantan, Malaysia
	Nurzehan Abu Bakar	Faculty of Hospitality, Tourism & Wellness, Universiti Malaysia Kelantan, Kampus Kota, Pengkalan Chepa, Kota Bharu, Kelantan, Malaysia
	Nor Maizana Mat Nawi	Faculty of Hospitality, Tourism & Wellness, Universiti Malaysia Kelantan, Kampus Kota, Pengkalan Chepa, Kota Bharu, Kelantan, Malaysia
	Raja Norliana Raja Omar	Faculty of Hospitality, Tourism & Wellness, Universiti Malaysia Kelantan, Kampus Kota, Pengkalan Chepa, Kota Bharu, Kelantan, Malaysia
	Nik Alif Amri Nik Hashim	Faculty of Hospitality, Tourism & Wellness, Universiti Malaysia Kelantan, Kampus Kota, Pengkalan Chepa, Kota Bharu, Kelantan, Malaysia
	Afifah Hanim Md Pazil	Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan, Kampus Kota, Pengkalan Chepa, Kota Bharu, Kelantan, Malaysia
URBANISATION AND SUSTAINABLE DEVELOPMENT: A CASE STUDY OF TWO URBAN CITY IN SOUTHWESTERN, NIGERIA	Adenike Anike Olayungbo	Natural History Museum, Obafemi Awolowo University, Ile-Ife, Nigeria
ARISING FROM TERROR AND ACTIONS OF TERROR DAMAGE ACTIONS AND THE COUNCIL OF STATE APPROACH	Lec. Merve Gül GÜN	Anadolu Üniversitesi, Hukuk Fakültesi
RESIDENCE PERMITS OF FOREIGNERS IN LINE WITH INTERNATIONAL PROTECTION LAW WITHIN THE FRAMEWORK OF MIGRATION MANAGEMENT IN TURKEY	Assoc. Prof. Seda TOPGUL	Akdeniz University, Department of Social Work, Antalya/TURKEY
THE INEQUALITY VIRUS: CORONAVIRUS AND THE NEW SOCIAL CLASSES IT HAS EMERGED	Assoc. Prof. Seda TOPGUL	Akdeniz University, Department of Social Work, Antalya/TURKEY

11.04.2021

SESSION-2 HALL-1

Turkey Time

13:00-15:30

Moderator: Assoc. Prof. Dr. Semra BENZER

TITLE	AUTHOR(S)	AFFILIATION
THE DUTY FOR EDUCATORS IN DETERMINING THE FUTURE OF NATIONS IN THE TECHNOLOGY AGE	Assist. Prof. Dr. Gamze SARMAŞIK ABUR	Muğla Sıtkı Kocman University
OCCURRENCE OF <i>Atherina boyeri</i> Risso, 1810 IN KÜÇÜK MENDERES RIVER	Assoc. Prof. Dr. Semra BENZER	Gazi University, Education Faculty
	Prof. Dr. Ali GÜL	Gazi University, Education Faculty
THE EFFECT OF WEB AIDED CONCEPT CARTOONS AND CONCEPTUAL CHANGE TEXTS ON THE COGNITIVE LOAD OF 6th GRADE STUDENTS	Kübra SİNANOĞLU	Ordu University
	Prof. Dr. Erol TAŞ	Ordu University
	Assist. Prof. Dr. Erdem KAYA	Ordu University
	Res. Assist. Hacı Mehmet YEŞİLTAŞ	Ordu University
THE EFFECT OF WEB AIDED CONCEPT CARTOONS AND CONCEPTUAL CHANGE TEXTS ON THE ACADEMIC SUCCESS AND PERMANENCE OF 6th GRADE STUDENTS	Kübra SİNANOĞLU	Ordu University
	Prof. Dr. Erol TAŞ	Ordu University
	Assist. Prof. Dr. Erdem KAYA	Ordu University
	Res. Assist. Hacı Mehmet YEŞİLTAŞ	Ordu University
GENIUS HOUR IN SCIENCE EDUCATION	Prof. Dr. Erol TAŞ	Ordu University
	Res. Assist. Hacı Mehmet YEŞİLTAŞ	Ordu University
THE INVESTIGATION OF CLASSROOM TEACHERS' VIEWS TOWARDS PRIMARY EDUCATION GOALS OF 2023 EDUCATION VISION	Assist. Prof. Dr. Ferhat Bahçeci	Fırat University
	Mustafa Çınar	Fırat University
	Lect. Semih Dikmen	Fırat University
COMPARISON OF TURKEY AND AZERBAIJAN OCCUPATIONAL ACCIDENT RATES WITH DESCRIPTIVE STATISTICAL METHOD	Dr. Serenay ÇALIŞ	Nigde Omer Halisdemir University
	Çağdaş ÇALIŞ	İstanbul Aydın University
THE RELATIONSHIP BETWEEN HIGH SCHOOL STUDENTS' PURPOSE OF USING SOCIAL MEDIA AND LEVEL OF LONELINESS	Lütfiye Timur	Necmettin Erbakan University
	Melike Soydan	Necmettin Erbakan University
	Selin Aycan Sezer	Necmettin Erbakan University
	Assoc. Prof. Dr. Menşüre Alkış Küçükaydın	Necmettin Erbakan University
INVESTIGATION OF THE EFFECTS OF SELF-PERCEPTION, LIFE SATISFACTION AND MOTIVATION IN UNIVERSITY STUDENTS	Gökkız KOÇ	Necmettin Erbakan University
	Assoc. Prof. Dr. Menşüre ALKIŞ KÜÇÜKAYDIN	Necmettin Erbakan University

11.04.2021
SESSION-2 HALL-2

Turkey Time	Azerbaijan Time (+1)	IndiaTime (+3)
13:00-15:30	14:00-16:30	16:00-18:30

Moderator: Dr. İsmail CEYLAN

TITLE	AUTHOR(S)	AFFILIATION
THE EFFECT OF CUTTING DIRECTIONS ON SCREW TORQUE IN SCOTS PINE WOOD (Pinus sylvestris L.)	Dr. Emre BİRİNCİ	Kastamonu University
SENTIMENT ANALYSIS USING ACTIVE LEARNING BASED TRANSFER LEARNING APPROACH IN TURKISH TEXTS	Seher LORT TOSUN	Karabük University
	Prof. Dr. Oğuz FINDIK	Karabük University
COMPARISON OF GRIP FORCE AND HAND REACTION VALUES IN DIFFERENT GENERATIONS	Dr. İsmail CEYLAN	Kırşehir Ahi Evran University
	Prof. Dr. Mehmet TURAN	Atılım University
	Prof. Dr. Sofiya OSTROVSKA	Atılım University
EXTRACTING SIGNAL CONVERSATION FROM ANDROID SMART PHONES USING ELCOMSOFT FORENSIC TOOL	Afrah Fathima	BSAR Crescent Institute of Science and Technology, Chennai, India
	Dr. Zameer Gulzar	BSAR Crescent Institute of Science and Technology, Chennai, India
A SIMULATION MODELLING FRAMEWORK OF MULTI CRANE DUAL CYCLING STRATEGY FOR CONTAINER TERMINALS	M.Sc. Elvan Deniz	Dokuz Eylül University, The Graduate School of Natural and Applied Sciences, Izmir, Turkey
	Assoc. Prof. Gonca Tunçel	Dokuz Eylül University, Department of Industrial Engineering, Izmir, Turkey
IN BIG DATA SEMI-STRUCTURED DATA TYPES AND ANALYTICAL STANDARDS OF TRANSFORMING SEMI-STRUCTURED DATA TO STRUCTURED DATA FOR DATA MINING	PhD st. Ulviyya İbrahimli Mahir	Azerbaijan National Academy of Sciences, Institute of Control Systems
THE PLACE AND IMPORTANCE OF THE BORON MINING IN THE WORLD	Aysu SARI ÇETİN	Ankara, TÜRKİYE
GREEN ARCHITECTURAL BUILDINGS	Aysu SARI ÇETİN	Ankara, TÜRKİYE
SUPPORT OF MN ADDITION TO CRACK PROPAGATION ALONG GRAIN BOUNDARIES IN BI-2212 SUPERCONDUCTING SYSTEM	A.T. Ulgen	Sırnak University, Department of Electric-Electronic Engineering
	T. Turgay	Sakarya University, Department of Architecture
	Y. Zalaoglu	Osmaniye Korkut Ata University, Department of Physics
	G. Yildirim	Abant İzzet Baysal University, Department of Mechanical Engineering
A MECHANICAL MODELLING RESEARCH FOR MN ADDED BULK BI-2212 SUPERCONDUCTING SYSTEM	A.T. Ulgen	Sırnak University, Department of Electric-Electronic Engineering
	T. Turgay	Sakarya University, Department of Architecture
	Y. Zalaoglu	Osmaniye Korkut Ata University, Department of Physics
	G. Yildirim	Abant İzzet Baysal University, Department of Mechanical Engineering

11.04.2021
SESSION-2 HALL-3

Turkey Time

13:00-15:30

Moderator: Assoc. Prof. Dr. Rasim SOYLU

TITLE	AUTHOR(S)	AFFILIATION
SEEKING NATIONAL IDENTITY IN TURKISH ART FROM OTTOMAN TO PRESENT	Assoc. Prof. Dr. Rasim SOYLU	Sakarya University
	Assoc. Prof. Dr. Mustafa DİĞLER	Karamanoğlu Mehmet Bey University
REFLECTIONS OF THE CONCEPT OF TIME IN PAINTING	Assoc. Prof. Dr. Mustafa DİĞLER	Karamanoğlu Mehmet Bey University
	Assoc. Prof. Dr. Rasim SOYLU	Sakarya University
DETERMINING THE ACCURACY OF QIBLA DIRECTION OF MOSQUES: A CASE STUDY IN KARAMAN CITY, TURKEY	Assist. Prof. Dr. Fuat BAŞÇİFTÇİ	Karamanoğlu Mehmetbey Üniversitesi, Teknik Bilimler MYO, Harita ve Kadastro Programı
TRANSFORMATION OF BROWNFIELDS: BAKU BLACK CITY OIL INDUSTRIAL ZONE	Leman Allahverdiyeva	Gazi University
	Özlem GÜZEY KOCATAŞ	Gazi University
HISTORY OF POLITICAL REPRESENTATION OF WOMEN IN THE TURKISH PARLIAMENT	Assoc. Prof. Dr. Derya ÇİNİ ŞİMŞEK	Başkent University
IMMEDIATION OF BAKU BY NURI PASHA, COMMANDER OF THE ISLAMIC ARMY OF THE CAUCASUS	Assist. Prof. Dr. Yunus EKİCİ	Osmaniye Korkut Ata University
THE EFFECTS OF INTEREST RATE AND INFLATION ON PRIVATE CONSUMPTION EXPENDITURES IN TURKEY	Assist. Prof. Dr. Musa ATGÜR	Balıkesir University
INVESTIGATION OF URBAN SPATIAL SEGREGATION AND SYRIANS AS OTHER IN URBAN AREA: ISTANBUL CASE	Şafak ÇÖZE	Yıldız Teknik University
	Assoc. Prof. Dr. Hülya BERKMEN	Yıldız Teknik University
EVALUATION OF TRADITIONAL TEXTURE IN THE CONTEXT OF URBAN LIFE QUALITY	Fatiha Nur Terlemez	Necmettin Erbakan University
	Assist. Prof. Dr. Fadim Yavuz	Necmettin Erbakan University

11.04.2021 SESSION-2 HALL-4

Nigeria Time (-2)	Turkey Time	Indonesia Time (+6)	Sweden Time (-1)	Iran Time (+1:30)
11:00-13:30	13:00-15:30	19:00-21:30	12:00-14:30	14:30-17:00

Moderator: Prof. Dr. GRAA Amel

TITLE	AUTHOR(S)	AFFILIATION
A DISRUPTIVE OPEN INNOVATION IDEA REALIZATION SYSTEM FOR BUSINESSES: CEM-COMMUNITY-BASED EXECUTION MODEL	Aysun DEMİRDÖĞEN	Ege University, Graduate School of Natural and Applied Science Institute, Product Life Management Programme, Izmir Ege University, Science and Technology Application and Research Center(EBILTEM) Technology Transfer Office, Izmir
THE IMPORTANCE OF CUSTOMER RELATION MANAGEMENT: IMPROVING A FRAMEWORK FOR A COMPANY IN THE SERVICE SECTOR	PhD. Ayşenur Erdil	Istanbul Medeniyet University, Faculty of Political Sciences
WE ARE THE COVID-19'S VICTIMS TOO: A QUALITATIVE STUDY OF THE INFORMAL AND MSME (MICRO, SMALL, AND MEDIUM) ENTREPRENEURS AT THE TIME OF COVID-19 PANDEMIC	Adhy Firdaus	STIE GANESHA College of Economics, Jakarta, Indonesia
	Muhammad Said	STIE GANESHA College of Economics, Jakarta, Indonesia
ANALYZING ELECTRONIC WORD OF MOUTH IN ALGERIAN HOSPITALITY SECTOR: QUALITATIVE APPROACH	Prof. Dr. GRAA Amel	Djillali Liabes University, Business and economic faculty, Algeria
	Dr. LACHABI Fatima Zohra	Djillali Liabes University, Business and economic faculty, Algeria
PARTICIPATORY LEARNING MANAGEMENT IN IMPROVING STUDENT ENTREPRENEURIAL BEHAVIOR OF INDONESIA	Jomed Ceilendra Saskana	College University for Economics Studies (STIE) Ganesha Jakarta, Indonesia
	Muhammad Said	College University for Economics Studies (STIE) Ganesha Jakarta, Indonesia
A DECISION PROCEDURE TO CONTROL COVID-19 CROSS-INFECTION IN HEALTHCARE FACILITIES	Dr. Yasaman Parsia	Independent Researcher, Gothenburg, Sweden
	Assoc.Prof. Dr. Shahryar Sorooshian	Department of Business Administration, University of Gothenburg, Sweden
A CASE STUDY ON MANAGEMENT OF A DIGITAL TRANSFORMATION PROJECT FOR A TRADITIONAL BUSINESS	MSc. Mehrdad Parsaee	Independent Researcher, Tehran, Iran
	MSc. Shila Khademi Sharifabad	Independent Researcher, Tehran, Iran
	Assoc.Prof. Dr. Shahryar Sorooshian	Department of business Administration, University of Gothenburg, Sweden
IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON PREVENTION OF WORKPLACE HARASSMENTS	MSc. Shila Khademi Sharifabad	Independent Researcher, Tehran, Iran
	MSc. Mehrdad Parsaee	Independent Researcher, Tehran, Iran
	Assoc.Prof. Dr. Shahryar Sorooshian	Department of business Administration, University of Gothenburg, Sweden
ANALYSIS OF THE INFLUENCE OF THE TOURISM SECTOR ON LOCAL REVENUE (PAD) IN NORTH MALUKU PROVINCE 2014-2018	Novi Nur Setianingsih	Department of Economic Development, Faculty of Economic, Semarang State University
	Avi Budi Setiawan, S. E.	Department of Economic Development, Faculty of Economic, Semarang State University
OIL PRICE, OIL REVENUE, NON-OIL REVENUE AND GOVERNMENT SPENDING IN NIGERIA: A SVAR ANALYSIS OF REVENUE AND EXPENDITURE RELATIONSHIP	D.O. Olayungbo	Department of Economics, Obafemi Awolowo University, Ile-Ife, Nigeria
SPATIAL ECONOMETRICS ANALYSIS WITH APPLICATION OF PHILLIP'S CURVE ON NIGERIAN ECONOMY	Okoro-Ugochukwu, N. A.	Department of Statistics, Nasarawa State University, Keffi, Nigeria & NSUK-LISA Stat Lab, Nasarawa State University, Keffi, Nigeria

	Adenomon, M. O	Department of Statistics, Nasarawa State University, Keffi, Nigeria & NSUK-LISA Stat Lab, Nasarawa State University, Keffi, Nigeria Chair, International Association of Statistical Computing (IASC) African Members Group Foundation of Laboratory for Econometrics and Applied Statistics of Nigeria (FOUND-LEAS-IN-NIGERIA)
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11.04.2021

SESSION-2 HALL-5

Nigeria Time (-2)	Turkey Time	New Zealand Time (+10)	Slovakia Time (-2)
11:00-13:30	13:00-15:30	23:00-00:30	12:00-14:30

Moderator: Prof. Dr. Andrea Bencsik

TITLE	AUTHOR(S)	AFFILIATION
ENTREPRENEURSHIP EDUCATION IN MALAYSIAN UNIVERSITIES FROM THE LENS OF NON-BUSINESS ACADEMIC STAFF	Bazilah Raihan Mat Shawal	The University of Auckland, New Zealand
	Kerry Lee	The University of Auckland, New Zealand
	Deborah Shepherd	The University of Auckland, New Zealand
AGING AND COGNITIVE FUNCTIONING; A MINI REVIEW	Saleha Bibi	Clinical Psychologist, ABA Therapist & Researcher, Army Special Education Academy, Rawalpindi, Pakistan
EMOTIONAL INTELLIGENCE AS A PREDICTOR OF OCCUPATIONAL ABILITY	Saleha Bibi	Clinical Psychologist, ABA Therapist & Researcher, Army Special Education Academy, Rawalpindi, Pakistan
	Dr. Amna Khalid	Fatima Jinnah Women University, Rawalpindi, Pakistan
GDP OR GNH (GENERAL NATIONAL HAPPINESS)	Prof. Dr. Andrea Bencsik	J. Selye University, Komarno, Slovakia
	Bc. Dominika Diósi	J. Selye University, Komarno, Slovakia
THE IMPORTANCE OF ATTITUDE / BEHAVIOR IN THE OBSERVATION OF WORK TEAMS	Francisco Jose Silvestre Nunes Guiomar	E-Redes, Portugal
	Prof. Dr. Rui Alberto da Silva Martins Isidoro	Polytechnic Institute of Beja, Portugal
	Prof. Dra. Ana Filomena de Figueiredo Dias	Polytechnic Institute of Beja, Portugal
POVERTY MANAGEMENT IN LOCAL GOVERNMENTS	Nazire YÜKSEK	İstanbul Sabahattin Zaim University
	Assist. Prof. Dr. Sayra LOTFİ	İstanbul Medipol University
THE ROLE OF DEMOGRAPHIC FACTORS IN SHAPING PERSONALITY	Mrs. N.J. Abdinova	Azerbaijan State Pedagogical University
SELF PERFECTION IN PRESCHOOL IMMIGRANT CHILDREN: THE EFFECT OF SOCIAL ADAPTION AND SKILLS EDUCATION	Emine Bozkurt Polat	Gazi University, Turkey
	Saide Özbey	Gazi University, Turkey
	Mehlika Köyceğiz Gözeler	Gazi University, Turkey
	Sare Türkmen	Gazi University, Turkey
SOCIAL VALUES EDUCATION PROGRAM IN PRESCHOOL CHILDREN: THE EFFECT ON SELF-REGULATION, SOCIAL SKILLS AND PROBLEM BEHAVIOR	Emine Bozkurt Polat	Gazi University, Turkey
	Saide Özbey	Gazi University, Turkey
E-TASK APPLICATION BASED ON PROBLEM BASED LEARNING IN DATA BASED DESIGN COURSES IN COLLEGE EDUCATION	Sri Restu Ningsih	STMIK Indonesia Padang

11.04.2021

SESSION-3 HALL-1

Turkey Time	Poland Time (-1)	Ethiopia Time (-2)	Pakistan Time (+2)
16:00-18:30	15:00-17:30	14:00-16:30	18:00-20:30

Moderator: Prof. Dr. Sedat İlhan

TITLE	AUTHOR(S)	AFFILIATION
CLASSIFICATION OF WAVE SEQUENCES FOR COUNTERFLOW COMBUSTION FRONTS IN REACTION-CONVECTION-DIFFUSION MODEL	Assist. Prof. Dr. Fatih ÖZBAĞ	Harran University
ROLE OF QUEUING THEORY MODEL IN EFFECTIVE BUSINESS STRATEGIES PLANNING	Bhavtosh Awasthi	Department of Mathematics, JECRC University, Jaipur-303905, Rajasthan, India
THE EFFECT OF NANOPARTICLES ON MHD BLOOD FLOW IN STRETCHING ARTERIAL POROUS VESSEL WITH THE INFLUENCE OF THERMAL RADIATION, CHEMICAL REACTION AND HEAT GENERATION /ABSORPTION	Dr. Binyam Zigta	Wolaita Sodo University, College of Natural and Computational Science, Department of Mathematics, P.O.Box 138, ETHIOPIA
A NUMERICAL STUDY OF RHEOLOGY OF BOUNDARY LAYER AXISYMMETRIC FLOW OF AN OLDROYD-B FLUID IN THE REGION OF STAGNATION POINT OVER A STRETCHING SHEET: FINITE DIFFERENCE ANALYSIS	Bilal Ahmed	Department of Mathematics and Statistics, The University of Lahore, Sargodha campus 40100, Pakistan
THE PHYSICAL LIMITS OF COMPUTATION INSPIRE AN OPEN PROBLEM THAT CONCERNS DECIDABLE SETS $\mathbb{X} \subseteq \mathbb{N}$ AND CANNOT BE FORMALIZED IN ZFC AS IT REFERS TO THE CURRENT KNOWLEDGE ON \mathbb{X}	Agnieszka Kozdęba	Institute of Mathematics, Jagiellonian University, Kraków, Poland
	Apoloniusz Tyszką	Technical Faculty, Hugo Kołłątaj University, Kraków, Poland
ON THE CONNECTIONS BETWEEN JACOBSTHAL NUMBERS AND PELL p -NUMBERS	Dr. Özgür ERDAĞ	Kafkas University, Faculty of Science and Letters, Department of Mathematics
	Prof. Dr. Ömür DEVECİ	Kafkas University, Faculty of Science and Letters, Department of Mathematics
THE FIBONACCI-PADOVAN p -SEQUENCES MODULO m	Dr. Özgür ERDAĞ	Kafkas University, Faculty of Science and Letters, Department of Mathematics
	Prof. Dr. Ömür DEVECİ	Kafkas University, Faculty of Science and Letters, Department of Mathematics
THE PELL-JACOSTHAL p -SEQUENCES MODULO m	Prof. Dr. Ömür DEVECİ	Kafkas University, Faculty of Science and Letters, Department of Mathematics
	Dr. Özgür ERDAĞ	Kafkas University, Faculty of Science and Letters, Department of Mathematics
EINSTEIN POISSON WARPED PRODUCT SPACE	Pankaj Kumar	Department of mathematics institute of science Banaras Hindu University Varanasi
A STUDY ON A CLASS OF NUMERICAL SEMIGROUPS	Prof. Dr. Sedat İlhan	Dicle University, Faculty of Science, Department of Mathematics, Diyarbakır, TURKEY

11.04.2021
SESSION-3 HALL-2

Turkey Time	India Time (+2:30)	Ukraine Time
16:00-18:30	18:30-21:00	16:00-18:30

Moderator: Assistant Prof. Dr. Yeşim AKÜZÜM

TITLE	AUTHOR(S)	AFFILIATION
CALCULATING THE DETERMINANT OF VIETA MATRIX	Assist. Prof. Dr. Ufuk Kaya	Bitlis Eren University
	Fatma Nur Kaya Sağlam	Tekirdağ Namık Kemal University
G-JITTER EFFECT ON CHAOTIC CONVECTIVE FLOW THROUGH AN ANISOTROPIC POROUS MEDIUM	R. Surendara	Department of Mathematics, Bharathiar University, Coimbatore 641 046, Tamil Nadu, India
	M. Muthamilselvan	Department of Mathematics, Bharathiar University, Coimbatore 641 046, Tamil Nadu, India
MICROPOLAR NANOFLUID FLOW OVER A STRETCHING SHEET UNDER THE EFFECTS OF THERMAL RADIATION AND MAGNETIC FIELD	Abid Hussanan	Department of Mathematics, Division of Science and Technology, University of Education, Lahore, 54000, Pakistan
RABBIT AND RED FOX DYNAMICS WITH ALTERNATIVE PREY: EFFECT OF MANGE	Jyoti Gupta	Department of Mathematics, S.M.S. Govt. Model Science College, Gwalior-474002, M.P., India
	Joydip Dhar	Department of Applied Sciences, ABV-Indian Institute of Information Technology and Management, Gwalior-474015, M.P., India
	Poonam Sinha	Department of Mathematics, S.M.S. Govt. Model Science College, Gwalior-474002, M.P., India
EVAPOTRANSPIRATION FACTOR IN 3D MATHEMATICAL MODELING OF GROUNDWATER LEVEL CHANGES	Elena Sierikova, PhD	National University of Civil Defence of Ukraine, Kharkiv, Ukraine
	Elena Strelnikova	A.M. Podgorny Institute for Mechanical Engineering Problems NAS of Ukraine, Kharkiv, Ukraine
IMPACT OF THE LORENTZ FORCE ON COMBINED BUOYANCY-THERMOCAPILLARY CONVECTION IN A VERTICAL CYLINDRICAL ANNULAR CAVITY OCCUPIED WITH HYBRID NANOFLUID	B. Kanimozhia	Department of Mathematics, Bharathiar University, Coimbatore 641 046, Tamil Nadu, India
	M. Muthamilselvan	Department of Mathematics, Bharathiar University, Coimbatore 641 046, Tamil Nadu, India
NONLINEAR FRACTIONAL PARTIAL DIFFERENTIAL EQUATION AND IT'S BOUNDEDNESS	Noureddine BOUTERAA	Laboratory of Fundamental and Applied Mathematics of Oran (LMFAO), University of Oran1, Ahmed Benbella. Algeria
THE PELL FIBONACCI-p SEQUENCES MODULO m	Assistant Prof. Dr. Yeşim AKÜZÜM	Kafkas University, Faculty of Science and Letters, Department of Mathematics
	Prof. Dr. Ömür DEVECİ	Kafkas University, Faculty of Science and Letters, Department of Mathematics
ON THE PELL FIBONACCI- p SEQUENCES	Prof. Dr. Ömür DEVECİ	Kafkas University, Faculty of Science and Letters, Department of Mathematics
	Assistant Prof. Dr. Yeşim AKÜZÜM	Kafkas University, Faculty of Science and Letters, Department of Mathematics
THE HADAMARD-TYPE ORDER-k JACOBSTHAL SEQUENCES MODULO m	Assistant Prof. Dr. Yeşim AKÜZÜM	Kafkas University, Faculty of Science and Letters, Department of Mathematics
	Prof. Dr. Ömür DEVECİ	Kafkas University, Faculty of Science and Letters, Department of Mathematics

11.04.2021

SESSION-3 HALL-3

Nigeria Time (-2)	Turkey Time	India Time (+2:30)	United Arab Emirates Time (+1)	Mexico Time (-9)	Hungary Time (-1)
14:00-16:30	16:00-18:30	18:30-21:00	17:00-19:30	07:00-09:30	15:00-17:30

Moderator: Asst. Prof. Dr. Adem YOLCU

TITLE	AUTHOR(S)	AFFILIATION
A THREE POINT INTEGRATION SCHEME FOR SINGULAR PERTURBATION PROBLEMS	Mohammad Javed Alam	Department of Mathematics ,National Institute of Technology Jamshedpur, 831014,Jharkhand, India
	Hari Shankar Prasad	Department of Mathematics ,National Institute of Technology Jamshedpur, 831014,Jharkhand, India
	Rakesh Ranjan	Department of Mathematics ,National Institute of Technology Jamshedpur, 831014,Jharkhand, India
TWO IMPORTANT OPERATIONS IN GENERALIZED UNIFORMITIES	Muwafaq Mahdi Salih	Institute of Mathematics, University of Debrecen, Hungary
FUZZY LOGIC AND CHAOTIC ATTRACTORS IN DECISION-MAKING FUNCTIONS	M.S. Hilario Martines-Arano	Instituto Politécnico Nacional, ESIME ZAC, Mexico City, 07738, Mexico
	M.S. José Alberto Arano-Martínez	Instituto Politécnico Nacional, ESIME ZAC, Mexico City, 07738, Mexico
	Dr. Carlos Torres-Torres	Instituto Politécnico Nacional, ESIME ZAC, Mexico City, 07738, Mexico
TRIVALENT LOGIC IN DECISION-MAKING FUNCTIONS BY NONLINEAR OPTICAL METHODS	M.S. Geselle García-Beltrán	Instituto Politécnico Nacional, ESIME ZAC, Mexico City, 07738, Mexico
	M.S. Eric A. Hurtado-Aviles	Instituto Politécnico Nacional, ESIME ZAC, Mexico City, 07738, Mexico
	Dr. Carlos Torres-Torres	Instituto Politécnico Nacional, ESIME ZAC, Mexico City, 07738, Mexico
NATURAL CONVECTION HEAT TRANSFER OF MAXWELL FLUID IN AN OSCILLATING CYLINDER	Maria Javaid	Department of Mathematics, Government College University, Faisalabad, Pakistan
	Dr. Muhammad Imran Chaudhry	Department of Mathematics, Government College University, Faisalabad, Pakistan
ON DETERMINING THE MORE AFFECTED REGION BY THE CORONAVIRUS DISEASE: EVIDENCE FROM NIGERIA'S PERSPECTIVE	OGUNLEYE, Timothy A	Department of Statistics, Faculty of Physical Sciences, University of Ilorin, Ilorin, Kwara State, Nigeria
	BAMIDELE, Akinfemi P	Department of General Studies, Ladoke Akintola University of Technology, Ogbomosho, Oyo State, Nigeria
A REGRESSION ANALYSIS OF FACTORS AFFECTING GLOBAL CRUDE OIL AND GAS PRICE	Alya Alblooshi	Department of Mechanical Engineering, Abu Dhabi University, Abu Dhabi, United Arab Emirates
	Mohammed Alavi	Department of Mechanical Engineering, Abu Dhabi University, Abu Dhabi, United Arab Emirates
	Sharul Sham Dol	Department of Mechanical Engineering, Abu Dhabi University, Abu Dhabi, United Arab Emirates
ON FUZZY PARAMETERIZED FUZZY SOFT TOPOLOGICAL SPACES AND IT'S APPLICATION	Asst. Prof. Dr. Adem YOLCU	Department of Mathematic, Kafkas University, 36100, Kars, Turkey
	Assoc. Prof. Dr. Taha Yasin ÖZTÜRK	Department of Mathematic, Kafkas University, 36100, Kars, Turkey
A NOTE ON BEST LINEAR UNBIASED ESTIMATORS IN MODELS WITH ORTHOGONAL BLOCK STRUCTURE	Carla Maria Lopes da Silva Afonso dos Santos (PhD)	Polytechnic Institute of Beja, Portugal CMA- Center for Mathematics and Applications, FCT, New University of Lisbon, Portugal
	Cristina Paula da Silva Dias (PhD)	Polytechnic Institute of Beja, Portugal CMA- Center for Mathematics and Applications, FCT, New University of Lisbon, Portugal

INTERNATIONAL HAZAR SCIENTIFIC RESEARCHES CONFERENCE - II
April 10 - 12, 2021
Baku, Azerbaijan, Khazar University
CONGRESS PROGRAM

	Célia Maria Pinto Nunes (PhD)	Department of Mathematics and Center for Mathematics and Applications of University of Beira Interior, Portugal
	João Tiago Praça Nunes Mexia (PhD)	Department of Mathematics and CMA-Center for Mathematics and Applications, FCT New University of Lisbon, Portugal
STABILITY ANALYSIS OF YIELD OF COMMON WHEAT (<i>Triticum aestivum</i> L.) GENOTYPES	Cristina Dias (PhD)	Polytechnic Institute of Portalegre, Campus Politécnico, 10, and Center of Mathematics and Applications (CMA), New University of Lisbon, Portugal
	Carla Santos (PhD)	Polytechnic Institute of Beja and Center of Mathematics and Applications (CMA), New University of Lisbon, Portugal

11.04.2021

SESSION-3 HALL-4

ColombiaTime (-8)	Turkey Time	Malaysia Time (+5)	India Time(+2:30)	Germany Time (-1)	Algeria Time (-2)	Egypt Time (-1)
08:00-10:30	16:00-18:30	21:00-23:30	18:30-21:00	15:00-17:30	14:00-16:30	15:00-17:30

Moderator: Dr. Yavuz CAN

TITLE	AUTHOR(S)	AFFILIATION
NUMERICAL ANALYSIS OF AN AXIAL FLOW CENTRIFUGAL PUMP AS TURBINE USING CFD TECHNIQUES	Prof. Diego Penagos-Vásquez	Faculty of Engineering, Department of Mechatronics and Electromechanics, Instituto Tecnológico Metropolitano, Robledo Campus, Calle 73 No. 76A-354, Vía al Volador, Medellín, Colombia
	Prof. Dr. Jonathan Graciano-Urbe	Faculty of Engineering, Department of Mechatronics and Electromechanics, Instituto Tecnológico Metropolitano, Robledo Campus, Calle 73 No. 76A-354, Vía al Volador, Medellín, Colombia
A USER-FRIENDLY EVALUATION TOOL FOR POINT CLOUD CLASSIFICATION AND SEGMENTATION	Muhammed Fatih ERDOĞAN	Eskisehir Osmangazi University, Electrical and Electronics Engineering Department
	Assist. Prof. Dr. Burak KALECİ	Eskisehir Osmangazi University, Electrical and Electronics Engineering Department
REDUCED BEAM SECTIONS WITH AND WITHOUT RIB	Dr. Yasin Onuralp Özkılıç	Necmettin Erbakan University, Faculty of Engineering
TURNING WASTES TO WEALTH	Assoc. Prof. Dr. Nilofar Asim	Solar Energy Research Institute, National University of Malaysia (UKM), 43600 Bangi, Selangor Darul Ehsan, Malaysia
EXERGETIC ANALYSIS OF MICROCHANNEL WITH SINUSOIDAL CORRUGATIONS	Krishan Kumar	Department of Mechanical Engineering, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab 144011, India
	Rajan Kumar	Department of Mechanical Engineering, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab 144011, India
	Rabinder Singh Bharj	Department of Mechanical Engineering, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab 144011, India
ORTHOGONALITY IN BOOLEAN CUBE	Dr. Yavuz CAN	University of Erlangen, Institute of Electrical Engineering, Germany
PROFESSIONAL RISKS IN THE FIREFIGHTERS ACTIVITY: A SUPPORT TOOL FOR ON-SCENE COMMANDERS IN STRUCTURAL INTERVENTIONS	Dr. Pedro Miguel Sousa Barahona	Instituto Politécnico de Beja, Beja, Escola Superior de Tecnologia e Gestão
	Prof. Dra. Ana Filomena de Figueiredo Dias	Instituto Politécnico de Beja, Beja, Escola Superior de Tecnologia e Gestão
	Prof. Dra. Carla Maria Lopes da Silva Afonso dos Santos	Instituto Politécnico de Beja, Beja, Escola Superior de Tecnologia e Gestão
BRUNCH-CUT FOR UNWRAPPING INTERFEROMETRIC PHASE	Mr. Hadj Sahraoui Omar	Remote Sensing department, Algerian Space Agency, 01 Avenue de la Palestine, B.P.13 Arzew, Oran, Algérie
	Mr. Dif Amar	Remote Sensing department, Algerian Space Agency, 01 Avenue de la Palestine, B.P.13 Arzew, Oran, Algérie
ELECTROCHEMICAL DEPOSITION OF CDTE THIN FILM FOR CDS/CDTE X-RAY SENSOR	H. SHAMS	Nuclear and Radiation Engineering Department, Faculty of Engineering, Alexandria University, Alexandria, Egypt
	H. ABOU GABAL	Nuclear and Radiation Engineering Department, Faculty of Engineering, Alexandria University, Alexandria, Egypt
	M. SOLIMAN	Materials Science Department, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt
	S. EBRAHIM	Materials Science Department, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt

	S. AGAMY	Nuclear and Radiation Engineering Department, Faculty of Engineering, Alexandria University, Alexandria, Egypt
ROBUST IDENTIFICATION BASED ON FRACTIONAL-ORDER MODEL FOR A VEHICLE ELECTRO-RHEOLOGICAL (ER) SUSPENSION SYSTEM	Prof. Dr. Samir Ladaci	National Polytechnic School of Constantine, 25100, Constantine Algeria. Signal Processing Laboratory, UMC university, Constantine 25000, Algeria.
	Ms. Yamina Ali-Larnene	Department of Electrical Eng. University of Skikda, 21000 Skikda Algeria

11.04.2021 SESSION-3 HALL-5

Nigeria Time (-2)	Turkey Time	India Time (+2:30)	Oman Time (+1)	Morocco Time (-2)	Malaysia Time (+5)
14:00-16:30	16:00-18:30	18:30-20:30	17:00-19:30	14:00-16:30	21:00-22:30

Moderator: Dr. Faisal Zulhumadi

TITLE	AUTHOR(S)	AFFILIATION
EFFECT OF DIFFERENT TYPES OF FILLER LOADINGS (GLASS/POLYESTER WASTE, OLIVE NUTS AND SAWDUST) ON THE MECHANICAL PROPERTIES OF UNSATURATED POLYESTER RESIN	Khedoudja LAOUBI	Laboratory of Coating, Materials and Environment (LRME); University M'Hamed Bougara of Boumerdes; Avenue of the Independence, 35000 Boumerdes
	Nabila BELLOUL	Laboratory of Coating, Materials and Environment (LRME); University M'Hamed Bougara of Boumerdes; Avenue of the Independence, 35000 Boumerdes
OPTIMIZATION OF CUTTING PARAMETERS DURING THE MACHINING OF POLYAMIDE (PA66-GF30%) USING THE DESIRABILITY FUNCTION APPROACH (DFA)	Haoues sabrina	8 mai 1945 - Guelma University , Faculty of science and technology
	Mohamed Athmane Yallese	8 mai 1945 - Guelma University , Faculty of science and technology
	Belhadji salim	8 mai 1945 - Guelma University , Faculty of science and technology
	Prof. Dr. Alper Uysal	Yildiz Technical University, Faculty of science and technology
SINGLE AND DOUBLE OPEN SWITCH FAULT DIAGNOSIS BASED ON ARTIFICIAL NEURAL NETWORK IN THREE PHASE INVERTER OF SOLAR PUMPING SYSTEM	Dr. Bengharbi Abdelkader Azzeddine	UNIVERSITY OF TIARET, ALGERIA, Laboratory of Energy and Electrical Engineering (L2GEGI),Department of Electrical Engineering
	Dr. Laribi Souad	UNIVERSITY OF TIARET, ALGERIA, Laboratory of Energy and Electrical Engineering (L2GEGI),Department of Electrical Engineering
	Prof. Allaoui Tayeb	UNIVERSITY OF TIARET, ALGERIA, Laboratory of Energy and Electrical Engineering (L2GEGI),Department of Electrical Engineering
REAL TIME IOT BASED CROP PROTECTION AND SOIL MAINTENANCE	Dr. N. Krishnaraj	Dr.Mahalingam College of Engineering and Technology, Pollachi, Coimbatore, Tamilnadu
	Padmini J	Dr.Mahalingam College of Engineering and Technology, Pollachi, Coimbatore, Tamilnadu
	Akalya A P	Dr.Mahalingam College of Engineering and Technology, Pollachi, Coimbatore, Tamilnadu
	Sneha M	Dr.Mahalingam College of Engineering and Technology, Pollachi, Coimbatore, Tamilnadu
THERMOELECTRIC GENERATORS, SOLAR CELLS, AND THERMAL COLLECTORS FOR SOLAR COGENERATION: A REVIEW OF RECENT RESEARCH TRENDS	Ali H.A. AL-WAELI	Solar Energy Research Institute, Universiti Kebangsaan Malaysia, Bangi, Malaysia
	Kamaruzzaman SOPIAN	Solar Energy Research Institute, Universiti Kebangsaan Malaysia, Bangi, Malaysia
	Hussein A. KAZEM	Faculty of Engineering, Sohar University, Sohar, Oman
	Miqdam T. CHAICHAN	Energy and Renewable Energies Technology Research Center, University of Technology, Iraq
A QUALITATIVE APPROACH IN HIGHLIGHTING INFRASTRUCTURE BARRIERS AND CHALLENGES TO MALAYSIAN NANOTECHNOLOGY DEVELOPMENT	Dr. Faisal Zulhumadi	Universiti Utara Malaysia, School of Technology Management and Logistics (STML)
	Dr. Wan Nadzri Osman	Universiti Utara Malaysia, School of Technology Management and Logistics (STML)

OPTIMIZATION OF CUTTING PARAMETERS IN THE MACHINING PROCESS OF INCONEL 718 USING THE SIGNAL-TO-NOISE RATIO BASED TAGUCHI GREY RELATIONAL ANALYSIS	PhD Student H. Boumaza	Department of Mechanical Engineering, Applied Mechanics of New LMANM, Université 8 Mai 1945, BP 401, 24000 Guelma, Algeria
	Dr. S. Belhadi	Department of Mechanical Engineering, Mechanics and Structure, LMS, Université 8 Mai 1945, BP 401,24000 Guelma, Algeria
	Prof. Dr. M.A. Yaltese	Department of Mechanical Engineering, Mechanics and Structure, LMS, Université 8 Mai 1945, BP 401,24000 Guelma, Algeria
	Prof. Dr. A. Haddad	Department of Mechanical Engineering, Mechanics and Structure, LMS, Université 8 Mai 1945, BP 401,24000 Guelma, Algeria
MULTI-OBJECTIVE OPTIMIZATION OF PERFORMANCE PARAMETERS IN MACHINING AISI D3 INTENDED TOOL STEEL FOR COLD WORKING	Safi Khaoula	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), Université 8 Mai 1945, BP 401,24000 Guelma, Algeria
	Prof. Dr. Yaltese Mohamed Athmane	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), Université 8 Mai 1945, BP 401,24000 Guelma, Algeria
	Dr. Belhadi Salim	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), Université 8 Mai 1945, BP 401,24000 Guelma, Algeria
	Prof. Dr. Mabrouki Tarek	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), Université 8 Mai 1945, BP 401,24000 Guelma, Algeria
	Prof. Dr. Haddad Abdelkrim	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), Université 8 Mai 1945, BP 401,24000 Guelma, Algeria
	Phd Student. Chihaoui Salim	Department of Mechanical Engineering, Mechanics and Structure, Laboratory (LMS), Université 8 Mai 1945, BP 401,24000 Guelma, Algeria
HEAVY METAL STATUS IN DRINKING WATER AND FARMLAND SOIL WITHIN NIGERIA POLICE ACADEMY,WUDIL -KANO STATE	Sholadoye.Q.Oyeniya	Chemistry Department, Nigeria Police Academy, Wudil-kano State,Nigeria
	Lawal Tajudeen Afolayan	Biochemistry and Forensic Department, Nigeria Police Academy, Wudil-kano State,Nigeria
	Zakari Abdullahi	Department of Pure and Industrial Chemistry, Bayero University Kano, Nigeria
GRAPH DECOMPOSITION FOR SECURE COMMUNICATION	M. Yamuna	Department of Mathematics, VIT, Vellore, Tamilnadu, India
	K. Karthika	Department of Mathematics, VIT, Vellore, Tamilnadu, India

12.04.2021

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Nigeria Time (-2)	Turkey Time	Greece Time	Morocco Time (-2)	Iraq Time
08:00-10:30	10:00-12:30	10:00-12:30	08:00-10:30	10:00-12:30

Moderator: Assist. Prof. Dr. Necati BASMAN

TITLE	AUTHOR(S)	AFFILIATION
OBTAINING TiO ₂ POWDER AS AN INTERMEDIATE PRODUCT DURING ELECTROCHEMICAL DEPOSITION	Assist. Prof. Dr. Necati Basman	Department of Avionics, Iskenderun Technical University, Hatay, Turkey
SYNTHESIS OF POLYESTER RESIN FROM PET WASTE AND EXPLOITATION OF DIFFERENT RESOURCES FOR THE ELABORATION OF COMPOSITES	N. Belloul	Laboratoire de revêtements, matériaux et environnement (LRME), Université M'Hamed Bougara, Boumerdès, 35000
	M. Bendaoud	Laboratoire de chimie des matériaux inorganiques et applications (LCNIA), Université Mohamed Boudiaf, BP1505, Oran
	K. Laoubi	Laboratoire de revêtements, matériaux et environnement (LRME), Université M'Hamed Bougara, Boumerdès, 35000
	L. Timhadjelt	Laboratoire de revêtements, matériaux et environnement (LRME), Université M'Hamed Bougara, Boumerdès, 35000
	Z. Hamadi	Unité de recherche: matériaux - procédés et environnement (UR-MPE), Université M'Hamed Bougara, Boumerdès, 35000 Crapc, Centre de recherche scientifique et technique en analyses physico-chimiques, Bousmail
ANTIFOULING TEMPERATURE-RESPONSIVE POLYMER BRUSH COATINGS BASED ON POLY(DI(ETHYLENE GLYCOL)METHYL ETHER METHACRYLATE-CO-ACRYLAMIDE) FOR BIOMEDICAL APPLICATION	Mgr. Yana Shymborska	Jagiellonian University, Smoluchowski Institute of Physics Lviv Polytechnic National University, Department of Organic Chemistry
INTERNAL LENGTH GRADIENT MECHANICS: FROM STRENGTH OF MATERIALS AND ELASTICITY TO PLASTICITY AND FAILURE	Vi.G.Dimosthenis	Lab of Mechanics, School of Engineering, Aristotle University of Thessaloniki, GR 54124, Greece
	L.A.S.Kouris	Lab of Mechanics, School of Engineering, Aristotle University of Thessaloniki, GR 54124, Greece
	E.C.Aifantis	Lab of Mechanics, School of Engineering, Aristotle University of Thessaloniki, GR 54124, Greece
SIMULATING THE FOUR POINT BENDING EXPERIMENT OF THE RC BEAM USING FEM	PhD Candidate M. Kountouri	National Technical University of Athens, Department of Civil Engineer, Zografou Campus, Athens
	Prof. Dr E. A. Vougioukas	National Technical University of Athens, Department of Civil Engineer, Zografou Campus, Athens
DETERMINATION OF THE ELEMENT CONTENTS OF THE GEOLOGICAL ROCK SAMPLES WITH THE HELP OF CF-LIBS	Dr. Gülin GENÇOĞLU KORKMAZ	Konya Technical University
	Assist. Prof. Dr. Yasemin GÜNDOĞDU	Selcuk University
	Prof. Dr. Hamdi Şükür KILIÇ	Selcuk University
	Prof. Dr. Hüseyin KURT	Konya Technical University
MAGNETIC Fe ₃ O ₄ NANOPARTICLES WITH COUMARIN-PHENYLALANINE: THERMAL, ANTIMICROBIAL AND DIELECTRICAL ANALYSIS	Res. Assist. Dr. Eray Çalışkan	Bingol University
	Res. Assist. Dr. Fatih Biryan	Fırat University
	Assoc. Prof. Dr. Kenan Koran	Fırat University

222Rn, 226Ra, and 238U IN SOIL SAMPLES COLLECTED FROM KERBALA UNIVERSITY, FREIHA, LRAQ	Abrrar Abbas Ibrahim	Department of Physics, College of Science, Kerbala University, Kerbala, Iraq
	Abdalsattar Kareem Hashim	Department of Physics, College of Science, Kerbala University, Kerbala, Iraq
	Ali Abid Abojasim	Department of Physics, College of Science, Kerbala University, Kerbala, Iraq
UNDERSTANDING THE TRIP CHARACTERISTICS OF THE PHYSICALLY CHALLENGED PEOPLE IN A TRADITIONAL NIGERIAN CITY	Nathaniel Oluwaseun OGUNSEYE	Department of Urban and Regional Planning, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
	Wasiu Ayodeji ALLI- BALOGUN	Department of Urban and Regional Planning, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
	Umar Obafemi SALISU	Department of Urban and Regional Planning, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
	Simeon Oluwagbenga FASINA	Department of Urban and Regional Planning, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
	Surajudeen Oluwaseyi MOMODU	Department of Urban and Regional Planning, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
	Olusholape Jumoke AKIYODE	Department of Urban and Regional Planning, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
	Boluwaji Philip AKINYEMI	Department of Urban and Regional Planning, Olabisi Onabanjo University, Ago-Iwoye, Nigeria

12.04.2021

SESSION-1 HALL-2

Nigeria Time (-2)	Turkey Time	Greece Time	Ukraine Time	India Time(+2:30)
08:00-10:30	10:00-12:30	10:00-12:30	10:00-12:30	12:30-15:00

Moderator: Assoc. Prof. Dr. Ebru Copuroğlu

TITLE	AUTHOR(S)	AFFILIATION
CONTEXTUALISING FLIPPED ONLINE CONTENT WITH LEARNER CENTRIC MOOCS FOR ENGINEERING STUDENTS IN PHYSICS EDUCATION	Dr. Neelima Agarwal	Department of Physics, CBIT, Hyderabad
ZnS and CdS NANOPOWDERS: WET CHEMICAL SYNTHESIS AND CHARACTERIZATION	Suresh Kumar	Department of Physics, Maharishi Markandeshwar University, Sadopur, Ambala-134007, Haryana, India
INVESTIGATING THE EFFECT OF HETEROGENEOUS ERROR-VARIANCE IN ESTIMATING LINEAR DYNAMIC PANEL DATA MODELS	OGUNLEYE, Timothy A.	Department of Statistics, Faculty of Physical Sciences, University of Ilorin, Ilorin, Kwara State, Nigeria
	ADEJUMO, A. Olusola	Department of Statistics, Faculty of Physical Sciences, University of Ilorin, Ilorin, Kwara State, Nigeria
SIMULATION OF COMPLEX SOCIAL SYSTEMS. TOOLS, RESULTS and POSSIBILITIES	Prof. Dr. Makarenko Alexander	Institute of Applied System Analysis at National Technical University of Ukraine (Igor Sikorskiy Kiev Polytechnical Institute)
	Ass. Prof., Dr. Malezhyk Peter	Institute of Applied System Analysis at National Technical University of Ukraine (Igor Sikorskiy Kiev Polytechnical Institute)
	Prof. Dr. Gasanov Aydin	National Pedagogical University of Ukraine (M.P. Dragomanova)
GROWTH AND CHARACTERISATION OF IN Zn _{0.97} Co _{0.03} S AND Zn _{0.97} Mn _{0.03} S THIN FILMS: STRUCTURAL AND OPTICAL CONSTANTS	Abdullah GÖKTAŞ	Department of Physics, Faculty of Art and Science, Harran University, 63300, Sanliurfa, Turkey
THE INVESTIGATION OF CHARGE CARRIER CONCENTRATION OF SEMICONDUCTORS BY USING TWO-PARAMETER FERMI-DIRAC FUNCTION	Prof. Dr. Bahtiyar A. Mamedov	Department of Physics, Faculty of Arts and Sciences, Gaziosmanpaşa University, Tokat, Turkey
	Assoc. Prof. Dr. Ebru Copuroğlu	Department of Physics, Faculty of Arts and Sciences, Gaziosmanpaşa University, Tokat, Turkey
ON THE STUDY OF SEEBECK COEFFICIENT FOR A SINGLE PARABOLIC BAND IN SEMICONDUCTOR BY USING FERMI-DIRAC FUNCTION	Assoc. Prof. Dr. Ebru Copuroğlu	Department of Physics, Faculty of Arts and Sciences, Gaziosmanpaşa University, Tokat, Turkey
	Prof. Dr. Bahtiyar A. Mamedov	Department of Physics, Faculty of Arts and Sciences, Gaziosmanpaşa University, Tokat, Turkey
10 YEARS CHANGE IN THE NBA AND IMPORTANT IN-GAME PARAMETERS: OFFENSIVE VARIABLES	Hakan BÜYÜKÇELEBİ	İnönü University
	Assoc. Prof. Dr. Mahmut AÇAK	İnönü University

12.04.2021 SESSION-1 HALL-3

Nigeria Time (-2)	Turkey Time	South Korea Time (+6)	Bangladesh Time (+3)	Greece Time	Ukraine Time
08:00-10:30	10:00-12:30	16:00-18:30	13:00-15:30	10:00-12:30	10:00-12:30

Moderator: Prof. Dr. Sci. Protsenko V.S

TITLE	AUTHOR(S)	AFFILIATION
Helianthus annuus ASSISTED GREEN SYNTHESIS OF Co₃O₄ AND Ag-Co₃O₄ AND EVALUATION OF THEIR CATALYTIC ACTIVITIES TOWARDS PHOTODEGRADATION OF CRYSTAL VIOLET DYE	Ayesha Rafiq	Government College University Faisalabad, Faculty of Physical Sciences
	Dr. Muhammad Saeed	Government College University Faisalabad, Faculty of Physical Sciences
Ag@ZnO: GREEN SYNTHESIS AND EVALUATION OF PHOTOCATALYTIC ACTIVITY TOWARDS PHOTODEGRADATION OF RHODAMINE B DYE	Ayesha Rafiq	Government College University Faisalabad, Faculty of Physical Sciences
	Dr. Muhammad Saeed	Government College University Faisalabad, Faculty of Physical Sciences
ELECTRODEPOSITION OF CHROMIUM COATINGS FROM ENVIRONMENTALLY SAFE PLATING BATHS BASED ON A DEEP EUTECTIC SOLVENT TO FABRICATE ELECTROCATALYSTS FOR HYDROGEN PRODUCTION	Prof., Dr. Sci. Protsenko V.S.	Ukrainian State University of Chemical Technology, Dnipro, Ukraine
	Dr. Bobrova L.S.	Ukrainian State University of Chemical Technology, Dnipro, Ukraine
	Dr. Butyrina T.E.	Ukrainian State University of Chemical Technology, Dnipro, Ukraine
	Prof., Dr. Sci. Danilov F.I.	Ukrainian State University of Chemical Technology, Dnipro, Ukraine
NON-ENZYMATIC AND SUPER POROUS HYBRID CUO/PT NPS PLATFORM WITH THE IMPROVED PERFORMANCE FOR THE HYDROGEN PEROXIDE DETECTION	Rakesh Kulkarni	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Rutuja Mandavkar	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Sundar Kunwar	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Jae-Hun Jeong	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Jihoon Lee	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
SERS ENHANCEMENT OF RHODAMINE 6G BY A MIXTURE APPROACH WITH GRAPHENE QUANTUM DOTS ON HYBRID CORE-SHELL Pd@Ag NPs	Rutuja Mandavkar	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Rakesh Kulkarni	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Shusen Lin	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Sanchaya Pandit	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Sundar Kunwar	Department of Electronic Engineering, College of Electronics and Information,

		Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Jihoon Lee	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
Azadirachta indica ASSISTED GREEN SYNTHESIS OF Ag-NiO AND INVESTIGATION OF ITS CATALYTIC ACTIVITY TOWARDS THE DEGRADATION OF RHODAMINE B DYE IN AQUEOUS MEDIUM	Tooba jabeen	Government College University, Faisalabad, Faculty of Physical Sciences
	Dr. Muhammad Saeed	Government College University, Faisalabad, Faculty of Physical Sciences
	Ayesha Rafiq	Government College University, Faisalabad, Faculty of Physical Sciences
ULTRAVIOLET PHOTODETECTOR USING HYBRID PDAG PLASMONIC NANOPARTICLES, GRAPHENE QUANTUM DOTS AND TITANIUM DIOXIDE	Shusen Lin	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Rutuja Mandavkar	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Rakesh Kulkarni	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Sanchaya Pandit	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Sundar Kunwar	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
	Ming-Yu Li	School of Science, Wuhan University of Technology, Wuhan, Hubei 430070, China
	Jihoon Lee	Department of Electronic Engineering, College of Electronics and Information, Kwangwoon University, Nowon-gu Seoul 01897, South Korea
PHOTOVOLTAIC ELECTROOXIDATION FOR PHENOL REMOVAL AND SIMULTANEOUS ENERGY HARVESTING VIA HYDROGEN PRODUCTION	Konstantinos Dermentzis	International Hellenic University, Department of Chemistry, 65404 Agios Loukas, Kavala, Greece
VISUALIZATION OF CARBON DIOXIDE-WATER MOLECULAR SYSTEM	M. Ferdows	Research Group of Fluid Flow Modelling and Simulation, Department of Applied Mathematics, Dhaka University, Dhaka 100, Bangladesh
FINITE DIFFERENCE SOLUTION OF BLASIUS PROBLEM AND HEAT TRANSFER UNDER BIOMAGNETIC FLUID	Sadia Anjum Jumana	Research Group of Fluid Flow Modelling and Simulation, Department of Applied Mathematics, University of Dhaka, Dhaka- 1000, Bangladesh
	M. Ferdows	Research Group of Fluid Flow Modelling and Simulation, Department of Applied Mathematics, University of Dhaka, Dhaka- 1000, Bangladesh

12.04.2021 SESSION-1 HALL-4

Algeria Time (-2)	Turkey Time	Indonesia Time (+4)	Pakistan Time (+2)	Poland Time (-1)
08:00-10:30	10:00-12:30	14:00-16:30	12:00-14:30	09:00-11:30

Moderator: Assoc. Prof. Dr. BARTOSZ JÓZWIK

TITLE	AUTHOR(S)	AFFILIATION
THE IMPACT OF THE PROPHETIC SUNNAH ON CHARACTER BUILDING OF AN INDIVIDUAL PERSON	Rehana Kanwal	M.Phil Scholar, Department of Islamic Studies, National College of Business Administration and Economics, Lahore, Pakistan
AFTER ATEBBAZ-I VELL AND ATEBBAZ-I VELL, PEOPLE WHO CAME TO THE COOKERY OFFICE	Yıldız ÜNLÜ	Konya Necmettin Erbakan University
	Assoc. Prof. Dr. Yılmaz ŞEÇİM	Konya Necmettin Erbakan University
	Prof. Dr. Hatice Ferhan NİZAMLIOĞLU	Konya Necmettin Erbakan University
ASSESSMENT OF WATER QUALITY NORTHERN ASSUIT GOVERNORATE, UPPER EGYPT	Ahmed Asmoay	Geological Science Department, National Research Centre, Egypt
AN UNAVOIDABLE TANDEM OF INTERESTS: SOVEREIGN AND GLOBAL	Francisco José Leandro	Associate Professor and Assistant Dean, Institute for Research on Portuguese Speaking Countries, City University of Macau
EXCHANGE RATE AND OIL PRICE PASS-THROUGH INTO INFLATION IN ALGERIA	TOUITOU Mohammed	Faculty of Economics and Business, University of Algiers 3
WE ARE THE COVID-19'S VICTIMS TOO: A QUALITATIVE STUDY OF THE INFORMAL AND MSME (MICRO, SMALL, AND MEDIUM) ENTREPRENEURS AT THE TIME OF COVID-19 PANDEMIC	Ady Firdaus	College for Economics (STIE) Ganesha Jakarta, INDONESIA
	Muhammad Said	College for Economics (STIE) Ganesha Jakarta, INDONESIA
ADVANCEMENT OF STATISTICAL COMPUTING IN NORTH CENTRAL NIGERIA: WAY FORWARD	Adenomom M. O	"Department of Statistics, Nasarawa State University, Keffi, Nigeria & NSUK-LISA Stat Lab, Nasarawa State University, Keffi, Nigeria
EXCHANGE RATE AND BALANCE OF PAYMENT IN NIGERIA (1986-2017). AN AUTO REGRESSIVE DISTRIBUTIVE LAG (ARDL) APPROACH	Gwaison, Panan Danladi	Economics Department, Nigeria Police Academy, Wudil-Kano
	Apeh Ajene Sunday Ph.D	Economics Department, Nigeria Police Academy, Wudil-Kano
THE IMPLEMENTATION OF TECHNICAL ANALYSIS TO FORECAST STOCKS PRICE IN EMERGING MARKET	Josep GINTING	President University, Indonesia
	Foloren GASELA	President University, Indonesia
THE PERCEPTION OF ARCHITECTURAL BARRIERS IN SIEWIERZ MUNICIPIAL OFFICE FROM DISABLE PERSON POINT OF VIEW	Prof. Dr. Eng. Radoslaw Wolniak	Silesian University of Technology, Faculty of Organization and Management, Institute of Economy and Informatics
TESTING THE ENVIRONMENTAL KUZNETS CURVE HYPOTHESIS IN CENTRAL EUROPEAN COUNTRIES: EMPIRICAL EVIDENCE FROM THE ARDL BOUNDS TEST	BARTOSZ JÓZWIK, Ph.D. Associate Professor	The John Paul II Catholic University of Lublin, Department of International Economics, Poland

12.04.2021

SESSION-1 HALL-5

Turkey Time Portugal Time (-1 day)

10:00-12:30

08:00-10:30

Moderator: Dr. Özcan ŞAHİN

TITLE	AUTHOR(S)	AFFILIATION
FAT AND FATTY ACID COMPOSITION OF THE GRAINS AT DIFFERENT PARTS OF THE PANICLE IN LOCAL OAT GENOTYPES	Assist. Prof. Dr. Özge Doğanay ERBAŞ KÖSE	Bilecik Şeyh Edebali University
	Prof. Dr. Zeki MUT	Bilecik Şeyh Edebali University
THE EVALUATION IN TERMS OF FORAGE QUALITY OF TOXIC SUBSTANCES FOUND IN SOME FORAGE CROPS	Semih AÇIKBAŞ	Siirt University
	Assoc. Prof. Dr. Mehmet Arif ÖZYAZICI	Siirt University
DETERMINATION OF GERMINATION CHARACTERISTICS OF FENUGREEK (<i>Trigonella foenum-graecum</i> L.) PLANT UNDER SALT STRESS	Assoc. Prof. Dr. Gülen ÖZYAZICI	Siirt University
	Semih AÇIKBAŞ	Siirt University
CURRENT STATUS OF ANIMAL PRODUCTION AND AGRICULTURAL SUPPORTS IN TURKEY	Sadi AKYÜZ	Selçuk University
	Assoc. Prof. Dr. İbrahim AYTEKİN	Selçuk University
MOLECULAR METHODS USED IN THE DETERMINATION OF A1 AND A2 MILK IN THE BETA-CASEIN GENE	Dr. Özcan ŞAHİN	Selçuk University
	Prof. Dr. Saim BOZTEPE	Selçuk University
CONTRACT FARMING IN TURKEY	Zuhal Adalı	Bursa Uludağ University
	Prof. Dr. Şule Turhan	Bursa Uludağ University
THE STATUS OF PUNICA GRANATUM L. CULTIVATION IN BILECIK PROVINCE INHISAR DISTRICT	Nuray KOŞ	Bilecik Şeyh Edebali University
	Assist. Prof. Dr. Sinem ÖZTÜRK ERDEM	Bilecik Şeyh Edebali University
EFFECT OF SUPPLEMENTATION OF CARDAMOM POWDER TO THE LAYING HEN DIETS ON PERFORMANCE AND EGG QUALITY PARAMETERS	Abbas Fadhıl ABDULQADER	Selcuk University, Faculty of Agriculture, Department of Animal Science, 42130 Selcuklu/Konya
	Esra Tuğçe ŞENTÜRK	Selcuk University, Faculty of Agriculture, Department of Animal Science, 42130 Selcuklu/Konya
	Osman OLGUN	Selcuk University, Faculty of Agriculture, Department of Animal Science, 42130 Selcuklu/Konya
	Alpönder YILDIZ	Selcuk University, Faculty of Agriculture, Department of Animal Science, 42130 Selcuklu/Konya
EFFECT OF THE ADDITION OF SODIUM BUTYRATE ON PERFORMANCE AND EGG QUALITY PARAMETERS IN LAYER QUAILS	Esra Tuğçe ŞENTÜRK	Selcuk University, Faculty of Agriculture, Department of Animal Science, 42130 Selcuklu/Konya
	Abbas Fadhıl ABDULQADER	Selcuk University, Faculty of Agriculture, Department of Animal Science, 42130 Selcuklu/Konya
	Alpönder YILDIZ	Selcuk University, Faculty of Agriculture, Department of Animal Science, 42130 Selcuklu/Konya
	Osman OLGUN	Selcuk University, Faculty of Agriculture, Department of Animal Science, 42130 Selcuklu/Konya

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E-TİCARETTE ELEKTRONİK ÖDEME SİSTEMLERİNİN KULLANIMI: TÜRKİYE ÖRNEĞİ

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ÖZET

Türkiye’de dünyaya paralel olarak e-ticaret ekosistemi pandemide de büyümeye devam etmiştir. Ancak koronavirüs’ün ekonomi üzerindeki olumsuz etkileri yanında önümüzdeki dönemde özellikle sağlık, eğitim, perakende ticaret, finans ve iletişim sektörlerinde dijitalleşmenin iş yapış tarzları ve fırsatlar üzerinde hızlandırıcı etki yaratacağı düşünülmektedir. E-ticaret sitesi kurmak ve bir online mağaza sahibi olmak belirli servis sağlayıcılar üzerinden oldukça kolay biçimde yönetilebilmekte ise de internet üzerinden satış ve tahsilat yapmanın geleneksel satış kanallarına kıyasla farklı dinamikleri bulunmaktadır. Bu nedenle online mağazaya sahip olmak kadar tahsilatların nasıl yönetileceği konusu da önem arz etmektedir. Bu araştırmada Türkiye’de elektronik ödemede kullanılan sistemlerin özelliklerinin ve birbirine göre farklılıklarının ortaya konulması amaçlanmaktadır.

Anahtar Kelimeler: E-Ticaret, Elektronik Ödeme Sistemleri, Bankacılık

ABSTRACT

In accordance with the global changes in the payment systems, the ecosystem in Turkey continues its growth during the pandemic. However, by the negative effects of coronavirus, conditions have an accelerating effect on business styles in health, education, retail trade, finance and communication industries. By the help of the service providers even it is a very simple process to set an online business, there are different dynamics of selling and collecting online have differences than traditional sales channels. It is aimed in this study, the properties of electronic payment systems used in Turkey and is intended to indicate the differences to each other.

Keywords: E-Commerce, Electronic Payment Systems, Banking



**GÜÇ SİSTEMLERİNDE KULLANILAN REZİSTİF SFCL İÇİN
TOPARLANMA SÜRESİNİN İYİLEŞTİRİLMESİ****IMPROVEMENT OF RECOVERY TIME FOR RESISTIVE SFCL
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ÖZET

Elektrik üretim, iletim ve dağıtım sistemleri çok geniş alanları kapsamaktadır. Bu sistemlerin herhangi bir yerinde herhangi bir sebeple arızalar meydana gelebilir. Meydana gelen arıza akımları röle-kesici koordinasyonu ile kesilmeden önce güç sistemleri elemanları için zorlayıcı etkiler oluşturmaktadır. Bu sebeple son yıllarda modern akım sınırlandırma yöntemleri geliştirilmiştir ve bu yöntemlerden birisi Rezistif Süperiletken Arıza Akımı Sınırlayıcılar (R-SFCL)'dir. R-SFCL arıza akımını ilk yarım periyot içerisinde sınırlandırarak arızanın termal, elektromanyetik ve dinamik etkilerini önemli ölçüde azaltmaktadır. Bunu yaparken yapısında bulundurduğu süperiletkenin dinamik davranışından faydalanır. Arıza akımı kritik akım değerini aşınca süperiletken şeritler süperiletkenlik bölgesinden çıktıkları için direnç değerleri artar. Direncin artması ile birlikte arıza akımı sınırlanır ve sınırlandırma süresi boyunca süperiletken sıcaklığı artar. Arıza sona erdikten sonra R-SFCL'nin en kısa süre içerisinde arıza öncesi duruma gelmesi beklenir. Bu süre toparlanma süresi olarak adlandırılır. Bu süre boyunca nominal işletme durumunda dahi R-SFCL'de gerilim düşümü ve güç kaybı görülmektedir. Bunun sebebi kritik sıcaklığı üzerinde bulunan süperiletken sıcaklığıdır. Bu yüzden mümkün olan en kısa sürede R-SFCL sıcaklığı kritik sıcaklığın altına indirilmelidir. Toparlanma süresi R-SFCL için sınırlandırma performansı kadar önemli bir tasarım parametresidir. R-SFCL tasarımında bu süreyi kısaltmak ve dolayısıyla bu süre içerisinde oluşacak gerilim düşümü ve güç kaybını minimize etmek mühendislerin ve üreticilerin önemli bir amacıdır. Arıza seviyesi ve arıza süresi gibi tahmini olarak belirlenen ama müdahale edilemeyen etkenlerin yanı sıra kriyojenik sistem, şönt eleman ve süperiletken uzunluğu gibi belirli sınırlar dâhilinde değiştirilebilen etkenlerden de toparlanma süresini etkilenmektedir. Bu çalışmada toparlanma süresini analiz etmek ve iyileştirmek için Matlab/Simulink'de simülasyonlar gerçekleştirilmiştir. Bu simülasyonlar ile hangi etkenin toparlanma süresini ne kadar etkili bir şekilde iyileştirdiği gözlemlenmiştir. Çalışma sonunda hangi faktörün en ideal çözüm olacağı belirlenmiştir.

Anahtar Kelimeler: Arıza akımı sınırlandırma, Dinamik model, Güç sistemi koruma, R-SFCL, Toparlanma süresi, Matlab/Simulink.



ABSTRACT

Electricity generation, transmission and distribution systems cover a wide range of areas. Malfunctions may occur in any part of these systems for any reason. The resulting fault currents create compelling effects for power system elements before they are interrupted by relay-breaker coordination. For this reason, modern current limiting methods have been developed in recent years and one of these methods is Resistive Superconductor Fault Current Limiters (R-SFCL). R-SFCL limits the fault current within the first half period, significantly reducing the thermal, electromagnetic and dynamic effects of the fault. In doing so, it makes use of the dynamic behavior of the superconductor it contains. When the fault current exceeds the critical current value, the resistance values increase as the superconductor tapes leave the superconducting region. As the resistance increases, the fault current is limited and the superconductor temperature increases during the limitation period. After the fault is over, R-SFCL is expected to come to the pre-fault state as soon as possible. This time is called the recovery time. During this period, voltage drop and power loss are observed in R-SFCL even in nominal operating state. This is due to the superconductor temperature above its critical temperature. Therefore, the R-SFCL temperature should be lowered below the critical temperature as soon as possible. Recovery time is an important design parameter for R-SFCL as well as limiting performance. In R-SFCL design, it is an important goal of engineers and manufacturers to shorten this time and therefore to minimize the voltage drop and power loss that will occur during this period. The recovery time is affected by factors such as fault level and fault time that are predicted but cannot be intervened, as well as factors that can be changed within certain limits, such as the cryogenic system, shunt element and superconductor length. In this study, simulations are carried out in Matlab/Simulink to analyze and improve the recovery time. With these simulations, it is observed which factor effectively improved recovery time. At the end of the study, it is determined which factor will be the most ideal solution.

Keywords: Fault current limiting, Dynamic model, Power system protection, R-SFCL, Recovery time, Matlab/Simulink.



BETA-KAZEİN GENİNDE A1 VE A2 SÜTÜN BELİRLENMESİNDE KULLANILAN MOLEKÜLER YÖNTEMLER

MOLECULAR METHODS USED IN THE DETERMINATION OF A1 AND A2 MILK IN THE BETA-CASEIN GENE

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ÖZET

Süt proteinlerinden β -kazein proteini toplam 209 aminoasitten oluşur ve β -kazein proteinini sığır genomunda 6. kromozomda lokalize olmuştur. β -kazein toplam süt proteinin % 25-35 oluşturur. Şimdiye kadar literatürde β -kazein'in 12 genetik varyantı olup, bunlar; A1, A2, A3, B, C, D, E, F, H1, H2, I ve G olarak bildirilmiştir. Süt sığır ırklarında en yaygın β -kazein formları A1 ve A2 varyantlarıdır. β -kazein varyantları olan A1 ve A2 varyantları arasındaki fark, 7. ekzon'da β -kazein aminoasit peptid zincirinin 67. pozisyonunda sadece bir amino asidin değişmesidir. β -kazeinin 67. pozisyonunda A1 varyantı Histidin içerir ve A2 varyantı ise Prolin içerir. β -kazein genini 67. amino asitindeki A2 varyantının kodlayan kodon CCT, A1 varyantının kodlayan kodon CAT'dir. β -kazein geni amino asit sekansının 67. Pozisyonunda Prolin / Histidine amino asit değişimi diğer bir ifadeyle amino asitleri kodlayan kodondaki C/A nokta mutasyonu sonucu dönüşmesi sonucunda doğal olarak oluşan bir opioid peptid olan beta-kasomorfin-7 (BCM-7) oluşmasına sebep olur. Bu mutasyon neticesinde meydana gelen varyantlar ile ilgili insan sağlığına olan olumsuz etkileri ile ilgili literatürde son yıllarda çalışmalara rastlanılmaktadır. A1, A2 ve diğer bütün varyantlar, A2 sütünde bulunan β kazeini kodlayan DNA zincirinde meydana gelen mutasyonlarla oluşmuştur. Bu varyant farklılığını belirlemek için literatürde günümüze kadar bazı moleküler yöntemler kullanılmış olup, bunlar Restriksiyon Uzunluk Parça Polimorfizmi (Restriction Fragment Length Polimorphizm; RFLP), Amplification Refractory Mutation System (ARMS-PCR), Allel Spesifik PCR (Allele-specific PCR; AS-PCR), Tek Nükleotit Polimorfizmi (Single Nucleotid Polymorphism; SNP), Tek Zincirli Konformasyon Polimorfizmi (Single Strand Conformation Polymorphism; SSCP-PCR) ve Amplification created restriction site (ACRS) metotlarıdır.

Bu çalışmanın amacı β -kazein geninde A1 ve A2 sütünün belirlenmesinde kullanılan moleküler yöntemlere yönelik yapılmış çalışmalar hakkında bilgi vermektir.

Anahtar Kelimeler: Süt, Süt proteinleri, Beta kazein, A1 sütü, A2 sütü, Moleküler metotlar

ABSTRACT

The-casein protein, one of the milk proteins, consists of a total of 209 amino acids, and the β -casein protein is localized on chromosome 6 in the bovine genome. β -casein consist of 25-



35% of total milk protein. There have been 12 genetic variants of β -casein in the literature up to now, and these are reported as; A1, A2, A3, B, C, D, E, F, H1, H2, I, and G. The most common forms of β -casein in dairy cattle breeds are variants A1 and A2. The difference between A1 and A2 variants, the variants of β -casein, is the changing of only one amino acid at 67th position of the β -casein amino acid peptide chain in the exon 7. At position 67 of β -casein the A1 variant contains Histidine and the A2 variant contains Proline. The codon CCT encoding the A2 variant at amino acid 67 of the β -casein gene is the codon CAT that encodes the A1 variant. The amino acid change to Proline / Histidine in the 67th position of the amino acid sequence of the β -casein gene, in other words, as a result of the C/A point mutation in the codon encoding amino acids, results in the formation of beta-casomorphine-7 (BCM-7), a naturally occurring opioid peptide. In recent years, studies have been found in the literature regarding the negative effects of variants that occur as a result of this mutation on human health. A1, A2 and all other variants have been formed by mutations in the DNA chain encoding the β casein found in A2 milk. In order to determine this variant difference, some molecular methods have been used in the literature upto now, and these are Restriction Fragment Length Polymorphism (RFLP), Amplification Refractory Mutation System (ARMS-PCR), Allele-specific PCR (AS-PCR), Single Nucleotide Polymorphism (SNP), Single Strand Conformation Polymorphism (SSCP-PCR) and Amplification created restriction site (ACRS) methods.

The aim of this study is to give information about the studies on the molecular methods used in the determination of A1 and A2 milk in the β -casein gene.

Keywords: Milk, Milk proteins, Beta casein, A1 milk, A2 milk, Molecular methods



**YABANCI DİL OLARAK RUSÇANIN EĞİTİMİNDE TÜRKÇEDEKİ ETTİRGEN
FİİLERİN RUSÇADAKİ İFADELERİNE İLİŞKİN ZORLUKLAR**
CHALLENGES REGARDING THE EXPRESSIONS OF TURKISH CAUSATIVE VOICE
VERBS IN TEACHING RUSSIAN AS A FOREIGN LANGUAGE

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ÖZET

Bir kişinin dile ilişkin becerileri, düşünce süreçleri, bilişsel faaliyetleri her şeyden önce ana dilinin fonetik, gramer ve sözcük yapısı ile ilintidir. Bu bakımdan kişi başlangıçta yabancı bir dil öğrenirken istemeden de olsa ana dilinin benzer özelliklerini, yabancı dil öğreniminde kolaylaştırıcı bir etken olması açısından, öğrenmekte olduğu ikinci bir dilde arayabilmektedir. Ancak, bilhassa farklı dil ailelerine mensup dillerin farklı noktaları ortak noktalarından fazla olabilmektedir. Türkçe ve Rusça arasındaki farklı noktalardan bir tanesi de özne-yüklem ilişkisi bakımından ele alınan çatı kategorisidir. Türkçede çatı kategorisinde fiiller nesnesine göre ettirgen olarak ayrılırken, Rusçada söz konusu kategoride böyle bir ayırım bulunmamaktadır. Bu bakımdan Türkçedeki ettirgen fiil ile ifadelerin Rus dilindeki kullanımlarında hem yapısal hem de anlamsal olarak farklılıklar görülebilmektedir. Rusçada Türk dilinde olduğu gibi ettirgenlik anlamını açıkça ortaya koyan morfolojik göstergeler de belirgin olmadığı için Türkçedeki ettirgenlik anlamı ancak doğrudan fiil yapıları veya kimi yardımcı dil araçları ile aktarılabilir. Bu da Türkçedeki ettirgenlik anlamının Rus dilinde ifadesini zorlaştırabilmekte, ortaya çıkan kimi iki anlamlılık durumları da ancak metne bağlı olarak çözümlenebilmektedir. Bu çalışmada Rusça ifadelerde yapısal olarak daha çok farklı biçimlerde aktarılan ya da aktarımı esnasında diğer dil araçlarının yardımı olmadan aktarılamayan Türkçedeki başlıca ettirgen fiiller Rusça ile karşılaştırmalı olarak incelenecektir. Bu şekilde ettirgenlik anlamına sahip fiillerin anlamlarına, yapılarına ve aktarılış özelliklerine göre bir sınıflandırma yapılmaya çalışılacaktır. Burada amaç Türkçedeki ettirgen fiillerin Rusçada ne şekilde dilde ifade edildiğini, bu aktarımlar sırasındaki farkları ve bu farklılardan kaynaklı öğrenimdeki ve kısmen de çevirideki zorlu noktaları ortaya koymaktır. Bununla birlikte, ifadeye bağlı olarak ettirgen fiillerin birincil anlamları dışında kullanılmaları sonucunda ortaya çıkan anlamsal farklar da ayrıca ele alınacaktır.

Anahtar Kelimeler: Çatı kategorisi, Ettirgen fiiller, Türkçe, Yabancı dil olarak Rusça

ABSTRACT

A person's language skills, thinking processes, cognitive activities first of all are related to the phonetic, grammatical and lexical structure of his/her native language. In this regard, when studying a foreign language, a person may unwillingly look for similarities between his native language and language he is studying, because the native language might be a factor, helping to study a foreign language. However, especially the languages belonging to different linguistic families may have more differences than similarities. One of the different points



between the Turkish and Russian languages is the voice category discussed in terms of subject-predicate relationship. The verbs of voice category in Turkish language are separated according to their object as causative, but in Russian there is no such distinction. In this respect, the structural and semantic differences can be seen in the use of Turkish causative verbs and expressions in Russian. Since the morphological indicators that clearly reveal the meaning of causality are not clear in Russian as good as in Turkish language, the meaning of causality in Turkish can only be conveyed into Russian directly by verb structures or some auxiliary language tools. It can be difficult to express the meaning of Turkish causative verbs in Russian language. The situations, when two meanings arise from one causative verb, can be understood only from the text. Some main Turkish causative verbs, which are conveyed structurally in different forms in Russian expressions or cannot be conveyed without the help of other language tools, will be analyzed in this study by means of comparison with Russian. Thus, a classification will be made according to the meanings, structures and conveying features of the causative verbs. The aim is to reveal how the causative verbs in Turkish are expressed in Russian and to show the differences, arising during their conveyance, and the difficult points in learning and partly in translation due these differences.

Keywords: Voice category, Causative verbs, Turkish, Russian as a foreign language



AZƏRBAYCAN DİLİNDƏ FEİLLƏR

VERBS IN THE AZERBAIJANI LANGUAGE

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XÜLASƏ

Dilimizin aktual problemlərindən biri feillərdə müxtəlif kateqoriyalara münasibət məsələsidir. Azərbaycan və eləcə də digər türk dillərində feilin tərz kateqoriyasının olub-olmaması müasir dilçiliyin aktual, eyni zamanda mübahisəli, mürəkkəb məsələlərindən biridir. Tarixən dilçilər bu məsələyə müxtəlif cəhətlərdən yanaşmış, bəziləri Azərbaycan və türk dillərində tərz kateqoriyasının olduğunu, digərləri isə olmadığını iddia etmişlər. Elə bu cəhəti əsas göstərək biz məsələyə münasibət baxımından dilçiləri iki qrupa ayıra bilərik:

1. Bəzi dilçilər tərz anlayışı deyərkən işdə, hərəkətdə təkrarçılığı, intensivliyi, işin birdəfəliliyini, hala çevrilməsini bitib-bitmədiyini və s. mənalı bildirdiyini qəbul etmişlər. Onlar həmin məna tərzlərinin bəzən zaman, bəzən şəkil şəkilçiləri ilə düzəldiyinə diqqət yetirmiş xüsusi sözdüzəldici-leksik morfemlərin olmadığını da qəbul etmişlər.

2. Bəzi dilçi-türkoloqların fikrincə, tərz kateqoriyası üçün işin, hərəkətin bitib, bitməməsi əsas səciyyəvi cəhət kimi qəbul edilir.

Məlumdur ki, bu cəhət-işin bitməsi və ya bitməməsi, əsasən, rus dili üçün səciyyəvi cəhətlərdən biridir: совершенный и несовершенный вид глагола.

Feilin perifrastik formaları təsriflənməyən formalarla sıx əlaqədədir. əslində feilin perifrastik formaları tərz kateqoriyasının ifadə üsullarından biridir. Kononov "Müasir türk ədəbi dilinin qrammatikası"nda tərzin üç yolla ifadə olunduğunu göstərmişdir: leksik, morfoloji və sintaktik üsul. Sintaktik üsula feili bağlama + vermək, başlamaq, qalmaq, bilmək və s. feillər qoşulmuş formalar daxildir.

Yuldaşev türk dillərində analitik feil formalarından bəhs edərkən, feilin tərzinin ifadə vasitələrindən də danışmışdır. O, tərz kateqoriyasının türk dillərində feili bağlama (p, a) + yat, otur, dur, get, gəl, düş, al və s. feillərlə düzəldiyi qənaətinə gəlmişdir.

Məlumdur ki, türk dillərində hərəkətin bitib bitməməsi feilin zaman göstəriciləri ilə ifadə olunur. İ.E.Məmmədov qazax dili materiallarına əsaslanaraq belə bir fikir söyləmişdir ki, türk dillərində bitmiş və bitməmiş tərz var. Bu forma feili bağlama forması ilə köməkçi feilin birləşməsi yolu ilə yaranır.

A.İ.Xarisov sübut etməyə çalışmışdır ki, türk dillərində tərz kateqoriyası asanlıqla bərpa edilə bilər. Azərbaycan dilində feilə həsr edilmiş əsərlərdə "perifrastik forma" termini işlənməmişdir. Xəlifəzadə M. Azərbaycan dili feillərindən danışarkən: " Feildə hal və hərəkətin icra vəziyyətini bildirən cəhətə feilin övzası deyilir",- fikrini söyləmişdir.

Açar sözlər: feil, tərz kateqoriyası, perifrastik formalar, bacarıq tərz, işin bitib-bitməməsi və s.

ABSTRACT

One of the current problems of our language is the attitude to different categories of verbs. Whether or not there is a style category of verbs in Azerbaijani and other Turkish languages is



one of the most pressing, controversial and complex issues of modern linguistics. Historically, linguists have approached this issue from different angles, some claiming that there is a category of style in the Azerbaijani and Turkish languages, while others claim that there is not. Based on this aspect, we can divide linguists into two groups in terms of their approach to the issue:

1. Some linguists say the concept of style, they refer to repetition, intensity, one-timeness of work, transformation of work into action, and so on. accepted that it meant. They also acknowledged that there were no special lexical-wordcreating morphemes, noting that these styles of meaning were sometimes formed by time and sometimes by suffixes.

2. According to some linguists-Turkologists, the main characteristic feature of the category of style is whether the work or action is finished or not.

It is known that this aspect - the completion or non-completion of the work, is mainly one of the characteristics of the Russian language: continuous verbs

The periphrastic forms of the verb are closely related to the indefinite forms. In fact the periphrastic forms of the verb are one of the ways of expressing the category of style. Kononov showed that in the "Grammar of the modern Turkish literary language" the style is expressed in three ways: lexical, morphological and syntactic. The syntactic method is to connect the verb + give, start, stay, know, and so on. verbs include conjunctive forms.

While Yuldashev spoke about analytical verb forms in Turkish languages, he also spoke about the means of expression of the style of the verb. It is a verb conjugation (p, a) + yat// yat (sleep), otur//otur (sit down), dur//dur (stand up), get//get (go), gel// gäl (come), düş//düş (go down), al//al (buy) and so on. concluded that it was made up of verbs.

It is known that in Turkish languages the ending of an action is expressed by the tenses of the verb. Based on the materials of the Kazakh language, IE Mammadov said that there is a perfect and simple style in the Turkish languages. This form is formed by combining the auxiliary verb with the conjugation form.

A.I. Kharisov tried to prove that the category of style in Turkish languages can be easily restored. The term "periphrastic form" has not been developed in works dedicated to the verb in the Azerbaijani language. Speaking about the verbs of the Azerbaijani language, Khalifazadeh M. said: "The aspect of the verb that expresses the state of execution of the situation and action is called the verb subjunctive."

Keywords: verb, style category, periphrastic forms, skill style, work is done or not done, etc.



TÜRKİYE'DE HAYVANSAL ÜRETİM VE TARIMSAL DESTEKLERDE MEVCUT DURUM

CURRENT STATUS OF ANIMAL PRODUCTION AND AGRICULTURAL SUPPORTS IN TURKEY

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ÖZET

Zirai faaliyet insanoğlunun yaratılışından günümüze kadar ekonomik ve uygar gelişmenin her döneminde önemli rol oynayan genel olarak bitkisel ve hayvansal üretimin birlikte yapıldığı faaliyetlere denir. Çoğu ülkenin ekonomisine önemli katkı sağlayan zirai faaliyet insanların temel gıda maddelerini sağlaması yanında endüstrinin ihtiyaç duyduğu hammaddeleri sağlaması, istihdam sağlaması ve hatta ihracata doğrudan veya dolaylı katkıda bulunması gibi ekonomide vazgeçilmez bir sektördür. Bununla birlikte özellikle pandemi durumlarında bir ülkenin kendi kendine yeterlilik gücünün bir göstergesidir. İyi bir tarımsal üretim için her şeyden önce hangi tarım işletmelerinde, hangi ürünlerin ne miktarda ve hangi verim seviyelerinde yetiştirilebileceklerini hesaplayabilmeli, sonrada bu nitelikteki ürünleri elde etme ve yetiştirme metotlarını bilip uygulayabilmelidir. Özellikle şimdi ve gelecekte dünya nüfusunun giderek artması, küresel iklim değişikliğinin etkilerinin daha hissedilebilir olması ve de hastalıkların da pandemi haline gelmesi ülkelerin tarımsal üretimini stratejik bir noktaya getirmektedir.

Hayvansal üretim, tarım işletmelerinde yapılan üretim faaliyetlerinden biridir. Özellikle tarımsal üretimin lokomotifi konumundaki hayvansal üretimin planlaması uzun vadeli olmalı ve buna yönelik politikalar veya desteklemelerle yetiştiriciler teşvik edilmelidir. Bunların yanında global sürdürülebilir bir üretim için ise yetiştiricilerin güncel bilgileri, yayınları ve teknolojiyi takip etmeleri sağlanmalıdır. Bu çalışmanın amacı Türkiye'de hayvansal üretimin mevcut durumu ve tarımsal destekler hakkında bilgi vermektir. Bunun için, TSI verilerinden yararlanılarak Türkiye'de hayvansal üretimindeki yıllara göre değişimler ile bu alandaki bütün desteklemeler bir araya getirilmeye çalışılmıştır.

Anahtar Kelimeler: Hayvansal üretim, tarımsal desteklemeler, ekonomik özellikler, süt üretimi, et üretimi, yumurta üretimi

ABSTRACT

Agricultural activity is called the activities in which plant and animal production are carried out together, which play an important role in every period of economic and civilized development from the creation of human beings to the present day. Agricultural activity, which contributes significantly to the economy of most countries, is an indispensable sector in the economy, as it



provides basic foodstuffs, as well as providing raw materials in the industry needs, providing employment and even contributing directly or indirectly to exports. Also, it is an indicator of a country's self-sufficiency power, especially in pandemic situations. For a good agricultural production, first of all, it should be able to calculate in which agricultural enterprises, which products can be grown in what amount and at what yield level, and then they should be able to know and apply the methods of obtaining and growing these products. In particular, the increasing world population, the fact that the effects of global climate change are more perceptible and the diseases have become pandemics, bring the agricultural production of countries to a strategic point in now and in the future.

Animal production is one of the production activities carried out in agricultural enterprises. In particular, the planning of animal production, which is the locomotive of agricultural production, should be long-term and growers should be encouraged with policies or supports for this. In addition to these, for a global sustainable production, breeders should be ensured to follow up-to-date information, publications and technology.

The aim of this study is to give information about the current status of animal production and agricultural supports in Turkey. In addition, we hope that these data are expected to give direction to those who will form a forward-looking strategy. For this, changes and supports in animal production in Turkey by years tried to put together by using TUIK data.

Keywords: Animal production, agricultural supports, economic traits, milk production, meat production, egg production



OCCURRENCE OF *Atherina boyeri* Risso, 1810 IN KÜÇÜK MENDERES RIVER

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ABSTRACT

In this study the presence of big-scale sand smelt *Atherina boyeri* Risso, 1810, an invasive and translocated species has been reported in the Küçük Menderes River, İzmir, Şelçuk, Turkey. The big-scale sand smelt *Atherina boyeri* Risso, 1810 lives in fresh, brackish and marine waters of the western Atlantic Ocean and Mediterranean Sea. *Atherina boyeri* is euryhaline: the adults migrate to sea in autumn and enter the lagoons in spring for reproduction.

The fish species were captured by use of fishing rods, electroshocker, and nets with various mesh sizes from the different regions of the Küçük Menderes River in May 2017. The captured fish samples were kept in 4% of formaldehyde and brought to the laboratory to determine their meristic and metric features. Turkey's inland waters are endemic, exotic and economic character, are hosting numerous species of fish. Morphometric and meristic measurements of fish taxa are required to determine the fish fauna in an ecosystem and to detect differences within the species.

This study describes the area where these fish were found and documents of the population. Monitoring the *Atherina boyeri* population in the Küçük Menderes River and researching its biological and ecological characteristics would be advisable for the future of the ecosystem.

Keywords: *Atherina boyeri*, big-scale sand smelt Küçük Menderes River, İzmir, Turkey.



**PRESERVING THE PURITY OF OUR LANGUAGE IS ONE OF THE URGENT
ISSUES OF LINGUISTICS**

**DİLİMİZİN SAFLIĞINI KORUMAK, DİLBİLİMİN AKTUAL KONULARINDAN
BİRİDİR**

DİLİMİZİN SAFLIĞIN QORUNMASI DİLÇİLİYİN AKTUAL MƏSƏLƏLƏRİNDƏNDİR

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ABSTRACT

Language is a specific social event and has an important place among existing social events. Sociolinguistics studies the relationship between language and society. Among the main problems to be addressed here is the study of the role of language in the development of society, as well as the definition of the role of society in the development of language. The study of these relations suggests that the history of language and the history of the people are closely intertwined.

As mentioned above, it is impossible to imagine a society without language. Just as the development of society depends on language, so the development of language depends on society. Society, the people and the state to which the language belongs play an important role in the development of language. One of the main functions of the state, and perhaps the most important, is to develop, preserve and pass on the language to future generations. For this purpose, an important part of state policy is language policy, which can be called the national language policy. At the same time, it should be noted that the national language policy is the internal policy of each state. The existence of the nation, political meetings about its future, political interest are an integral part of national policy.

In each period, people assimilate, generalize, and pass on their knowledge and experiences to the next generation, to the next generation, by adding their own thoughts. All this is done through language. This aspect also determines the important function of language in society.

The role of the Great Leader Heydar Aliyev in the protection and development of our language is irreplaceable. Thanks to the wise and far-sighted policy of national leader Heydar Aliyev, today the Azerbaijani language has become a common language, the state language, enriched and gained great prestige, and special attention was paid to its protection.

In conclusion, it should be noted that each language is one of the main tools in the development of scientific and cultural life of society. It remains one of those tools in modern times.

Keywords: language, state, politics, society, purity

ÖZET

Dil, belirli bir sosyal olaydır ve mevcut sosyal olaylar arasında önemli bir yere sahiptir. Sosyodilbilim, dil ve toplum arasındaki ilişkiyi inceler. Burada ele alınması gereken temel sorunlar arasında, toplumun gelişiminde dilin rolünün incelenmesi ve ayrıca dilin gelişiminde toplumun rolünün tanımlanması yer almaktadır. Bu ilişkilerin incelenmesi, dil tarihi ile halk tarihinin yakından iç içe geçtiğini göstermektedir.



Yukarıda da bahsedildiği gibi dilsiz bir toplum hayal etmek imkansızdır. Nasıl toplumun gelişimi dile bağlıysa, dilin gelişimi de topluma bağlıdır. Dilin gelişiminde toplum, insanlar ve dilin ait olduğu devlet önemli rol oynar. Devletin temel işlevlerinden biri ve belki de en önemlisi, dili geliştirmek, korumak ve gelecek nesillere aktarmaktır. Bu amaçla, devlet politikasının önemli bir parçası, ulusal dil politikası olarak adlandırılabilir dil politikasıdır. Aynı zamanda, ulusal dil politikasının her devletin iç politikası olduğu unutulmamalıdır. Ulusun varlığı, geleceği hakkında siyasi toplantılar, siyasi çıkarlar ulusal politikanın ayrılmaz bir parçasıdır.

Her dönemde insanlar kendi düşüncelerini ekleyerek bilgi ve deneyimlerini bir sonraki nesle, bir sonraki nesillere özümsür, genelleştirir, aktarır. Bütün bunlar dil aracılığıyla yapılır. Bu yön aynı zamanda dilin toplumdaki önemli işlevini de belirler.

Ulu Önder Haydar Aliyev'in dilimizin korunması ve geliştirilmesindeki rolü yeri doldurulamaz. Milli lider Haydar Aliyev'in bilge ve ileri görüşlü politikası sayesinde, bugün Azerbaycan dili ortak bir dil, devlet dili haline gelmiş, zenginleşmiş ve büyük bir prestij kazanmış, korunmasına özel önem verilmiştir.

Sonuç olarak, her dilin toplumun bilimsel ve kültürel yaşamının gelişiminde temel araçlardan biri olduğu unutulmamalıdır. Modern zamanlarda bu araçlardan biri olmaya devam ediyor.

Anahtar kelimeler: dil, devlet, siyaset, toplum, saflık

XÜLASƏ

Dil spesifik ictimai hadisədir və mövcud ictimai hadisələr arasında mühüm mövqeyə malikdir. Dil və cəmiyyətin qarşılıqlı əlaqələrini sosiolinqvistika araşdırır. Burada diqqət yetirilən əsas problemlər sırasında cəmiyyətin inkişafında dilin rolunun öyrənilməsi ilə yanaşı, həm də dilin inkişafında cəmiyyətin rolunun müəyyənləşdirilməsidir. Bu əlaqələrin öyrənilməsi belə bir fikri söyləməyə əsas verir ki, dilin tarixi ilə xalqın tarixi bir-biri ilə sıx vəhdətdədir.

Yuxarıda qeyd etdiyimiz kimi, cəmiyyəti dilsiz təsəvvür etmək qeyri-mümkündür. Cəmiyyətin inkişafı dildən asılı olduğu kimi, dilin də inkişafı cəmiyyətdən asılıdır. Dilin inkişafında cəmiyyət, dilin mənsub olduğu xalq və dövlət mühüm rol oynayır. Dövlətin əsas funksiyalarından biri və bəlkə də, ən mühümü dili inkişaf etdirmək, qorumaq, gələcək nəsillərə ötürməkdir. Bu məqsədlə dövlət siyasətinin mühüm bir tərkib hissəsini dil siyasəti təşkil edir ki, bunu Milli dil siyasəti adlandırmaq olar. Eyni zamanda onu da qeyd etmək lazımdır ki, milli dil siyasəti hər bir dövlətin daxili siyasətidir. Millətin varlığı, onun gələcəyi ilə əlaqədar siyasi görüşlər, siyasi maraq milli siyasətin tərkib elementidir.

Hər bir dövrdə insanlar öncə özlərindən əvvəl yaranmış və dil-yazılı dil vasitəsilə sonrakı nəsillərə ötürülmüş bilikləri, təcrübələri mənimsəyir, ümumiləşdirmə aparır və yenidən öz düşüncələrini əlavə edərək növbəti dövrə, növbəti nəsillərə ötürür. Bunların hamısı dil vasitəsilə həyata keçirilir. Elə bu cəhət də dilin cəmiyyətdəki mühüm funksiyasını müəyyən edir.

Dilimizin qorunması və inkişafı istiqamətində Ulu Öndər Heydər Əliyevin rolu əvəzolunmazdır. Ümummilli lider Heydər Əliyevin müdrik, uzaqgörən siyasəti sayəsində Azərbaycan dili bu gün ümumişlək dilə, dövlət dilinə çevrilib, zənginləşərək böyük nüfuz qazanıb, onun qorunmasına xüsusi önəm verilib.



Sonda qeyd etmək lazımdır ki, hər bir dil cəmiyyətin elmi və mədəni həyatının inkişafında əsas vasitələrindəndir. Çağdaş dövrdə də həmin vasitələrindən biri olaraq qalmaqdadır.

Açar sözlər: dil, dövlət, siyasət, cəmiyyət, saflıq ...



MEDIAL OVERHANG OF THE TIBIAL COMPONENT DOES NOT SIGNIFICANTLY AFFECT POSTOPERATIVE FUNCTIONAL OUTCOME FOLLOWING TOTAL KNEE ARTHROPLASTY

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Background

Postoperative residual pain following total knee arthroplasty(TKA) is one of the reasons for patients' dissatisfaction. Tibial component overhang in total knee arthroplasty may cause soft tissue irritation and generate pain. The aim of our study is to investigate the effect of medial overhang of tibial component on the functional outcome following TKA.

Material and Method

One hundred and six knees of 76 patients(14 male;62 female, 30 bilateral) were retrospectively assessed. All the procedures were performed using Genesis 2 CR(Smith&Nephew) implant type. Patients with secondary gonarthrosis, malalignment following TKA and <1 year postoperative follow up period were excluded. Patients were divided into two groups whether there was medial overhang of tibial component or not. Demographic data of the patients, medial overhang of tibial component, postoperative ROMs, knee society score(KSS), WOMAC scores and visual analogue scale(VAS) scores were evaluated.

Results

Mean age of the patients was 66.4 ± 7.4 (48-87). Medial overhang of tibial component was observed in 10% of the patients. Mean overhang of tibial component was 2.2 ± 1.15 mm. There was no significant difference between two groups in postoperative ROMs, KSS, WOMAC scores and VAS scores($p:0,214$, $p:0,073$, $p:0,527$ and $p:0,197$; respectively).

Conclusion

Our study demonstrates that medial overhang of tibial component does not significantly affect postoperative outcome scores following TKA.

Keywords: Total knee arthroplasty, tibial component, medial overhang, functional scores



ZAUR USTACIN ŞEİRLƏRİNDƏ UŞAQ OBRAZLARI

(“Sətirlərdə uşaq obrazları” bölümü

(“Gülüzənin şeirləri” kitabında) tədqiqat müstəvisində)

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XÜLASƏ

Məqalədə Zaur Ustacın “Gülüzənin şeirləri” kitabındakı “Sətirlərdə uşaq obrazları” bölümünə daxil edilən şeirləri tədqiq olunur. Qeyd olunur ki, bu şeirlərin qəhrəmanları bizlərin tez-tez həyatda qarşılaşdığı uşaqlardır. Onların hər biri özünəməxsus təbiətdə olmaları ilə sevimli, yaddaqalandır. Aralarında sadələşmə ilə diqqətçəkənlər də var, ərköynlüyü, davakarlığı, inadçılığını ilə yadda qalanlar da. Ancaq onlar elə bu özəl cəhətləri ilə ətraf mühit tərəfindən qəbul olunur, sevilirlər. Çünki safdırlar, təmizdirlər, müəyyən yaş həddindən sonra həyatı dərk edən, cəmiyyətdə layiqli yer tutacaq şəxs olacaqlar.

Şeirlər üç yarımşəkilə altında qruplaşdırılıb: 1 – “Bir ad bir şeir”; 2 - “İki və daha artıq şəxs adına ünvanlanan şeirlər”; 3 – “Tam və bitkin şeirlər”. İlk iki yarımşəkilə altındakı şeirlər şəxs adları ilə əlaqəlidir. Həmin adın daşıyıcısı olan uşağın hansı təbiətdə olması, orta təhsilini başa çatdırdandan sonra həyatda kim olacağı haqda düşüncələri gündəmə gətirilir. Şeirlərin sonluğunda hərflər və adlarla əlaqəli suallar, yaxud tapşırıqlar da verilir ki, bütün bunlar azyaşlının dünyagörüşünün genişlənməsinə, onda iti düşünmə qabiliyyəti formalaşmasına xidmət edən xüsusiyyətlərdir. Bu kimi vasitələrdən bəhrələnməklə müəllif qarşıya qoyduğu “cəmiyyət üçün layiqli vətəndaş formalaşdırmaq” kimi məqsədinə müvəffəq olacağına əmindir.

Son olaraq tədqiqata cəlb olunan şeirlər haqqında bu qənaət hasil olur ki, Z.Ustac nədən, yaxud kimdən yazmasından asılı olmayaraq təqdim etdikləri yeni görünür, təbiidir, səmimidir, ürəyəyatımlıdır. Obrazlar elə xarakterizə olunur ki, onlar haqqında deyilənlərin həqiqət olduğuna şəkk-şübhən qalmır. Bunun bir səbəbi əgər yazıçının intellektindən irəli gəlsə, digər səbəbi müəllifin ixtisas, peşə yönümü ilə izah oluna bilər. Axı Zaur Ustac müəllimdir, uşaq dünyasına hamıdan çox bələdliyi yetən bir ixtisas sahibi.

Açar sözlər: uşaq şeiri; vətəndaş tərbiyəsi; ixtisas, peşə yönümü.

Zaur Ustac'ın şiirlerinde çocuk obrazları

(“Sətirlərdə uşaq obrazları” bölümü

(“Gülüzənin şiirləri” kitabında) araşdırma alanında)

ÖZET



Makalede "Gülüzanın Şiirleri" kitabının "Satırlardaki Çocuk rolleri" bölümündeki şiirler incelenmektedir. Bu şiirlerin kahramanlarının hayatta sıklıkla karşılaştığımız çocuklar olduğu belirtiliyor. Bunların her biri tuhaf bir doğaya sahipler. güzel, unutulmaz. Onların arasında saf olanlar var, sevecen, kavgacı ve inatçı olanlar da. Ama onlar saf, temiz oldukları için bu özellikleriyle çevre tarafından kabul ediliyor ve seviliyor.

Şiirler üç alt başlık altında toplanmıştır: 1 - "Bir isim, bir şiir"; 2 - "İki veya daha fazla kişiye hitap eden şiirler"; 3 - "Tam ve bitkin şiirler". İlk iki başlık altında toplanan şiirler, kişisel isimlerle ilgilidir. Adını taşıyan çocuğun liseden mezun olduktan sonra hayatta kim olacağı ortaya çıkar. Şiirlerin sonunda harflere ve isimlere ilişkin sorular, ya da görevler verilir. Bunların hepsi çocuğun genel kültürünü genişletmeye, keskin düşünme becerilerinin oluşmasına hizmet eden özelliklerdir. Yazar, bu tür araçları kullanarak, "toplum için iyi bir vatandaş oluşturma" hedefine ulaşacağından emin olmuştur.

Son olarak, araştırmada yer alan şiirlerin, Z.Ustaj'ın ne veya kimden yazdığına bakılmaksızın, yeni, doğal, samimi ve iç açıcı görüldüğü sonucuna varıldı. Çocuk rolleri onlar hakkında söylenenlerin doğru olduğuna hiç şüphe olmayacak şekilde karakterize edilir. Bunun bir nedeni eğer yazarın zekasından geliyorsa, bir nedeni de yazarın uzmanlığı, mesleki yönelimi ile açıklanabilir. Çünkü, Zaur Ustaj bir öğretmen, çocukların dünyasını herkesten daha iyi bilen bir profesyonel.

Anahtar kelimeler: çocuk şiiri; yurttaşlık eğitimi; uzmanlık, profesyonel yönelim.

**Children's obraz in Zaur Ustac's poems
("Child obraz in setir" section (In the book
"Gülüzanın Şiirleri" in the field of research)**

ABSTRACT

The article examines the poems in the "Children's roles in the rows" section of the book "Gülüzanın Şiirleri". It is stated that the heroes of these poems are the children we often encounter in our lives. Each of these have a strange nature. beautiful, unforgettable. Among them there are the naive ones, as well as the loving, quarrelsome and stubborn ones. But because they are pure, clean, these qualities are accepted and loved by the environment.

Poems are grouped under three subheadings: 1 - "A name, a poem"; 2 - "Poems addressing two or more people"; 3 - "Complete and exhausted poems". The poems collected under the first two headings are related to personal names. It is revealed who the boy who bears his name will be alive after graduating from high school. At the end of the poems, questions or tasks regarding letters and names are given. All of these are features that serve to expand the general culture of the child and to form sharp thinking skills. Using such tools, the author was confident that he would achieve his goal of "creating a good citizen for the community".



Finally, it was concluded that the poems included in the research seem new, natural, sincere and heartwarming, regardless of what or whom Z Ustaj wrote. Children's roles are characterized in such a way that there is no doubt that what is said about them is true. If one reason comes from the intelligence of the author, another can be explained by the author's expertise, professional orientation. Because Zaur Ustaj is a teacher, a professional who knows the world of children better than anyone else.

Keywords: children's poetry; civic education; expertise, professional orientation.



BAKI ŞƏHƏRİNİN DİL SİTUASIYASI
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XÜLASƏ

Dil müəyyən insan kollektivinin üzvləri arasında əsas və ən mühüm kommunikasiya vasitəsi olan semasioloji sistemlərdən biridir. Dil habelə düşüncənin inkişaf vasitəsidir, mədəni-tarixi ənənələri nəsillərdən-nəsillərə çatdırır.

Dil situasinya deyəndə müəyyən siyasi-inzibati qurum, yaxud coğrafi ərazi hüdudu çərçivəsində bir və ya bir neçə dilin funksional, habelə sosial təsirlərindən ibarət mövcudluq formasının toplusu nəzərdə tutulur.

Tədqiqatda müəyyənləşdirilir ki, dil situasinya nəinki dil sistemində funksional cəhətdən bölüşdürülmüş, paylaşılmış dillərin sosial cəmi, toplusudur, eləcə də dilin podsistemi və onların iyerarxiyasıdır. Dil situasinya çoxaspektli və çoxəlamətli bir hadisədir.

Dil situasinya nəzəri baxımdan sosioloji dilçiliyin ən mühüm məsələsidir. Hər hansı bir ölkədə, o cümlədən Azərbaycanda dil və nitq situasinya bir neçə cür olur: 1) tarixi-mədəni situasinya; 2) dil situasinya və s. Bu və ya digər situasiyalar sosial hadisələri əks etdirir. Müəyyən tarixi-mədəni situasiyada dilin sosial diferensiasiyası yaranır. Yəni dilin sosial inkişafı prosesi məhz bir sosial hadisə kimi dəyərləndirilir.

Dil situasinya sosiolinqvistik elminin, dilin funksiyasının kardinal anlayışlarındanır.

Ölkəmizdə dil situasinyaın aşağıdakı məsələləri də öyrənilir: 1) dilin funksionallaşmasının sosial şəraiti; 2) dilin istifadə olunma mühiti və sferaları; 3) dilin funksiyaları.

Polietnik şəhərin dil situasinya, dil situasinyaın vacib tipoloji əlamətləri, dilin və ya dillərin sosial funksiyası. Bu məsələlər bizim araşdırmada 2 aspektdə- 1) regionun yaxud dövlətin dil situasinya,1) ekzoqlos kimi, şəhərdə çoxdilliyin mövcudluğu; 2) endoqlos kimi, burada diqqət iki və ya çoxdialektə istiqamətlənir. Tədqiqat işində Bakı şəhərinin ekzoqlos və endoqlos dil situasiyaları xarakterizə olunur. Bunun üçün aşağıdakı vəzifələrin yerinə yetirilməsi qarşıda məqsəd kimi durur:

— Bakının dil mənzərəsi tərəfimizdən Azərbaycan xalqının mənəvi irsinin bərpası istiqamətində araşdırılır;

— Bakı şəhərinin dil situasinya sosial və kommunikativ situasiyaların vəhdətində öyrənilir;

— Bakı əhalisinin milli tərkibinin statistikasını, şəhərdə çoxdillilik tipinin səciyyəsi;

— Qədim mədəniyyət mərkəzi kimi Bakı şəhəri əhalisinin dil həyatı dəqiqləşdirilir; Bakı şəhərinin dil situasinya sosiolinqvistik marağa səbəb olur. Bakı şəhərinin dil həyatı konqlomer (müxtəlif hissələrin nizamsız yığını, birləşməsi) xarakter daşıyır.

— Azərbaycan dilinin distribusiyası (müəyyən dil vahidinin rast gəlinə biləcəyi bütün kontekstlərin məcmusu, distribusiyası dil iyerarxiyasının bütün mərhələləri-yarusları ilə



bağlıdır) funksionallığın müxtəlif sferalarda insanların-şəhər əhalisinin həyat və fəaliyyətini nəzərdən keçirmək;

— Bakı şəhəri üzrə dil situasiyasının spesifikasiyasını üzə çıxarmaq, onun başlıca podsistemi təyin etmək;

— şəhər əhalisinin dil situasiyası modelini müəyyənləşdirmək;

— nəticə olaraq Bakı şəhərində əhalinin Azərbaycan, rus, ingilis və digər dillərdən istifadə kontaktlarını tədqiq etmək.

Məqsədımız Bakı şəhərinin dil situasiyasını kompleks şəkildə təhlil etməkdən ibarətdir. Fikrimizcə, bütün region və ayrı-ayrı böyük şəhərlərdə dil situasiyasının öyrənilməsi bütövlükdə Azərbaycan Respublikasının dil mənzərəsinin, dil vəziyyətinin monoqrafik yolla tədqiqinin gerçəkləşməsi üçün müəyyən perspektivlər yarada bilər.

Açar sözlər: sosioloji dilçilik, dil situasiyası, funksionallaşma, şəhər əhalisinin dil situasiyası, ekzoqlos və endoqlos dil situasiyaları

ABSTRACT

Language is one of the semasiological systems, which is the main and most important means of communication between members of a certain human community. Language is also a means of developing thought, passing on cultural and historical traditions from generations to generations.

Under the language situation it is intended to be a set of forms of existence, consisting of functional as well as social influence of one or more languages within a certain political and administrative structure or geographical area.

The study identifies that the language situation is not only a social totality, collection of languages that are functionally shared, distributed in the language system, but also is a subsystem of a language and their hierarchy. The language situation is a multifaceted and multi featured phenomenon.

The language situation is theoretically the most important problem of sociological linguistics. In any country, including Azerbaijan, there are several types of language and speech situation: 1) historico-cultural situation; 2) language situation, etc. These or other situations reflect social events. The social differentiation of a language arises in a certain historico-cultural situation. That is, the process of a social development of a language is assessed as a social event. It means that the social development process of a language is assessed as a social event. The language situation is one of the cardinal concepts of sociolinguistics, the function of a language.

The following issues of the language situation are also studied in our country:

- 1) social conditions of language functioning;
- 2) environment and spheres of language use;
- 3) functions of language.

The language situation of a multiethnic city, important typological features of the linguistic situation, the social function of a language or languages. In our study, these issues are



explored in two aspects: 1) the language situation of a region or state; 2) the presence of multilingualism in the city as an exogloss; 3) As with endogloss, the focus here is on two or more dialects.

The study characterizes language situations of Baku city with exogloss and endogloss. For this, the following tasks to be performed as a goal:

- We are studying the language panorama of Baku in the direction of restoring the spiritual heritage of the Azerbaijani people;
- The language situation of Baku is studied in a combination of social and communicative situations;
- Statistics of the national structure of the population of Baku city, the nature of the multilingual type in the city;
- The linguistic life of the population of Baku city as an ancient cultural center is being clarified; The language situation of of Baku city arouses sociolinguistic interest. The linguistic life of Baku city is conglomerate (an irregular heap, combination of different parts) in nature.
- Consider the life and activities of the urban population in various spheres of the functionality of the distribution (the sum of all contexts in which a certain language unit can be found, the distribution is associated with all the stages – floors of the language hierarchy) of the Azerbaijani language;
- Identify the specifics of the language situation in the city of Baku, determine its main subsystem;
- Determine the model of the language situation of the urban population;
- As a result, study the contacts of the population in Baku in Azerbaijani, Russian, English and other languages.

Our goal is to comprehensively analyze the language situation of Baku city. In our opinion, the study of the language situation in the whole region and in large cities can create certain prospects for the realization of a monographic study of the language panorama and language situation in the Azerbaijan Republic as a whole.

Key words: sociological linguistics, language situation, functionalization, language situation of the urban population, endoglossic and exoglossic language situations.



**KSANTOGEN TURŞULARININ TÖRƏMƏLƏRİ KORROZİYA VƏ
OKSİDLƏŞMƏYƏ QARŞI AŞQAR KİMİ**
DERIVATIVES OF XANTHOGENIC ACIDS AS ANTICORROSIVE AND
ANTIOXIDANT ADDITIVES

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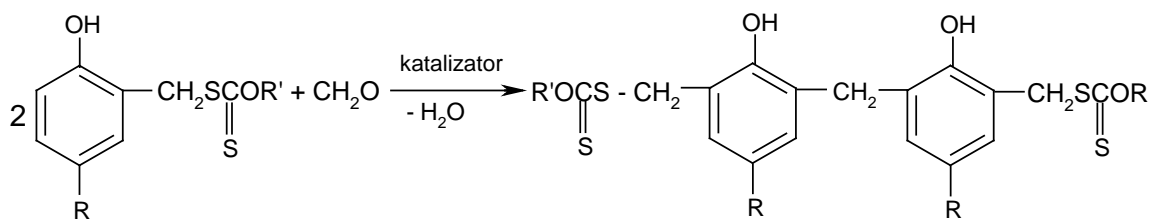
ÖZƏT

Aşqarların təsir mexanizmi və onların quruluşu ilə funksional xassələri arasındakı qanunauyğunluğun öyrənilməsi nəticəsində yüksək təsirə malik müxtəlif təyinatlı aşqarların məqsədyönlü sintezi alimlərin uzun illərdir ki, tədqiqat obyektinə olmuşdur.

Sürtkü yağlarının ən mühüm xassələrindən biri, onların korroziya və oksidləşməyə qarşı stabilliyidir. Tədqiqatlar göstərmişdir ki, oksidləşmə və korroziyaya qarşı ən keyfiyyətli aşqarlar alkilfenollar və onların törəmələridir. Ayrı-ayrılıqda ksantogen turşuları törəmələrinin də korroziyaya qarşı aşqar kimi təsirli olduğu məlumdur [1, 2]. Bizim tərəfimizdən maddənin çoxfunksiyalılığını təmin etmək, aşqar kimi çeşidini və təsirini artırmaq məqsədilə molekulunda ksantogenat fraqmenti olan alkilfenol törəmələri təklif olunur.

2,2'-Metilen-bis(4-alkil-6-ksantogenatometilfenollar məlum olan hidroksoalkilbenzilksantogenatları [3] 30-40°C-də katalizator iştirakı ilə formaldehidlə kondensləşmə reaksiyasından alınır:





Burada, R=CH₃, C₉H₁₉; R'=C₂H₅, (CH₃)₂, C₄H₉, (CH₃)₂CHOH₂CH₂

Maddələrin tərkib və quruluşunu İQ spektr əyriləri təsdiq edir.

Sintez edilmiş maddələr korroziya və oksidləşməyə qarşı aşqar kimi Bakı baza yağları tərkibində tədqiq edilmişdir. Tərkibinə aşqar qatılmış yağların korroziyalığı ГОСТ 20502-75 üzrə (katalizator mis naftenat, 140⁰C, 25 saat), oksidləşməyə qarşı davamlığı isə ГОСТ 11063-77 üzrə (200⁰C, 30 saat) DK-2 aparatında təyin edilmişdir.

Sınaq nəticələri göstərmişdir ki, maddələr yüksək korroziya və oksidləşməyə qarşı xassələrə malikdir.

Açar sözlər: aşqar, korroziya xassəsi, oksidləşmə, ksantogenat

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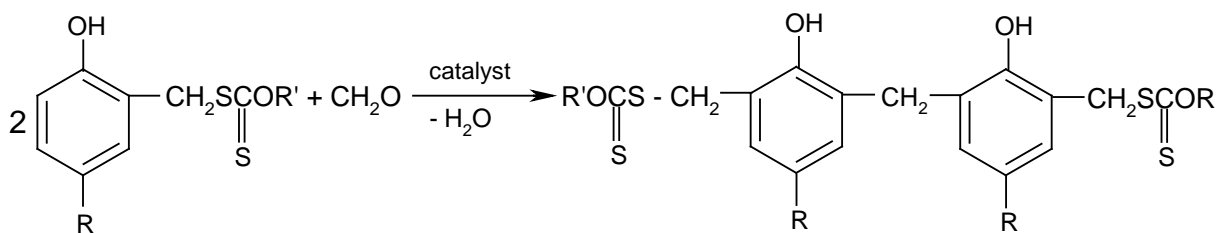
ABSTRACT

As a result of studying the mechanism of action of additives and the regularity between their structure and functional properties, the purposeful synthesis of high-impact additives for various purposes has been the subject of research for many years.

One of the most important properties of lubricants is their resistance to corrosion and oxidation. Studies have shown that the best additives against oxidation and corrosion are alkylphenols and their derivatives. Derivatives of xanthogenic acids are also known to be effective as anti-corrosion additives [1, 2]. We offer alkylphenol derivatives with a xanthogenate fragment in the molecule in order to ensure the multifunctionality of the substance, increase its range and effect as an additive.

2,2'-Methylene-bis (4-alkyl-6-xanthogenatomethyl)phenols are known hydroxyalkylbenzylxanthonogates [3] obtained by condensation reaction with formaldehyde in the presence of a catalyst at 30-40⁰C:





Where, R = CH₃, C₉H₁₉; R' = C₂H₅, (CH₃)₂, C₄H₉, (CH₃)₂CHOH₂CH₂

The composition and structure of substances are confirmed by IR spectral curves.

The synthesized substances have been studied in Baku base oils as an anti-corrosion and oxidation additive. Corrosion of added oils was determined in accordance with GOST 20502-75 (catalyst copper naphthenate, 140⁰C, 25 hours), and oxidation resistance was determined in accordance with GOST 11063-77 (200⁰C, 30 hours) in DK-2 apparatus.

Test results have shown that the substances have high anti-corrosion and anti-oxidation properties.

Keywords: additive, corrosion properties, oxidation, xanthogenate

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**İZMİR İLİ BORNOVA İLÇESİNDE YETİŞEN ZEYTİN (OLEA EUROPAEA)
AĞACI TALAŞI ÜZERİNDEKİ METİLEN MAVİSİ ADSORPSİYONUNUN
KİNETİK HESAPLAMALARI**

KINETIC CALCULATIONS OF METHYLENE BLUE ADSORPTION ON OLIVE (OLEA
EUROPAEA) TREE SAWDUST GROWN IN BORNOVA DISTRICT OF IZMIR
PROVINCE

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ÖZET

Atık su arıtımında adsorpsiyon, atık sulardaki belirli maddeleri uzaklaştırmak amacıyla bu maddeleri tutabilecek özellikler gösteren adsorbent maddelerin kullanılması işlemidir. Bu çalışmada, İzmir İli Bornova İlçesinde Yetişen Zeytin (Olea Europaea) Ağacı Talaşı çok ince öğütülüp 250 mesh elekten geçirildikten sonra, bunun 2 gramı bir litre metilen mavisi boyası içeren farklı derişimlerdeki çözeltilere eklenmiştir. Farklı zaman aralıklarında bu çözeltilerden örnekler alınıp, UV-GB spektrofotometresinde 668 nm dalga boyunda adsorbansları ölçülmüştür. Ölçümler farklı sıcaklık değerlerinde yapılmış, elde edilen veriler birinci ve ikinci derece kinetik modellerine uygulanmıştır. Birinci derece kinetik modelde 60 ppm Metilen mavisi Yeşili derişimindeki regresyon sabiti değerleri 298 K, 308 K ve 318 K'de sırasıyla 0,709, 0,665 ve 0,739 olarak bulundu. İkinci derece kinetik modelde ise, 60 ppm Metilen mavisi derişimindeki regresyon sabiti değerleri: 298 K, 308 K ve 318 K'de sırasıyla 0,9956, 0,2281 ve 0,9959 olarak bulundu. Sıcaklığın adsorpsiyon verimine etkisi ise şöyle gözlemlendi. Sıcaklık arttıkça, 60 ppm Metilen mavisi konsantrasyonunun sırasıyla %71,23 , % 74,6, % 84,35 , 298 K, 308 K ve 318 K olduğu tesbit edildi. Sonuçta veriler ikinci derece



kinetik modele uygundur. Bu sonuçlar bize İzmir İli Bornova İlçesinde Yetişen Zeytin (*Olea Europaea*) Ağacı Talaşının kentsel kaynaklı atık suların arıtılmasında filtre amaçlı kullanılabileceğini göstermektedir.

Anahtar Kelimeler: Zeytin ağacı Talaşı ,Metilen mavisi, Kinetik, Adsorpsiyon.

ABSTRACT

Adsorption in waste water treatment is the process of using adsorbent substances that have properties that can hold these substances in order to remove certain substances in waste water. In this study, Olive (*Olea Europaea*) tree shavings grown in Bornova District of Izmir province were milled very finely and passed through 250 mesh sieve and 2 grams of it were added to different concentrations of solutions containing one liter of methylene blue dye. Samples were taken from these solutions at different time intervals and their adsorbency was measured at a wavelength of 668 nm on a UV-GB spectrophotometer. Measurements were made at different temperature values, and the data obtained were applied to first and second degree kinetic models. In the first degree kinetic model, the regression constant values in the methylene blue green concentration of 60 ppm were found to be 0.709, 0.665 and 0.739, respectively, at 298 K, 308 K and 318 K. In the second degree kinetic model, the regression constant values in the methylene blue concentration of 60 ppm were found to be 0.9956, 0.2281 and 0.9959, respectively, at 298 K, 308 K and 318 K. The effect of temperature on adsorption efficiency was observed as follows. As the temperature increases, the methylene blue concentration of 60 ppm respectively %71,23 , % 74,6, % 84,35 , 298 it was found to be K, 308 K, and 318 K. After all, the data corresponds to the second-degree kinetic model. These results show that Olive (*Olea Europaea*) tree sawdust grown in Bornova District of Izmir province can be used for filter purposes in the treatment of urban wastewater.

Key words: Olive Tree sawdust, methylene blue, Kinetics, adsorption.



**İZMİR İLİ BORNOVA İLÇESİNDE YETİŞEN ZEYTİN (OLEA EUROPAEA)
AĞACI TALAŞI ÜZERİNDEKİ METİLEN MAVİSİ ADSORPSİYONU
ÇALIŞMALARININ TERMODİNAMİK VE İZOTERM HESAPLAMALARI
THERMODYNAMIC AND ISOTHERM CALCULATIONS OF METHYLENE BLUE
ADSORPTION STUDIES ON OLIVE (OLEA EUROPAEA) TREE SAWDUST GROWN
IN BORNOVA DISTRICT OF IZMIR PROVINCE**

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ÖZET

Bu çalışmamızın , İzmir İli Bornova İlçesinde Yetişen Zeytin (Olea Europaea) Ağacından elde edilen talaşların kullanılarak su kirliliklerinin arıtılması tasarlanmıştır. Böylelikle temiz bir çevre ve kent yaşamına katkısı olacaktır. Yaptığımız deneysel çalışmamızda farklı derişimlerde boyar madde (Metilen mavisi) çözeltileri sırası ile 298 K,308 K,318 K derece sıcaklıklarda ve değişik zaman aralıklarında alınan numunelerin (boyar madde) UV-GB spektrofotometresi kullanılarak 660 nm dalga boyunda absorbans ölçümleri yapıldı. Çalışma sonucunda Metilen mavisinin zeytin ağacı talaşı üzerinde hesaplanan izoterm verilerinde, 298 K da 60 ppm 500 ml metilen mavisi çözeltilerinde bir gram zeytin ağacı talaşı 47,27 miligram metilen mavisi adsorplamıştır. Adsorpsiyona farklı PH' ların etkisi optimum çalışma koşulları belirlenirken, incelenmiş ve en iyi adsorpsiyonun PH' 5 ta gerçekleştiği belirlenmiştir. Bundan dolayı tüm deneyler pH 5 te yapılmıştır. Adsorpsiyonun Langmuir, Freundlich, Temkin, Dubinin-Radushkevich, izotermi ile kıyaslandığında, Freundlich, izotermine daha iyi uyduğu ve en iyi sonucun $R^2 = 0,9917$ ile 298 K'da olduğu görüldü. Termodinamik parametreleri hesaplandığında , ΔH , entalpi değerinin 0,025 kJ/mol, ΔS



,entropi deęerinin 0,092 kJ/mol , ΔG , Gibbs serbest enerji deęerlerinin 298 K'de -27,59 kJ/mol, 308 K'de -28,52 kJ/mol, 318 K'de ise -29,45 kJ/mol olduęu grlmřtr. Bu sonular İzmir İli Bornova İlesinde Yetiřen Zeytin (*Olea Europaea*) Aęacından elde edilen talařların kullanılarak atık sulardaki boyar maddelerin arıtılmasında filtrasyon olarak kullanılabileceęini gstermektedir.

Anahtar Kelimeler: Zeytin aęacı Talařı , Metilen mavisi , Termodinamik, Adsorpsiyon.

ABSTRACT

In this study , it was designed to treat water pollution by using sawdust obtained from Olive (*Olea Europaea*) tree grown in Bornova District of Izmir province. In this way, it will contribute to a clean environment and urban life. We done our experimental study, different concentrations of dye (methylene blue) solutions with order 298 K,308 K and 318 K at temperatures of samples at different time intervals (dye) using UV-Visible Spectrophotometer at a wavelength of 660 Nm absorbance measurements were performed. As a result of the study, methylene blue adsorbed 47.27 milligrams of methylene blue in a gram of olive tree shavings in a solution of 500 ml of methylene blue at 60 ppm at 298 K in isotherm data calculated on Olive Tree shavings. The effect of different pHs on adsorption when determining optimal working conditions, it was studied and it was determined that the best adsorption occurs at PH' 5. Because of this, all experiments were conducted at pH 5. Compared to Langmuir, Freundlich, Temkin, Dubinin-Radushkevich, isotherms of adsorption, Freundlich was found to fit isotherm better and the best result was $R2 = 0.9917$ at 298 K. Thermodynamic parameters calculated for you, too, ΔH , of the value of the enthalpy 0.025 kJ/mol, ΔS ,the value of the entropy 0,092 kJ/mol , ΔG , Gibbs free energy values at 298 K -27,59 kJ/mol at 308 K -28,52 kJ/mol at 318 K -29,45 kJ/mol. These results show that shavings obtained from Olive (*Olea Europaea*) tree grown in Bornova District of Izmir province can be used as filtration for the treatment of dyes in waste water.

Key words: Olive Tree sawdust , methylene blue, thermodynamics, adsorption.



MOTOR YAĞLARININ KEYFİYYƏTİNƏ MÜXTƏLİF RADİKAL SAXLAYAN AŞQARLARIN TƏSİRİ

THE EFFECT OF ADDITIVES BASED ON VARIOUS ALKYLPHENOLS ON THE
PROPERTIES OF ENGINE OILS

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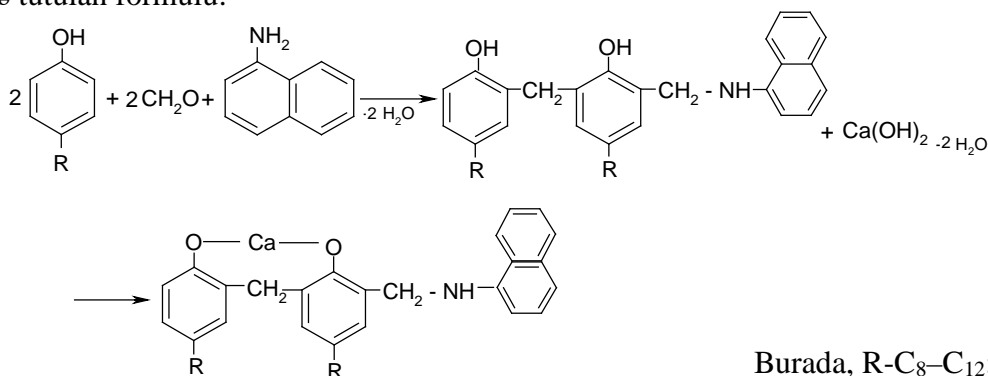
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ÖZƏT

Motor istehsalı inkişaf etdikcə detalların korroziyasının və sürtünməsinin azalmasına, mühərziqlərin normal işə düşməsi və işləməsinə təmin etmək və s. kimi problemlər yaradır bu da motor yağlarının keyfiyyətinin yüksəlməsi ilə mümkündür.

Motor yağlarının xassələrinin yüksəlməsinin əsas yollarından biri keyfiyyətli çox funksiyalı aşqarların istifadəsidir (1-3). Təqdim edilən işdə alkilfenolun, formaldehid və α - Naftilaminin kondensləşmə məhsulunun kalsium duzu – AKİ-38 aşqarı verilmişdir. Bu aşqar C_8 – C_{12} , C_9 – C_{12} alkilradikalları ilə alınmışdır.

Nəzərdə tutulan formulu:



C_{12}



Alınmış aşqarlar özülü mayedir, qələvi ədəbi 55-80mgKOH/q sulfat külü 5.0-7.5% dir.

Aşqarların fiziki-kimyəvi və funksional xassələri M-8 yağında standart üsullarla öyrənilmişdir. Aşqarların korroziya və oksidləşməyə qarşı davamlığı uyğun olaraq ГОСТ 20502-75 və ГОСТ-11063-77, yuyuculuq xassələri isə ГОСТ 5726-2013 üzrə təyin edilmişdir.

Aşqarların funksional xassələri bir-biri ilə müqaisədə, müəyyən edilmişdir ki, C₈-C₁₂ alkil radikalı ilə alınan AKİ-38 aşqarı C₉ və C₁₂ radikalı ilə alınan aşqarlardan korroziya və oksidləşməyə qarşı xassələrinə görə geri qalır. C₉ və C₁₂ radikalı ilə alınan aşqarların keyfiyyəti praktiki eynidir. Aşqarların hamısı isə analoqu olan əmtəə ЦИАТИМ-339 aşqarından funksional xassələrinə görə üstündür.

Beləliklə, AKİ-38 aşqarları korroziya, oksidləşməyə qarşı və yuyuculuq xassələrinə malik çoxfunksiyalı aşqarlardır.

Açar sözlər: alkilfenol, formaldehid, α - Naftilamin, aşqar, funksional xassələri

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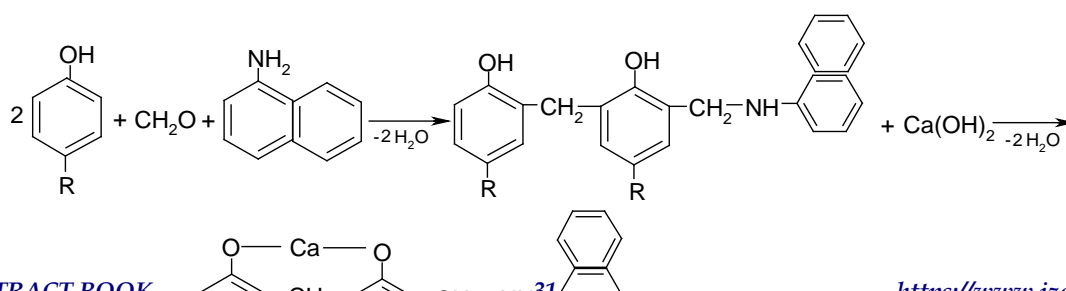
ABSTRACT

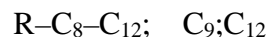
As engine production progresses, issues such as reduced corrosion and friction of parts, ensuring normal operation and maintenance of engines, etc. were solved with the improvement of the quality of engine oils.

One of the main ways to improve the properties of engine oils is the use of quality multifunctional additives [1-3].

In the presented work, the calcium salt-AKI-38 additive of the condensation product of alkylphenol, formaldehyde and α-Naphthylamine was given. These additives were made from various alkyl radicals C₈-C₁₂; C₉; C₁₂ alkylphenols.

The intended formula:





The obtained additives are basic liquid, alkaline number is 55-80 mgKOH/g, sulfate ash is 5.0-7.5%.

Physicochemical and functional properties of additives were studied by standard methods in M-8 oil. The resistance of additives to corrosion and oxidation is determined in accordance with GOST 20502-75 and GOST-11063-77, while the washing properties - in accordance with GOST 5726-2013.

The comparison of the functional properties of the additives with each other showed that AKI-38 additive obtained with alkyl radical C_8-C_{12} lags behind the additives obtained with C_9 and C_{12} radicals in terms of anti-corrosion and oxidation properties. The quality of additives obtained with C_9 and C_{12} radicals is practically the same. All additives are superior to TSIATIM-339 -an analogue product-in terms of functional properties.

Thus, AKI-38 additives are multifunctional additives with anti-corrosion, oxidation and detergent properties.

Key words: alkylphenol, formaldehyde, α -Naphthylamine, additive, functional properties

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UYĞUR OĞUZNAMƏSİNDƏ BOZQURD OBRAZI**BOZQURD IMAGE IN UYĞUR OGUZNAMES****Sadəddinli Nərmən Məmmədrazul qızı**

Bakı Avrasiya Universitetinin Folklorşünaslıq ixtisası üzrə doktorantı

XÜLASƏ

Bu məqalədə Bozqurd mifologeminin folklor mətnlərində yaratdığı məna sıralarının (paradiqmalarının) öyrənilməsi nəzərdə tutulur. Bozqurd mifologemi türk dastanlarının hər birində müəyyən məna paradiqmasını təmsil edir. Uyğur "Oğuznamə"sində Bozqurd obrazı türk etnosunu xilas edir. Bozqurd "Oğuznamə"nin uyğur versiyasında hərbi totem və yölgöstərən xilaskardır. Türk əfsanə və rəvayətlərində varlığına inanılan bir çox zoobrazlar vardır. Bunlara qurd, ilan, simurq, ağ quş, qara quş və başqalarını nümunə göstərmək olar. Haqqında bəhs etdiyimiz əfsanədə ən çox adı çəkilən heyvan qurddur. Dastanda Oğuz Xaqanın doğumundan ölümünə qədər keçdiyi bütün həyat yolu, iştirak etdiyi döyüşlər, xanımları ilə tanış olması, onlardan olan övladların dünyaya gəlməsi, torpaqları öz övladları arasında sırayla paylaşması öz əksini tapmışdır. Dastanda Oğuz Xaqan fiziki keyfiyyətlərinə görə qurda bənzədilir. Bozqurd türklərdə gücün simvolu sayılır. Göydən işıq içərisində yerə enərək Oğuzun gözünə görünməsi onu Türklər arasında müqəddəs edir. Göy işıq Tanrının simvolik işarəsi sayılır. Bozqurd həmçinin Oğuznamənin Uyğur versiyasında Oğuz Xaqanla danışır. Qəhrəmanın gözünə görünür, ordusunun qarşısında gedərək onu qələbəyə doğru inamla aparır. Türk milli adət-ənənəsində Bozqurd yol göstərən, xilaskar, sərkərdə funksiyalarını özündə ehtiva edir. Uyğur Oğuznaməsində həm Bozqurd, həm də Oğuz Xaqan Müqəddəs varlıq kimi göstərilir. Əgər Bozqurd türkləri xilas edib, tanrı yurdunu qoruyandısa, Oğuz Xaqan isə dövləti qurub,cahanı idarə edir. Dastanda qəhrəmanın gözünə görünən qurd " göy tükli və göy yələklidir". Tüklerinin və yələyinin göy rəngində olması Tanrı tərəfindən ona verilən bir ərməğandır. Qurd həmçinin türklərin hərbi totemlərindən biridir. Bozqurddan törəmiş olmaları inancı Türkləri hər zaman qürurlandırır. Bəzi dastanlarda ana, bəzilərdə isə ata funksiyasını daşıyır. Ən zətin zamanlarında Türklərin köməyinə çatır və onları düşdükleri vəziyyətdən xilas edir. Bozqurda inam bu gündə özünü göstərir.

Açar sözlər: Oğuz Xaqan, Bozqurd, işıq, gücün simvolu, xilaskar

ABSTRACT

This article is intended to study the series of paradigms of meaning created by Bozkurt mythology in folklore texts. Bozkurt mythology represents a certain paradigm of meaning in each of the Turkish epics. The image of Bozkurt in the Uyghur "Oguzname" saves the Turkic ethnos. Bozkurt is a military totem and a guiding savior in the Uyghur version of Oguzname. There are many zoobraz in Turkish myths and legends that are believed to exist. Examples include wolves, snakes, simurg, white birds, black birds, and others. The most mentioned animal in the legend we are talking about is the worm. The saga reflects all the life of Oguz Khagan from his birth to his death, the battles he took part in, his acquaintance with his wives, the birth of their children, and the distribution of lands among his children. In the saga, Oguz



Khagan is likened to a wolf due to his physical qualities. Bozkurt is considered a symbol of power among the Turks. The sight of Oguz descending from the sky to the earth in the light makes him sacred among the Turks. Blue light is a symbolic sign of God. Bozkurt also speaks with Oguz Khagan in the Uyghur version of the Oguzname. He is seen by the hero, walks in front of his army and leads him to victory with confidence. In the Turkish national tradition, Bozkurt has the functions of a guide, savior and commander. In the Uyghur Oghuz script, both Bozgurd and Oghuz Khagan are shown as sacred beings. If Bozkurt saved the Turks and protected the land of the gods, Oguz Khagan established the state and ruled the world. In the saga, the wolf seen in the hero's eyes is "blue-haired and blue-haired." The fact that its feathers and mane are blue is a gift from God. The wolf is also one of the military totems of the Turks. The belief that they are descended from Bozkurd always makes Turks proud. In some sagas she is a mother, and in others she is a father. He reaches out to the Turks in their most difficult times and saves them from their predicament. Confidence in the steppe is manifesting itself today.

Keywords: Oguz Khagan, Bozkurt, light, symbol of power, savior



**KORKU KÜLTÜRÜ EKSENİNDE COVID-19 PANDEMİSİNİN DİSİPLİN
TOPLUMU ÜZERİNDEKİ ETKİSİ**

**THE IMPACT OF THE COVID-19 PANDEMIC ON A DISCIPLINE SOCIETY
RESPECTIVE TO CULTURAL FEAR**

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ÖZET

Ülkemizde yaşanan covid-19 salgını nedeniyle çeşitli önlemler alınmıştır. Örneğin, halkın sağlığını koruma ve hastalığın bir an önce son bulması amacıyla; sokağa çıkma yasakları getirilmiştir. Foucault'cu bir perspektifle bu yasaklar, iktidar mekanizmasının kontrol arzusunu yeniden üreterek, disiplin toplumunun meşrulaştırılmasını sağlamıştır. Keza korku kültürüyle birlikte halkın; endişe ve kaygısının arttığı düşünülmektedir. Dolayısıyla halk; kendi istediklerine değil, topluma yön veren iktidar mekanizmasının isteklerine boyun eğmek zorunda kalmıştır. Böylece bir korku kültürü ekseninde iktidar, covid-19 salgını nedeniyle; bedenlerin daha kolay uysallaştırılmasını sağlamış ve toplumsal kontrol mekanizmasını daha derinden işlemiştir.

Bu çalışmada, tüm dünyayı etkisi altına alan covid-19 salgınının inşa ettiği korku kültürünün, disiplin toplumunu üzerindeki etkisinin nasıl ve ne şekilde olduğunu belirlemek amaçlanmıştır. Bu amaçla:

- Covid-19 salgının korku kültürünü yaratması üzerindeki en önemli güç nedir? (Halkın söylentisi mi, medya mı, iktidarın isteği mi?)
- Covid-19 salgının yarattığı korku kültürü, bireylerin iktidar mekanizmasının taleplerine rıza göstermesini nasıl etkilemiştir?

Bu araştırma sorularına yanıt bulmak amacıyla nitel araştırma modellerinden ölçüt örnekleme yöntemi kullanılacaktır. Verileri elde etmek amacıyla ise, yarı yapılandırılmış görüşme formu kullanılacak ve katılımcılarla online görüşme sağlanacaktır. Görüşmeler betimsel analiz yöntemiyle analiz edilecek ve bulgular sunulacaktır. Bu çalışmanın yapılmasıyla birlikte, ülkemizde Covid-19 salgınına yönelik korku kültürü anlaşılacak ve halkın, disiplin toplumuna nasıl tabii kılındığı derinlemesine analiz edilecektir.

Anahtar kelimeler: Covid-19, Korku Kültürü, Disiplin Toplumu



ABSTRACT

Various measures have been taken due to the covid-19 outbreak in our country. For example, in order to protect the health of the public and to end the disease; curfews have been imposed. From a foucaulterian perspective, these prohibitions enabled the disciplined society to be legitimized by reproducing the desire for control of the power mechanism. Together with the culture of fear, people's anxiety are thought to have increased. Therefore, the people had to submit not to their own desires, but to the wishes of the mechanism of power that guides society. Thus, due to the covid-19 epidemic, power on the axis of a culture of fear made it easier to tame the body and process the social control mechanism more deeply.

In this study, it is aimed to determine how and in what way the culture of fear caused by the covid-19 pandemic, which has affected the whole world, has an impact on the disciplined society. Thus:

- What is the most important force in the Covid-19 pandemic creating a culture of fear? (Is it the public rumor, the media, or the government's demands)
- How has the culture of fear created by the Covid-19 pandemic affected individuals' consent to the demands of the power mechanism?

Criteria sampling method from qualitative research models will be used to find answers to these research questions. In order to obtain the data, a semi-structured interview form will be used and online interviews will be granted with participants. Interviews will be analyzed by dethralistic analysis method and findings will be presented. With this study, the culture of fear towards the Covid-19 pandemic in our country will be understood and how the public is subordinated to the disciplined society will be analyzed in depth.

Keywords: Covid-19, Cultural Fear, Disciplined Society



RESİMDE ZAMAN KAVRAMININ YANSIMALARI
REFLECTIONS OF THE CONCEPT OF TIME IN PAINTING

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ÖZET

Bu çalışmada insanoğlunun kendini ifade etme biçimlerinden en mükemmellerinden birisi olan resim sanatı zaman kavramı ile ilişkilendirilmiştir. Ölümlü olan şu dünya da ölümsüzlüğü yakalama gayreti içerisinde olan insanoğlu meydana getirdiği uygarlıklar ve bu uygarlıkların meydana getirdiği sanatı sonsuz bir yaşam rüyası ile gerçekleştirmiştir. Bu rüya resim sanatı içerisinde bir görsel şölene dönüşmüştür ve sonsuzluğun bir ifade biçimi olmuştur. İnsanoğlu kendini ifade etme çabası ve durmadan akıp giden zamanı durdurma gayretleri insanlık tarihi içinde sürekli olarak bir dönüşüme uğramıştır. Resimde zaman kavramı insanoğlunun iki boyutlu bir yüzey üzerinde üçüncü boyuta zaman kavramının eklenmesiyle dördüncü bir boyuta geçme çabalarının bir göstergesidir. Ayrıca bu zaman kavramı ile dördüncü boyutta yer alan bakış sürecinden resim sanatı tarihine nasıl gelinildiğinin anlatmak istemesini göstermektedir. Resmi oluşturan sanatçı resim içerisinde meydana getirdiği mekânları, zamanları ve resmi yapan sanatçının içinde yaşadığı dış dünya ile ilgili betimlemeleri, sanat olgusu içerisinde saklanmış olan gerçekliğin değişen anlamlarını zamanın sonsuzluk veya sonu olan bir yapı içerisinde değerlendirir. Yeryüzünde bulunan her şeyi büyük bir değişime uğratan zaman kavramı resim sanatını da büyük bir değişime uğratmıştır. Resim sanatını büyük değişimlere uğratan zaman ve zamanı da beraberinde değişime uğratan resim sanatı; insanoğlunun yaşam mücadelesi içerisinde onların üretkenliğini etkileyen toplumsal, siyasal ve teknolojik gelişmelerin sanat ile olan ilişkisi göz ardı edilemez. Geçmişten günümüze kadar baktığımız zaman resim sanatının geçirmiş olduğu köklü değişimler ile birlikte insanoğlunun süreç içinde yaşam koşullarının da değiştiğini bizlere göstermektedir. Zamanın hiç duraksamayan akıcılığı içerisinde insanoğlu resim sanatında tüm geçmişin izlerini, anlamlarını, değer yargılarını ve inançlarını resme aktarmasını bilmişlerdir. Zaman ve sanat kavramları farklılıklarının anlamlarından yola çıktığımız mutlak zaman kavramından değişen zaman kavramına kadar resimde zaman kavramı önemli bir tutmaktadır. Bu çalışmamızda insanlığın iki boyutlu bir yüzeyi gözlemlediğini sandığı fakat dört boyutlu bir dünya'ya ait izlerin yani imgelerin resim sanatı içerisindeki değişimi zaman kavramı içerisindeki ilişkisi ele alınmıştır. Bu çalışma tarama modeli ile gerçekleştirilmiş olup ayrıca zamanın resim sanatı içerisindeki yansımaları ele alınarak resim incelemeleri yapılmıştır. Ayrıca bu çalışmada resim sanatın geçirdiği dönüşüm zaman kavramı içinde ele alınmıştır.

Anahtar Sözcükler: Zaman, Resim, Kavram, Yansıma, Dönüşüm.



ABSTRACT

In this study, the art of painting, which is one of the most perfect ways of self-expression of human beings, is associated with the concept of time. Human beings, who are striving to attain immortality in this mortal world, have realized the civilizations they have created and the art created by these civilizations with a dream of an eternal life. This dream has turned into a visual feast in the art of painting and has become an expression of eternity. Human beings have been constantly transforming their efforts to express themselves and to stop the flowing time. The concept of time in painting is an indicator of human beings' efforts to move to a fourth dimension on a two-dimensional surface by adding the concept of time to the third dimension. In addition, with the concept of time, it shows that he wants to explain how to come to the history of painting art from the perspective process in the fourth dimension. The artist who creates the painting evaluates the spaces, times he creates in the painting and the depictions of the painting artist about the external world he lives in, the changing meanings of reality hidden in the art phenomenon in a structure that is the eternity or end of time. The concept of time, which changed everything on earth, changed the art of painting to a great extent. Painting art, which changed the time and time that changed the art of painting; The relationship between art and the social, political and technological developments that affect the productivity of human beings cannot be ignored. When we look from the past to the present, it shows us that the living conditions of human beings have also changed in the process with the radical changes that the art of painting has undergone. In the uninterrupted fluency of time, human beings have been able to convey the traces, meanings, values and beliefs of all the past in painting. From the meaning of the differences between the concepts of time and art, from the concept of absolute time to the concept of changing time, the concept of time is important in painting. In this study, the relationship of the traces of a four-dimensional world, namely the changes in the art of painting, in the concept of time, which humanity thinks is observing a two-dimensional surface, is discussed. This study was carried out with the scanning model, and also, painting examinations were made by considering the reflections of the time in the art of painting. In addition, in this study, the transformation of painting art is discussed within the concept of time.

Keywords: Time, Painting, Concept, Reflection, Transformation.



OSMANLIDAN GÜNÜMÜZE TÜRK SANATINDA MILLI KIMLIK ARAYIŞLARI
SEEKING NATIONAL IDENTITY IN TURKISH ART FROM OTTOMAN TO PRESENT

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ÖZET

Tanzimat'tan sonra başlayan batılılaşma sürecinde Türk sanatında çok ciddi değişimler ortaya çıkmıştır. Avrupa'ya giden aydınlar gibi sanatçılar da ciddi kimlik sorunları yaşamıştır. İlk güzel sanatlar akademisi olan Sanayi-i Nefise Mektebi kurulduktan sonra Batı tarzı sanat anlayışı yaygınlaşmış ve Cumhuriyetten sonra Avrupa'ya sanat eğitimine gitmek moda haline gelmiştir. Ancak sanatta milli arayışların da yine aynı kuşakta ortaya çıktığı görülmektedir.

Birinci Dünya Savaşı yıllarında yaptıkları savaş resimlerinde milli duyguların uyanışını tasvir eden Şişli Atölyesi sanatçıları gibi Kurtuluş savaşı yıllarında da bir kısım sanatçılar milli mücadele ruhunu sanat eserlerinde yansıtmaya çalışırlar.

Başlangıçta Türk sanatçıları Avrupa sanat akımlarına ve sanatçılarına öykünürken bilhassa 1930'lu yıllarda "D Grubu" sanatçıları Zeki Faik İzer, Nurullah Berk, Elif Naci, Cemal Tollu, Abidin Dino ve Zühtü Müridoğlu, Anadolu ve Türk motiflerine yönelmişler ve sanatta milli kimlik arayışları ciddi olarak başlamıştır.

1940'lı yıllarda ortaya çıkan "Yeniler Grubu" Nuri İyem, Avni Arbaş, Selim Turan, Nejad Devrim, Turgut Atalay, Ferruh Başağa ve Abidin Dino gibi ressamlar da Anadolu köylü yaşamı konuları ile toplumcu gerçekçi resimler üretmeye başlar. Türk sanatına hem eserleri hem de eğitimci kimliği ile çok katkıları olan Bedri Rahmi Eyüboğlu'nun çalışmalarında Anadolu Türk kültürüne ait imgeler çoklukla görülür.

20. Yüzyılın sonuna doğru artan milliyetçilik ve muhafazakârlık siyasal üstünlüğün de etkisi ile fikir ve sanat dünyasında da milli değerlerin gelişmesinde etkili olur. Günümüzde hemen hemen her ilde kurulan üniversitelerin çoğunda Geleneksel Türk Sanatlarına ait bölümler açılır. Belediyeler ve Halk Eğitim Merkezlerinde Geleneksel Sanatlar Kursları düzenlenir. Sanatçıların eserlerinde Geleneksel Türk Sanatlarına ait imgeler açıkça görülmeye başlar.

Bu çalışmanın amacı Günümüz Türk sanatında milli kimlik arayışlarının tanımlanması ve örnekler üzerinden Türk kültürüne ait imgelerin yakından incelenmesidir.

Yöntem olarak Osmanlı Dönemi, Cumhuriyet dönemi ve günümüz sanatçılarından örnek eserler üzerinde yer alan Türk sanatına ait milli değerleri sembolize eden imgeler incelenecektir. Gösterge olarak ta tanımlanan imgeler, işaretler, semboller ve ikonik figürler düz anlam, yan anlam ve derin anlam çağrışımlarıyla çözümlenecektir.

Anahtar Kelimeler: Geleneksel Türk Sanatları, Milli Kimlik, Türk Motifleri, Türk Sanatı.



ABSTRACT

During the westernization process that began after the Tanzimat period, there were serious changes in Turkish art. Like intellectuals going to Europe, artists experienced serious identity problems. After the establishment of the first fine arts academy, Sanayi-i Nefise Mektebi, the Western understanding of art became widespread and after the Republic it was fashionable to go to Europe for art education. However, it is seen that the national quests in art also emerged in the same generation.

During the War of Independence, some artists tried to reflect the spirit of national struggle in their artworks, as did the Şişli Atelier artists, who depicted the awakening of national emotions in the war paintings they made during the First World War.

While Turkish artists initially emulated European art movements and artists, especially in the 1930s, the Grubu Group D "artists Zeki Faik Izer, Nurullah Berk, Elif Naci, Cemal Tollu, Abidin Dino and Zühtü Müridoğlu turned to Anatolian and Turkish motifs, and their search for national identity was serious. It began.

Painters such as Nuri İyem, Avni Arbaş, Selim Turan, Nejad Devrim, Turgut Atalay, Ferruh Başağa and Abidin Dino, who emerged in the 1940s, started to produce realistic socialist paintings with the subjects of Anatolian peasant life. Bedri Rahmi Eyüboğlu, who contributed a lot to Turkish art with both his works and his educator identity, can often see images of Anatolian Turkish culture.

Increasing nationalism and conservatism towards the end of the 20th century have an impact on the development of national values in the world of ideas and art with the effect of political superiority. Today, in most of the universities established in almost every province, departments of Traditional Turkish Arts are opened. Traditional Arts Courses are organized in Municipalities and Public Education Centers. In the works of the artists, images of Traditional Turkish Arts begin to be seen clearly.

The aim of this study is to define the search for national identity in contemporary Turkish art and to examine closely the images of Turkish culture through examples.

As a method, the images symbolizing the national values of Turkish art on the sample works from the Ottoman period, the Republic period and today's artists will be examined. Images, signs, symbols and iconic figures defined as signs will be analyzed with literal meaning, connotation and deep meaning connotations.

Keywords: National Identity, Turkish Art, Turkish Motifs, Traditional Turkish Arts.



HİPOGAMMAGLOBULİNEMİ VE SARS-COV-2: BİR OLGU SUNUMU

HYPOGAMMAGLOBULINEMIA AND SARS-COV-2: A CASE REPORT

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ÖZET

Giriş: SARS-CoV-2 hastalığı influenza benzeri hafif semptomlardan yoğun bakıma yatışı gerektiren akut solunum sıkıntısı sendromu (Acute Respiratory Distress Syndrome-ARDS) ve çoklu organ yetmezliği sendromu (Multipl Organ Dysfunction Syndrome-MODS) gibi ağır tablolara kadar geniş bir klinik kapsama sahiptir. SARS-CoV-2 enfeksiyonu komorbiditesi olan hastalarda ağır seyretmekte ancak, bağışıklığı yetersiz olanların ciddi şekilde hastalanma riski daha yüksektir. Bu bildiri, hipogammaglobulinemi öyküsü olan 19 yaşında bir erkek hastayı sunuyoruz.

Vaka Sunumu: 10 gündür devam eden ateş, öksürük ve nefes darlığı semptomları ile gelen hastanın RT-PCR testi + ve akciğer tomografisinde belirlenen atipik pnömonik infiltrasyonlar SARS-CoV-2 enfeksiyonu lehine yorumlandı. Tıbbi özgeçmişinde kronik otitis media, üst solunum yolu enfeksiyonu, bronşit, toplum kökenli pnömoni atakları, menenjit ve iştah azlığı (menenjit sekeli) var. 2009 yılından beri hipogammaglobulinemi nedeniyle 28 günde bir 0.4 g/kg intravenöz immünglobulin (İVİG) kullanmakta. Laboratuvar incelemesinde lenfosit, hemoglobin, IgG, IgM ve IgA düşüktü. SGOT, SGPT, CK, LDH, ferritin, D-Dimer, fibrinojen, eritrosit sedimentasyon hızı (erythrocyte sedimentation rate-ESR) ve CRP yüksekti (Tablo 1). Yoğun bakım takibi gerektiren hasta HFNC ile O₂ tedavisi, favipiravir 2x600 mg p.o., enoksaparin 1x0.4 ml s.c., pantoprazol 3x40 mg, meropenem 3x1 gr, levofloksasin 1x500 mg i.v., tazobaktam 4x4.5 gr ve 20 gr Human Immünglobulin (yatışının 4. ve 12. günleri) tedavileri aldı. 28. gün antibiyotik (AB) ve evde O₂ desteği önerileri ile taburcu edildi.

Tartışma ve Sonuç: B hücre fonksiyonu yetersizliğine rağmen hipogammaglobulinemili hastalar SARS-CoV-2 enfeksiyonundan iyileşebilir. Bununla birlikte sekonder bakteriyel enfeksiyonlar dikkate alınmalı, İVİG ve AB tedavide düşünülmelidir. Bu vaka, şiddetli immünoglobulin eksikliği olan bir hastanın klinik seyrini tanımlayarak eşzamanlı hipogammaglobulinemi ve SARS-CoV-2 enfeksiyonu olan hastalar için klinik yaklaşımlara rehberlik edebilir.

Anahtar Kelimeler: SARS-CoV-2, Hipogammaglobulinemi, İmmün yetmezlik, Covid-19

ABSTRACT

Introduction: SARS-CoV-2 disease has a wide clinical scope from mild symptoms similar to influenza to severe conditions such as acute respiratory distress syndrome (ARDS) and multiple organ failure syndrome (MODS) that require admission to intensive care. SARS-CoV-2 infection is severe in patients with comorbidities, but those who are immunocompromised have



a higher risk of getting seriously ill. In this report, we present a 19-year-old male patient with a history of hypogammaglobulinemia.

Case Presentation: The patient presented with symptoms of fever, cough and shortness of breath for 10 days, and the atypical pneumonic infiltrations detected in lung tomography were interpreted in favor of SARS-CoV-2 infection. SARS-CoV-2 infection was confirmed by detection of viral RNA from the nasopharyngeal swab sample by RT-PCR test. His medical history includes chronic otitis media, upper respiratory tract infection, bronchitis, community-acquired pneumonia attacks, meningitis and hearing loss (meningitis sequela). Since 2009, he has been using 0.4 g/kg intravenous immunoglobulin (IVIG) every 28 days due to hypogammaglobulinemia. In the laboratory analysis, lymphocytes, hemoglobin, IgG, IgM and IgA were low. SGOT, SGPT, CK, LDH, ferritin, D-Dimer, fibrinogen, erythrocyte sedimentation rate (ESR) and CRP were high (Table 1). The patient, who required intensive care follow-up, received favipiravir 2x600 mg po, enoxaparin 1x0.4 ml sc, pantoprazole 3x40 mg, meropenem 3x1 g, levofloxacin 1x500 mg iv, tazobactam 4x4.5 gr and 20 gr Human Immunoglobulin (4th and 12th days of admission) treatments and O₂ treatment with HFNC. He was discharged on the 28th day with O₂ supplementation and antibiotic (AB) recommendations.

Discussion and Conclusion: Despite B cell dysfunction, patients with hypogammaglobulinemia can recover from SARS-CoV-2 infection. However, secondary bacterial infections should be taken into consideration and IVIG and AB should be considered in treatment. This case may describe the clinical course of a patient with severe immunoglobulin deficiency and guide clinical approaches for patients with concurrent hypogammaglobulinemia and SARS-CoV-2 infection.

Key Words: SARS-CoV-2, Hypogammaglobulinemia, Immunodeficiency, Covid-19



**PACEMAKER UYGULANAN HASTALARDA NADİR GÖRÜNEN
KOMPLİKASYON PNÖMOTORAKS:TEK MERKEZ DENEYİMİ**

A RARE COMPLICATION PNEUMOTORAX: SINGLE CENTER EXPERIENCE IN
PATIENTS WITH PACEMAKER APPLIED

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Amaç: Pacemaker(Kalp pili) kalbin ritmini oluşturan ve düzenleyen elektronik aletlerdir. İşlem genelde lokal anestezi ile, göğüste kalbe giden büyük toplar damarların içinden elektrod denilen ince tellerin kalbin kulakçık ya da karıncıklarından birine veya her ikisine yerleştirilmesi ve bunların göğüs cildi altına yerleştirilen bir jeneratöre bağlanması şeklinde yapılır. Bu, genelde 30-60 dakika süren bir işlemdir. Kalıcı kalp pili uygulaması küçük ölçekli bir cerrahi işlemdir. Dolayısıyla uygulamada bazı komplikasyon dediğimiz istenmeyen durumlar ortaya çıkabilir. Ancak bu işlemlerde komplikasyon riski oldukça düşüktür ve çoğu kez hayati önem taşımaz. Pnömotoraks(pnx), hemotoraks ve ritm bozukluğu gibi komplikasyonlarda oluşabilir. Bu çalışmamızda pacemaker işlemi sırasında hastalarda oluşan pnömotoraks sıklığını araştırmayı amaçladık.

Method: Çalışma retrospektif veri analiz yöntemiyle yapıldı. Çalışmada Kahramanmaraş Sütçü İmam Üniversitesi Kardiyoloji Anabilim Dalı Anjiyografi servisinde 01.01.2018 tarihi ile 01.01.2021 tarihleri arasında 425 pacemaker takılan hastalar üzerinde yapıldı. Veri kayıtları retrospektif olarak incelendi.

Bulgular: Kahramanmaraş Sütçü İmam Üniversitesi Kardiyoloji Anabilim Dalı Anjiyografi servisinde 01.01.2018 tarihi ile 01.01.2021 tarihleri arasında 425 hastaya pacemaker takılmıştır. 11 hastada iyatrojenik pnömotoraks oluşmuştur. Bu hastalara işlem esnasında oluşan pnx nedeniyle tüp torakostomi uygulanmıştır. Pacemaker işlemi uygulanan bu hastalarda pnömotoraks görülme sıklığı %0.25 dır.

Sonuç: Pacemaker takılması sırasında ve sonrasında komplikasyon riski düşük olmakla birlikte işlem sırasında serbest hava aspire edilmesi ve oksijen saturasyonları düşmesi durumunda akciğer flmi çekilerek Pacemaker uygulanan bu hastalarda pnx oluşabileceği unutulmamalı ve bu hastalar pnx açısından yakından takip edilmelidir.

Anahtar Kelimeler: pacemaker,pnömotoraks,komplikasyon

Pacemakers are electronic devices that create and regulate the rhythm of the heart. The procedure is usually performed under local anesthesia, by placing thin wires called electrodes through the large veins in the chest to one or both of the auricles or ventricles of the heart and connecting them to a generator placed under the breast skin. This is a process that usually takes 30-60 minutes. Permanent pacemaker implantation is a small-scale surgical procedure. Therefore, some undesirable situations, which we call complications, may occur in practice.



However, the risk of complications in these procedures is very low and often not vital. Complications such as pneumothorax, hemothorax and rhythm disturbance may occur. In this study, we aimed to investigate the frequency of pneumothorax occurring in patients during the pacemaker procedure.

Method: The study was conducted with a retrospective data analysis method. In the study, 425 pacemakers were applied on patients between 01.01.2018 and 01.01.2021 in the angiography service of the Department of Cardiology, Kahramanmaraş Sütçü İmam University. Data records were analyzed retrospectively.

Results: Pacemakers were placed in 425 patients between 01.01.2018 and 01.01.2021 in the angiography service of the Department of Cardiology, Kahramanmaraş Sütçü İmam University. Iatrogenic pneumothorax occurred in 11 patients. Tube thoracostomy was applied to these patients due to the pnx that occurred during the procedure. The incidence of pneumothorax is 0.25% in these patients who are paced.

Conclusion: Although the risk of complications is low during and after pacemaker insertion, it should not be forgotten that if free air is aspirated and oxygen saturation decreases during the procedure, pnx may occur in these patients who undergo pacemaker by pulling lung flmi and these patients should be followed closely in terms of pnx.

Keywords: pacemaker, pneumothorax, complication



İSLAM TEOLOJİSİNDE İNSAN ÖZGÜRLÜĞÜ BAĞLAMINDA HİDÂYET VE DALÂLETİN TEOLOJİK TEMELLERİ**THEOLOGICAL FUNDAMENTALS OF GUIDANCE AND HERESY IN THE CONTEXT OF HUMAN FREEDOM IN ISLAMIC THEOLOGY****Doç. Dr. Recep ÖNAL**

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ÖZET

İslam düşünce tarihinde hidâyet ve dalâlet meselesi kalam literatüründe kulların fiilleri ile “kaza, kader, özgür irade” gibi başlıklar altında ele alınmıştır. İslâm âlimleri hidâyet ve dalâlet’in ilâhî kaynaklı olduğunu temel bir prensip olarak kabul etmekle birlikte söz konusu iki kavramın tanımı ve mahiyeti konusunda farklı görüşler benimsemişlerdir. Bunun temel sebeplerinden biri konuyla ilgili ilk bakışta çelişkili gibi görünen farklı ayetlerin yer almasıdır. Sözgelimi bazı ayetlerde “Allah dilediğini hidayete erdirir, dilediğini saptırır” (İbrahim 14/4); “Allah kimi saptırır ise artık onun için bir yol gösteren yoktur” (Araf 7/186); “...Şüphesiz Allah, saptıracağı kimseyi hidayete erdirmez...” (Nahl 16/37) buyurularak hidâyet ve dalâlet’in Allah’ın elinde olduğu, bu konuda insanın bir katkısının olmadığı bildirilirken; diğer bazı ayetlerde ise “Sana gelen kötülük kendindedir...” (Nisâ 4/79); “Kim doğru yolu bulmuşsa, ancak kendisi için bulmuştur; kim de sapmışsa kendi aleyhine sapmıştır.” (İsrâ 17/15); “O (Kur’an), herkes için, sizden doğru yolda gitmek isteyenler için bir öğüttür.” (Tekvîr 81/27-28) buyurularak hidâyet ve dalâleti seçmenin insan elinde olduğu ifade edilmektedir. Bu konuda iki farklı ayet grubunun yer alması doğal olarak farklı görüşlerin ileri sürülmesine neden olmuştur. Bu çalışmada bu teorik zemin esas alınarak Ehl-i Sünnet, Mu‘tezile ve Şîa gibi kalam ekollerinin konuya dair temel yaklaşımları kıyaslamalı bir metod kullanılarak tespit edilmeye çalışılmıştır.

Anahtar Kelimeler: Kader, İrade, Hidâyet, Dalâlet, Ehl-i Sünnet, Mu‘tezile**ABSTRACT**

In the history of Islamic thought, the issue of guidance (hidâyet) and heresy has been dealt with under the titles of “qada, fate, free will” in the literature of kalam. Although Islamic scholars accept the divine origin of guidance and heresy as a basic principle, they have different views on the definition and nature of the two concepts in question. One of the main reasons for this is that there are different verses on the subject that seem contradictory at first glance. For instance, the verses such as “So Allah leads astray those whom He pleases and guides whom He pleases” (Ibrahim 14/4); “To such as Allah rejects from His guidance, there can be no guide” (The Elevated Place 7/186); “...yet surely Allah does not guide him who leads astray...” (The Bee 16/37) state that guidance and heresy are in the hands of Allah and that humans have nothing to do with this issue. However, some other verses such as “...and whatever misfortune befalls you, it is from yourself...” (Women 4/79); “Whoever goes aright, for his own soul does he go aright; and whoever goes astray, to its detriment only does he go



astray...” (The Israelites 17/15); “It is naught but a reminder for the nations, For him among you who pleases to go straight” (The Covering Up 81/27-28) state that it is up to humans to choose guidance and heresy. The presence of two different verse groups on this subject naturally caused different views to be put forward. In this study, based on this theoretical basis, the basic approaches of kalam schools such as Ahl al-Sunna, Mu‘tazila and Shī‘a on the subject were tried to be determined using a comparative method.

Keywords: fate, free wills, guidance, heresy, Ahl al-Sunna, Mu‘tazila



**SYNTHESIS AND STUDY OF THIOCYANATE DERIVATIVES CONTAINING
DIFFERENT FUNCTIONAL GROUPS AS BIOCIDES TO COOLANT**

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ABSTRACT

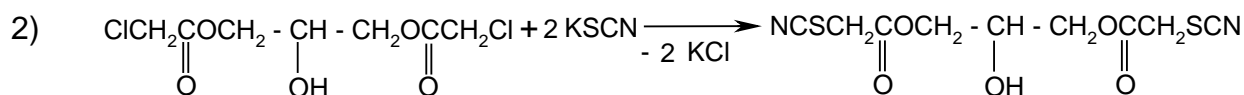
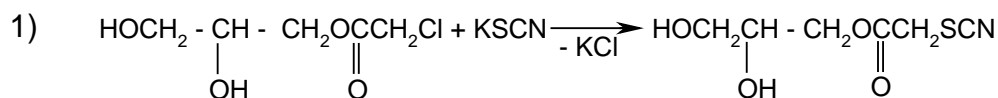
The main reason for the deterioration of the properties of cutting fluids (cutting fluids) used in industry is microbiological damage.

Bacterial and fungal microflora can cause deterioration of protective properties, corrosiveness during storage and transportation of coolant.

The most effective method of protecting cutting fluid from microbiological damage is the use of biocides introduced either into the coolant concentrate or into the composition of the emulsion at the stage of its preparation.

We have synthesized and investigated thiocyanate derivatives containing various functional groups, such as carbonyl C(O) and hydroxyl groups –OH (Scheme 1):





For both reactions, the exothermic temperature in the reaction flask increased from 19⁰C to 29⁰C.

β,γ-dihydroxy-α-thiocyanatoacetoxyp propane is a straw-colored liquid, soluble in water (compound 1).

β-hydroxy-α,γ-dithiocyanatoacetoxyp propane water-insoluble, oil-soluble yellow liquid (compound 2).

The structure of the synthesized compounds was confirmed by IR spectroscopy. An intense absorption band in the region of 3431 cm⁻¹ and 3478 cm⁻¹ corresponded to hydroxyl groups, the carbonyl group corresponded to an absorption band at 1732 cm⁻¹ and 1716 cm⁻¹. Stretching vibrations in the region of 2140 cm⁻¹ belong to the thiocyanic group SCN, the presence of which confirms the receipt of the whole compound.

The antimicrobial properties of the synthesized thiocyanates were determined according to GOST 9085-78 for water-soluble cutting fluid (compound 1) and oil for soluble cutting fluid (compound 2).

Pseudomonas aeruginosa, *Mycobacterium facticolum* were used as bacteria. As fungi: *Aspergillus niger*, *Cladosperium chrysogenum*, *Chaebomium globosum*.

For growing cultures of bacteria, a nutrient medium mesopotamia agar (MPA) was used, and for fungi-wort agar (CA).

The analysis of the conducted studies of antimicrobial properties showed that the obtained thiocyanates have insignificant bactericidal properties, but provide the fungal resistance of the cutting fluid. The most effective fungicidal activity is possessed by β,γ-dihydroxy-α-thiocyanatoacetoxyp propane, which makes it possible to use it as a fungicide.

Keywords: thiocyanate derivatives, antimicrobial properties, bactericidal, fungicidal



**YEREL YULAF GENOTİPLERİNDE SALKIMIN FARKLI KONUMLARINDAKİ
TANELERİN YAĞ VE YAĞ ASİDİ KOMPOZİYONLARI****FAT AND FATTY ACID COMPOSITION OF THE GRAINS AT DIFFERENT PARTS OF
THE PANICLE IN LOCAL OAT GENOTYPES****Dr. Öğretim Üyesi Özge Doğanay ERBAŞ KÖSE,**

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ÖZET

Sağlıklı yaşam tarzının temel bileşenlerinden biri, fonksiyonel yiyeceklerde dahil olmak üzere sağlıklı besinlerdir. Yulafı da (*Avena sativa* L.) içine alan tahıllar, fonksiyonel gıdalar olarak kabul edilmiştir. Çünkü tahıllar tüketicinin sağlığı üzerinde faydalı etki sağlar ve çeşitli hastalık riskini azaltırlar. Yulaf, dünyada önemli miktarlarda çözünebilir diyet lifi, β -glukanlar, yağda çözünen E vitamini ve çoklu doymamış yağ asitleri içeren sağlıklı bir gıda olarak kabul edilmektedir. Bu çalışma, salkımın üst, orta ve alt kısımlarında bulunan yerel yulaf tanelerinin yağ ve yağ asidi içeriklerini araştırmak için yapılmıştır. Türkiye'nin farklı illerinden toplanan 20 yulaf genotipi ve 4 tescilli yulaf çeşidi kullanılan denemeler Yozgat koşullarında iki yıl süre ile yürütülmüştür. Denemeler Faktöriyel düzende Tesadüf Blokları Deneme Desenine göre 3 tekrarlamalı olarak kurulmuştur. Üst, orta ve alt kısımlara ayrılan salkım kısımlarında yağ içeriği, palmitik, stearik, oleik, linoleik ve linolenik asit içerikleri belirlenmiştir. Yıllara, genotiplere ve tanelerin salkımdaki kısmına bağlı olarak tüm incelenen özelliklerde önemli farklılıklar belirlenmiştir. Birleştirilmiş analiz sonuçlarına göre, genotiplerin yağ oranı % 5.58 ile 7.50, palmitik asit içeriği % 17.99 ile 20.47, stearik asit içeriği % 1.675 ile 1.885, oleik asit içeriği % 36.47 ile 43.27, linoleik asit içeriği % 32.26 ile 35.92 ve linolenik asit içeriği % 1.378 ile 1.794 arasında değişmiştir. Salkımın üst kısmındaki tanelerde yağ içeriği, stearik, oleik ve linolenik asit içeriğinin, salkımın alt kısmındaki tanelerde ise palmitik ve linoleik asit içeriğinin daha yüksek olduğu belirlenmiştir.

Anahtar Kelimeler: Yulaf, salkım, Yağ, Yağ asidi**ABSTRACT**

A key component of healthy lifestyle is healthy food including functional food. Grains, including oats (*Avena sativa* L.), have been recognized functional foods. Because provide beneficial effect on the health of the consumer and decrease the risk of various diseases. oat is recognised as a healthy food containing significant amounts of soluble dietetic fibre, β -glucans, fat-soluble vitamin E and polyunsaturated fatty acids in the world. The present study was conducted to investigate fat and fatty acid contents of local oat grains located at top, middle and bottom sections of the panicle. Twenty-oat genotypes collected from different provinces of Turkey and four registered oat varieties used in trials were carried out for two



years in Yozgat conditions. Trials were carried out in according to the factorial arrangement of randomized blocks design with three replications. In the panicle parts divided into top, middle and bottom parts, fat content, palmitic, stearic, oleic, linoleic and linolenic acid contents were determined. Significant differences were determined in investigated traits based on the position of grains within the panicle, years and genotypes. According to the combined of variance analysis results, fat conten, palmitic, stearic, oleic, linoleic and linolenic acid contents of oat genotypes ranged from 5.58 to 7.50%, 17.99 to 20.47%, 1.675 to 1.885%, 36.47 to 43.27%, 32.26 to 35.92% and 1.378 to 1.794%, respectively. It was determined that the fat content, stearic, oleic and linolenic acids was higher in the grains in the top part of the panicle, and the palmitic and linoleic acids were higher in the grains in the bottom part of the panicle.

Keywords: Oat, Panicle, Fat, Fatty Acid



**CLASSIFICATION OF WAVE SEQUENCES FOR COUNTERFLOW COMBUSTION
FRONTS IN REACTION-CONVECTION-DIFFUSION MODEL****Dr. Öğr. Üyesi Fatih ÖZBAĞ**

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ABSTRACT

In few last decades great deal of attention and large efforts has been given into combustion fronts that appear in many real life applications such as heavy oil recovery, burners, smoldering combustion and many others. Combustion is an exothermic reaction between the fuel in the porous media and oxygen contained in the gas flowing through the media. Combustion waves are continuous nontrivial traveling waves. A traveling wave is a solution of a partial differential equation that moves with constant velocity while maintaining its shape. Such traveling waves has been intensely studied in a class of reaction-convection-diffusion systems.

In the present work we consider a reaction-convection-diffusion system that produces combustion waves when air injected into a porous medium which contains some solid fuel. The system consists of three equations that express energy, oxygen, and fuel balance laws. We analyze the more complex case in which the thermal capacity of the gas is much less than thermal capacity of the medium. A consequence is that oxygen is transported faster than the heat. Moreover, combustion wave speed is assumed to be negative which means that the combustion front moves in the opposed direction of the injected gas flow.

This study presents the classification of the wave sequences containing counter-flow combustion waves that appear in the Riemann solution. First we construct all possible wave sequences by giving some important properties. In constructing wave sequences, in addition to combustion waves we need to consider contact waves that separate intervals on which the reaction does not occur. Then a careful numerical analysis is carried out to show the evidence of these sequences. We use Crank-Nicolson finite difference scheme to simulate our system. Some numerical examples are presented to illustrate the wave sequences including counter-flow waves. In some numerical examples we encounter small perturbation in fuel and oxygen concentration because of the initial step adjustment. However, this does not have an effect on the final result.

Keywords: Wave Sequence, Combustion Front, Finite Difference Scheme, Traveling Wave, Porous Media.



COVID-19 TANILI ÇOCUKLARDA AĞRI YÖNETİMİ
PAIN MANAGEMENT IN COVID-19 DIAGNOSED CHILDREN

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ÖZET

Koronavirus (COVID-19) bugüne dek tüm dünyada 67 milyona yakın kişiyi etkilemiş ve 1,54 milyondan fazla kişinin ölümüne neden olmuştur. Şu anda çocukların daha hafif semptomlara sahip olduğu ve yetişkinlere kıyasla hastaneye yatma olasılığının daha düşük olduğu bilinmektedir. Sistematik bir literatür taramasında, çocuk olgular tanı konulan tüm COVID-19 vakalarının yaklaşık %1-5 ini oluşturmuştur. Bu durumun sitokin fırtınasının erişkinlerde daha yoğun olması, çocukların daha az viral yüke maruz kalmaları ve angiotensin dönüştürücü enzim 2 reseptörünün çocuklarda solunum yollarındaki düzeylerinin erişkinden farklı olması nedeniyle meydana gelebileceği düşünülmektedir. Çocuklarda görülen klinik semptomlar arasında en sık ateş ve öksürük semptomu görüldüğü bildirilmiş ancak ağrı ile ilgili oldukça sınırlı kaynak bulunmaktadır. Ağrı, çocukların günlük yaşam aktivitelerini oldukça olumsuz etkilemektedir. Bu nedenle Covid 19 tanılı çocuklarda çocuklarda ağrı yönetimi-önemlidir.

Literatürdeki Covid 19 tanılı pediatrik olgu çalışmalarında, çocuklarda en sık boğaz ağrısı, karın ağrısı, baş ağrısı, semptomları görüldüğü tespit edilmiştir. Ancak pediatrik popülasyon içerisinde genellikle daha büyük yaş grubu çocukların ağrılarının değerlendirildiği, yenidoğan dönemindeki vakalarda ağrı semptomuna ait yeterli bilgi verilmediği göze çarpmaktadır. Oysaki Covid-19 ile enfekte olmuş yenidoğanlar tüm dünyada tespit edilmiştir. Covid-19 enfeksiyonunda çocuklarda ve yenidoğanlarda ağrı bulgularının ve yönetiminin açıkça karakterize edilmesi gerekmektedir. Bu nedenle, hemşirelerin Covid -19 tanılı tüm yaş grubundaki çocukların ağrı yönetimindeki rolü önemlidir. Çocuk hemşirelerinin ağrısı olan çocuğun ağrısını değerlendirmesi ve bakımını yapabilmesi için yeterli bilgi, beceriye sahip olması gerekir. Ağrının değerlendirmesinde standart bir ölçüm aracı kullanılmalıdır. Ağrı yönetiminde güncel kanıtlar doğrultusunda önerilen farmakolojik yöntemler ile birlikte uygun nanfarmakolojik yöntemlerde kullanılabilir.

Anahtar kelimeler: COVID-19; ağrı; çocuk; yenidoğan; hemşire



ABSTRACT

Coronavirus (COVID-19) has so far affected nearly 67 million people worldwide and caused the deaths of more than 1.54 million people. Children are now known to have milder symptoms and are less likely to be hospitalized than adults. In a systematic literature review, pediatric cases accounted for approximately 1-5% of all diagnosed COVID-19 cases. It is thought that this situation may occur because the cytokine storm is more intense in adults, children are exposed to less viral load, and the levels of angiotensin converting enzyme 2 receptor in the respiratory tract in children are different from those in adults. Among the clinical symptoms seen in children, the most common symptoms of fever and cough have been reported, but there are very limited resources regarding pain. Pain affects children's daily activities negatively. Therefore, pain management is important in children with a diagnosis of Covid 19.

In the pediatric case studies with a diagnosis of Covid 19 in the literature, it was found that the most common symptoms in children were sore throat, abdominal pain, headache. However, in the pediatric population, it is observed that the pain of older children is generally evaluated, and in cases in the neonatal period, not enough information is given about the pain symptom. However, newborns infected with Covid-19 have been detected all over the world. The symptoms and management of pain in children and newborns in Covid-19 infection should be clearly characterized. Therefore, nurses' role in pain management of children of all age groups diagnosed with Covid-19 is important. Pediatric nurses should have sufficient knowledge and skills to assess and care for the pain of a child with pain. A standard measuring tool should be used in the assessment of pain. In pain management, it can be used in appropriate non-pharmacological methods together with the recommended pharmacological methods in line with current evidence.

Keywords: COVID-19; pain; child; newborn; nurse



**KUMARIN-FENİLALANİN KONJUGATININ MANYETİK Fe₃O₄
NANOPARTİKÜLÜNE BAĞLANMASI: TERMAL, ANTİMİKROBİYAL VE
DİELEKTRİK ÖZELLİKLERİNİN İNCELENMESİ**
MAGNETIC Fe₃O₄ NANOPARTICLES WITH COUMARIN-PHENYLALANINE:
THERMAL, ANTIMICROBIAL AND DIELECTRICAL ANALYSIS

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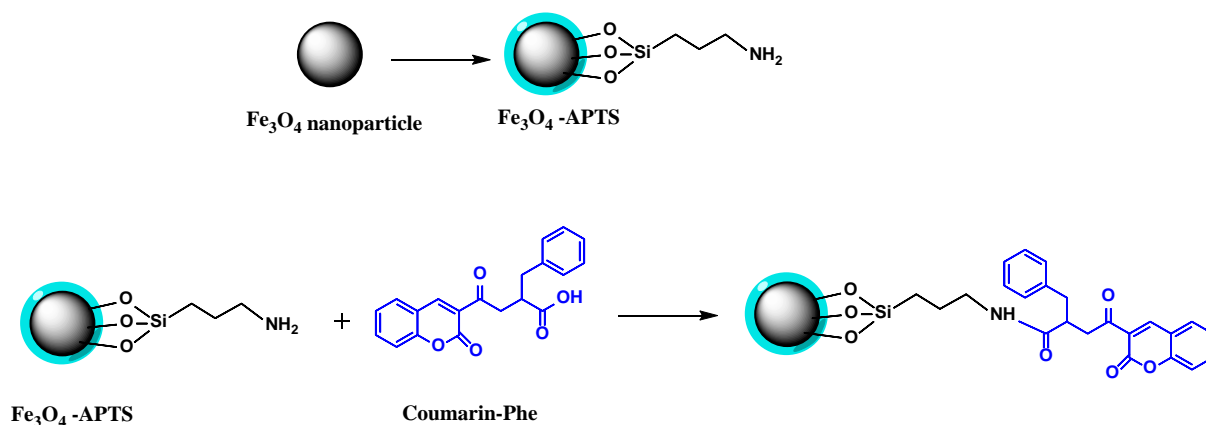
ÖZET

Kumarinler çeşitli bitkisel kaynaklardan izole edilen yaygın kullanımlı bir bileşik sınıftır. Doğal ve sentetik kumarin türevlerinin dikkate değer farmakolojik ve biyomedikal özellikleri vardır. Antikanser, antioksidan, antimikrobiyal, antikoagülan ve anti-inflamatör özellikleri bunlardan bazılarıdır. Manyetik nanopartiküller özellikle demir oksitler çeşitli biyomedikal alanlarda, sahip oldukları fiziksel ve kimyasal özellikleri ile önemli bir potansiyele sahiptir. Bu malzemeler hedef ilaç salınımı, manyetik hipertermi, manyetik rezonans (MR) görüntüleme ve biyolojik materyallerin manyetik ayrımı gibi alanlarda etkin olarak rol almaktadır.

Bu çalışmada ilk olarak karboksilik asit içeren kumarin bileşiği ve fenilalanin amino asiti arasında benzotriazol yöntemi kullanılarak yeni kumarin-amino asit hibrit bileşiği elde edildi. Daha sonra Manyetik Fe₃O₄ nanopartikülleri hazırlandı ve 3-amino propil trimetoksisilan (APTS) bileşiği ile modifiye edildi. Son olarak hazırlanan hibrit bileşiği amit bağı ile nanopartikülün yüzeyine bağlandı.

Elde edilen son ürünün karakterizasyonu FT-IR, SEM ve termal analiz metodları kullanılarak gerçekleştirildi. Nanopartikülün manyetik özelliğindeki değişimi incelemek amacıyla VSM analizi kullanıldı. Kumarin-Fenilalanin bağlı nanopartikülün antimikrobiyal özellikleri agar disk difüzyon yöntemi kullanılarak Escherichia Coli bakterisine karşı incelendi. Dielektrik özellikleri oda sıcaklığında frekansın bir fonksiyonu olarak incelendi. Artan frekansla birlikte dielektrik sabiti ve dielektrik kaybının azaldığı ve yüksek frekanslarda sabit kaldığı görülmüştür.





Anahtar Kelimeler: Manyetik nanopartikül, antimikrobiyal, aminoasit, termal özellik

ABSTRACT

Coumarins are a class of compounds with a variety of pharmacological and biomedical properties that are naturally isolated from a variety of plant sources and can be derivatized synthetically. These are, for example, anticancer, antioxidant, antimicrobial, anticoagulant and anti-inflammatory effects. Magnetic nanoparticles, especially iron oxides are used in various biomedical fields due to their physical and chemical properties. Such materials are effectively used in fields such as target drug release, magnetic hyperthermia, magnetic resonance (MR) imaging and magnetic separation of biological materials.

In this study, the intermediate product of *N*-acyl benzotriazole was obtained by activating coumarin-3-carboxylic acid compound with benzotriazole. In the next step, coumarin-phenylalanine conjugate was synthesized as a result of the reaction of the intermediate product with free phenylalanine in the presence of triethylamine. Magnetic Fe_3O_4 nanoparticles were then prepared and modified with 3-amino propyl trimethoxysilane (APTS). Finally, coumarin-phenylalanine conjugate was introduced to the surface of the nanoparticle by forming amide bond via triazine method.

The characterization of the target product carried out via FT-IR, SEM and thermal analysis. The change in magnetic properties of the nanoparticle was examined via VSM analysis. Dielectric properties were investigated as a function of frequency at room temperature. The results show that dielectric constant and dielectric loss decrease with increasing frequency and remain constant at high frequencies. Antimicrobial properties of coumarin-phenylalanine bonded nanoparticles were carried out by using agar disk diffusion method against *Escherichia Coli*.

Keywords: Magnetic nanoparticle, antimicrobial, amino acid, thermal property



**PERİFERİK ARTER HASTALIĞI TANISINDA KULLANILAN HAREKETLİ MASA
TEKNİKLİ KONTRASTLI MANYETİK REZONANS ANJİYOĞRAFİDE
İNSİDENTAL RENAL ARTER DARLIKLARININ TESPİTİ**

DETERMINATION OF INSIDENTAL RENAL ARTERY STENOSIS WITH MOVING
BED CONTRAST ENHANCED MAGNETIC RESONANCE ANGIOGRAPHY USED IN
THE DIAGNOSIS OF PERIPHERAL ARTERY DISEASE

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ÖZET

Giriş ve Amaç: Periferik arter hastalığı (PAH) kranial, karotid, üst ekstremité, viseral ve renal dolaşımı da kapsar ancak pratikte sadece alt ekstremité dolaşımı için kullanılır. Bu çalışmanın amacı; PAH tanısında kullanılan kontrastlı alt ekstremité periferik manyetik rezonans anjiyografi (MRA) tetkikinin insidental olarak renal arter darlığı tespitindeki duyarlılığı, özgülüğü ve tanısal doğruluğunu araştırmaktır.

Yöntem: 2 yıllık zaman periyodunda periferik arter hastalığı ön tanısı ile bölümümüze başvuran ve hareketli masa tekniği ile kontrast sonrası Flash 3D T1 ağırlıklı MRA ve sonrasında 30 (ortalama 17±6) gün içerisinde aortofemoropoplíteal dijital subtraksiyon anjiyografi (DSA) uygulanan 43 hasta dahil edildi. Her iki tetkikte de renal arterler incelemeye dahil edilmiştir. DSA altın standart kabul edilerek periferik MRA'nın insidental olarak renal arter darlığı tanısındaki duyarlılığı, özgülüğü ve tanısal doğruluğu saptanmıştır. Ayrıca hastaların özgeçmişleri sorgulanarak diyabet, hipertansiyon, hiperlipidemi (HL), hastada ve ailesinde koroner arter hastalığı (KAH), serebrovasküler olay (SVO), kronik böbrek hastalığı (KBY) varlığı, sigara ve/veya alkol kullanımı, kadınlarda menopoza, vücut kitle indeksi (BMİ) araştırıldı. MRA ve DSA görüntüleri iki ayrı radyolog tarafından çift kör olarak değerlendirildi.

Bulgular: Hastaların (11 K, 32 E) yaşları 47 ila 87 arasında (ortalama 64.0) değişmekteydi. Tüm kadın hastalar postmenopozal dönemdedi. Hastaların BMİ değerleri 18-44 kg/m² (ortalama 26.6 ± 5) arasında değişmekteydi. 11 (%25) hastada BMİ değeri obezite sınırını geçiyordu (>30 kg/m²). 21(%48.8) hastada diyabet, 33 (%76.7) hastada hipertansiyon, 26 (%60.5) hastada hiperlipidemi, 28 (%65.1) hastada kendisinde koroner arter hastalığı, 10 (%23.3) hastada ailede koroner arter hastalığı, 2 (%4.7) hastada geçirilmiş SVO, 11 (%25.6) hastada KBY, 30 (%69.8) hastada sigara kullanımı öyküsü mevcuttu. Periferik MRA, %70 ve



üzeri renal arter darlıklarında %77 duyarlı, %100 özgül; tam oklüzyon tanısında ise %75 duyarlı; %100 özgül bulunmuştur. Tanısal doğruluk oranı her ikisinde de %85 bulunmuştur.

Tartışma ve Sonuç: Periferik arter hastalığı tanı ve takibinde kullanılan kontrastlı 3D MRA tetkikinde, alt ekstremite arterlerine ek olarak renal arterler de darlık yönünden güvenle değerlendirilebilir.

Anahtar Kelimeler: DSA, MRA, renal arter, darlık, PAH

ABSTRACT

Background and Aim: Peripheral artery disease (PAD) includes cranial, carotid, upper extremity, visceral and renal circulation, but is practically used only for lower extremity circulation. The aim of this study is to investigate the sensitivity, specificity and diagnostic accuracy of the contrast-enhanced lower extremity peripheral magnetic resonance angiography (MRA) examination used in the diagnosis of PAD in the detection of renal artery stenosis incidentally.

Methods: 43 patients who were admitted to our department with a pre-diagnosis of peripheral artery disease during a 2-year period and underwent Flash 3D T1-weighted MRA after contrast with moving table technique and then aortofemoropopliteal digital subtraction angiography (DSA) within 30 (mean 17 ± 6) days were included. Renal arteries were included in both examinations. DSA was accepted as the gold standard, and the sensitivity, specificity and diagnostic accuracy of peripheral MRA in the diagnosis of renal artery stenosis incidentally were determined. In addition, the history of the patients was questioned and the presence of diabetes, hypertension, hyperlipidemia (HL), coronary artery disease (CAD), cerebrovascular disease (CVD), chronic kidney disease (CRF) in the patient and family, smoking and/or alcohol use, menopause in women, body mass index (BMI) was investigated. MRA and DSA images were evaluated double blind by two separate radiologists.

Results: The ages of the patients (11F, 32M) ranged from 47 to 87 years (mean 64). All female patients were in the postmenopausal period. The BMI values of the patients varied between 18-44 kg/m² (mean 26.6 ± 5). In 11 (25%) patients, BMI was above the obesity limit (>30 kg/m²). Diabetes in 21 (48.8%), hypertension in 33 (76.7%), hyperlipidemia in 26 (60.5%), history of coronary artery disease in 28 (65.1%), family history of coronary artery disease in 10 (23.3%), previous history of SVD in 2 (4.7%), CRF in 11 (25.6%), history of smoking in 30 (69.8%) patients were detected. Peripheral MRA was found 77% sensitive, 100% specific in 70% and above renal artery stenosis. It was found 75% sensitive and 100% specific in the diagnosis of complete occlusion. The diagnostic accuracy rate was 85% for both.

Discussion and Conclusion: Contrast enhanced 3D MRA, which is used in the diagnosis and follow-up of peripheral artery disease, can be safely used in the detection of renal artery stenosis in addition to lower extremity arteries.

Keywords: DSA, MRA, renal artery, stenosis, PAD



**TÜRKİYE’DE EKİP KAYNAK YÖNETİMİ EĞİTİMLERİNİN
UÇUŞ EMNİYETİNE KATKISININ BELİRLENMESİ**
DETERMINING THE CONTRIBUTION OF CRM TRAININGS
ON FLIGHT SAFETY IN TURKEY

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ÖZET

Küresel ekonomik sistemin gereklerine ve teknolojik yeniliklerin sonuçlarına bağlı olarak hava taşımacılığının gelişmesi, hava taşımacılığına talebin artmasına neden olmaktadır. Hava trafiğinin yoğunlaştığı ve operasyonel baskının arttığı ortamda giderek daha karmaşık teknolojileri kullanan pilotların ya da iletişim içinde oldukları diğer oyuncuların yapabilecekleri olası hataları önlemek üzere emniyet düşüncesi de sürekli gelişmektedir. 1960’lardan itibaren davranış bilimlerindeki gelişmelerin havacılık alanına da katkı vermesiyle, insan faktörünün öne çıkarıldığını görüyoruz. Nitekim Ekip Kaynak Yönetimi (EKY) konseptinin temelleri o yıllarda atılmıştır. EKY’nin pilotların teknik ve teknik olmayan yetenekleri temelinde düşünüldüğü ve yazının da insan faktörünün fiziksel, bilişsel ve psikolojik sınırlılıklarının neden olduğu hataların önlenmesi üzerine geliştiği, gerçek dünyada da yeni birçok hata modelin kullanıldığı görülmektedir. 1990’lardan itibaren kazaların nedenlerini incelerken kazaların ardındaki örgütsel aksaklıklara odaklanılmaya başlanmıştır. Kazaların ve insan hatasının asla sifira inemeyeceğinin bilindiği, buna karşılık insan hatalarını önlemekte sürekli ve bütüncül çabaların benimsendiği bir yaklaşımda emniyet performansının öne çıktığını görmekteyiz: Yeni nesil emniyet yaklaşımı. ICAO’nun da mevzuatı yeni nesil emniyet yaklaşımına göre güncellediğini, sistematik bir anlayışta örgütsel aksaklıkların giderilmesinde havacılık örgütü seviyesinde, ulusal havacılık seviyesinde ve uluslararası havacılık seviyesinde olmak üzere ayrı seviyelerde ve bütüncül çalışmalarla yürütülmesini zorunlu kıldığını gözlemlemekteyiz. Mevcut koşullarda EKY’nin benimsenmesi ve sürekli daha etkin şekilde başarılması için pilotlara ve kabin görevlilerine yeni nesil emniyet yaklaşımını benimseyen kurs içerikleri ile eğitimler verilmektedir. Süregelen eğitimlerde katılımcıların birey ya da bir takımın oyuncusu olarak sergilediği iş performansına etki eden faktörlerin daha iyi anlaşılmasıyla, uçuşta sadece teknik yeteneklerin değil, teknik olmayan becerilerin de önemli olduğu ve bu becerileri sergileyebilecekleri iletişimin koşullarının neler olması gerektiği ortaya çıkmıştır. Bu çalışma, ülkemizde verilen EKY eğitimlerinin uçuş emniyetine katkısında sorunları belirleyip, bu sorunları giderecek önerileri ortaya koymayı amaçlamıştır. Pilotlar ve kabin görevlilerinden seçilen 41 katılımcıdan anket yöntemiyle veri toplanıp aldıkları EKY eğitimlerin amacına ulaşmasında



tanımlanabilir aksaklıkların neler olduğu ve geliştirilmesi gereken hangi hususların bulunduğu veri setinin analizi sonucunda ortaya çıkarılmıştır. Takiben, üniversitelerde ve havayolu işletmelerinde EKY eğitimcisi olan 6 katılımcıdan yarı-yapılandırılmış mülakat tekniğiyle veri toplanarak içerik analizi yapılmıştır. Böylece mevcut sorunların azaltılması ve eğitimlerin amacına ulaştırılması ve sürekli geliştirilebilmesi için gereklilikler ortaya çıkarılmıştır. Takiben EKY eğitimcilik ve yöneticilik deneyimi bulunan 4 katılımcı ile odak grubu çalışması yapılmış, eğitimlerin geliştirilebilmesi hakkında araştırma sonucunda ortaya çıkarılan önerilerin havayolu işletmelerinde nasıl karşılık bulabileceği değerlendirilerek araştırmada ortaya çıkarılan öneriler uygulanabilir ve somut önerilere dönüştürülmüştür. Araştırma neticesinde elde edilen bulgular, sorunları giderecek farklı yöntemlerin eğitimciler ve eğitim yöneticileri tarafından uygulandığını fakat sorunların ancak azaltılabildiğini, tamamen ortadan kaldırılamadığını göstermektedir. Araştırma neticesinde toplanarak analiz edilen veriler, mevcut uygulamalara alternatif olabilecek önerileri bir bütün haline sunmayı olanaklı hale getirmiştir. Böylece eğitimlerin aksayan yönleri belirlenmiş, daha etkin bir geri besleme sistemine olan ihtiyaç tanımlanmış, yeni eğitim tekniklerine ve materyallerine olan ihtiyaç ortaya çıkarılmış ve EKY eğitimlerinde uygulanabilir yeni öğretim teknikleri ve sahip olunması gereken iletişim koşulları bir model olarak önerilebilmiştir.

Anahtar Kelimeler: Havacılıkta İnsan Faktörü Bilimi, Uçuş Emniyeti, Ekip Kaynak Yönetimi, Uçuş Eğitimi, Pilotaj Yetenekleri, Pilot Eğitimi

ABSTRACT

The vast, ongoing developments both in global economy and technology have been fueling a great catalyst in the spiking demand for air transportation. Meanwhile, safety concept yet continues to evolve in order to prevent any possible human error by pilots and by those whom pilots cooperate while heavier air traffic is faced and more complex technology is applied. As the progress and contribution to aviation of behavioral sciences is noted, the human factor observably has been put forward since 1960s. Therefore, resulting in the formation of Crew Resource Management (CRM). For the time being, CRM is considered on the basis of technical and non-technical skills of pilots and accordingly the literature has evolved towards preventing human error in respect to physical, cognitive and psychologic limitations of mankind while many relevant error models can be found in the real world. Since 1990s, while interrogating the reasons behind the accidents, focus has been moved to organizational deficiencies. One may see that it is when the safety performance comes on the scene where everyone knows that human error is inevitable though continuous and integrated efforts are compulsory. Namely, it is “next-generation safety approach”. Adopting to this approach, ICAO updates the safety regulations and dictates a systematic safety consideration and integrated efforts at organizational, national and international levels in order to correct the deficiencies. Under current conditions, aiming to adopt and achieve CRM that is related to the next-generation safety approach, pilots and cabin crew receive periodic trainings. During these trainings, as the factors affecting the work performance of the participants either



individually or as a team member is agreed better, the importance of non-technical skills as much as the technical skills and the conditions of the communications are well understood. This paper aims to bring out the problems in the contribution of CRM trainings to flight safety and to propose recommendations for correcting these problems. In respect to this aim, after the analysis of data collected from 41 cockpit crew and cabin crew with a survey consisting of open-ended questions, the problematic areas and the requirements for the development were brought into view in achieving the goal of CRM trainings. Thereafter, data collected with semi-structured interviews from 6 CRM trainers of both universities along with the airline companies were analyzed with content analysis. Thereby, the necessities for diminishing the current problems and achievement of the goals and a continuous improvement of trainings were revealed. Following this, a focus group discussion meeting with 4 experienced CRM manager and trainers was held. The recommendations produced for the enhancement of CRM trainings with this research were assessed in this meeting taking the real world conditions in airline companies and a set of applicable recommendations were produced then. The findings in this paper show that the training managers and the trainers are trying to find variety of solutions to current problems by themselves where they can only diminish but can never vanish. The data collected and analyzed with this research has enabled researchers embody and present a set of alternative recommendations for them. And thus, the deficiencies in CRM trainings were revealed, the requirement for a better feed-back system was addressed, the necessity of new teaching technics and materials were exposed, and finally a modelling of new applicable teaching techniques together with the necessary communications environment in CRM trainings was proposed.

Keywords: Science of Human Factors in Aviation, Flight Safety, Crew Resource Management, Flight Training, Pilot Skills, Pilot Trainings.



**FEN EĞİTİMİNDE BULANIK MANTIK UYGULAMALARI NEDEN
KULLANILMALIDIR?**

WHY SHOULD FUZZY LOGIC APPLICATIONS BE USED IN SCIENCE EDUCATION?

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ÖZET

1956 yılında Dartmouth konferansında McCarthy tarafından ortaya atılan yapay zekâ kavramı; öğrenme, tahminlerde bulunma, karmaşık problemleri çözüme gibi özellikleriyle doğrudan eğitim alanına katkı sağladığı söylenebilir(Arslan, 2020). Gündelik yaşantımızda cevabını bilmediğimiz veya cevaplarından emin olamadığımız birçok problemle karşılaşırız. Bu durumun gerçek dünyanın bulanık, belirsiz, puslu ve kesinlikten uzak olmasından kaynaklandığını söylemek mümkündür (Özkan, 2018). Yapay zekânın alt dallarından biri bulanık mantıktır[BM] ve bulanık problemlerin çözümlerinin modellenmesinden oluşur(Özdemir, 2017). Değişen dünyanın beklentilerinin de sürekli değiştiği düşünülürse, hayatımızdaki her durumu bir kalıba sokmamızın enerji ve zaman kaybına sebep olacağı aşikârdır. BM, hayatımızdaki belirsiz durumların sembolize edilip makinelere aktarabildiği için karar verme, değerlendirme ve problem çözüme süreçlerinde yaşanan belirsizlikler BM ile ortadan kaldırılabılır(Güner ve Çomak, 2014). Aristo mantığına dayanan klasik küme kuramında bir eleman o kümenin ya elemanıdır ya da elemanı değildir. Klasik kümelerde bir kümeye ait olan elemanlar bir (1), ait olmayanlar ise sıfır (0) değerindedirler ve üyelik kesin sınırlarla ayrıldığı için kısmi üyelik yoktur(Özdemir, 2009). BM ise bulanık küme teorisine dayanır ve klasik mantığın aksine (0,1) değerli değil, [0,1] aralığındaki sayısız değeri ifade etmektedir. BM, insan mantığına daha yakın olduğu için birçok disiplin tarafından kullanılmaktadır(Özkan, 2018). BM, *soğuk-sıcak, hızlı-yavaş, başarılı-başarısız* gibi ikili değişkenlerden oluşan kesin dünyayı; *az soğuk-az sıcak, az hızlı-çok hızlı, az başarılı-çok başarılı* gibi daha esnek niteleyicilerle gerçek dünyaya indirger(Elmas, 2018). Bunun doğal bir sonucu olarak da BM ile yapılan değerlendirmelerin daha esnek ve objektif olduğunu söylemek mümkündür(Öcal, 2015). Bu çalışmada BM ve BM' nin eğitim alanındaki uygulamaları hakkında bilgi verildikten sonra özellikle BM'nin fen eğitiminde kullanımının gerekliliğine ve önemine değinilmiştir. Araştırmacıların çoğunlukla öğrenme stiline veya zekâ türünün belirlenmesi, performans değerlendirme, akademik başarı sınıflandırmasında ve alana-mesleğe yöneltme konularına odaklandıkları söylenebilir. Araştırmacıların eğitimde BM kullanımına ağırlık vermelerine karşın, fen eğitiminde yapılan çalışmaların sınırlı sayıda olduğu görülmüştür. Çalışmanın son bölümünde ise, BM'nin fen eğitiminde kullanımının olumlu



sonuçlarına ve bu konuyla ilgili önerilere açıklık getirilerek BM'nin fen eğitimindeki yeri ve önemi ortaya çıkarılmaya çalışılmıştır.

Anahtar Kelimeler: Bulanık Mantık, Fen Eğitimi, Yapay Zekâ.

ABSTRACT

Artificial intelligence concept introduced by McCarthy at the Dartmouth conference in 1956; It can be said that it directly contributes to the field of education with its features such as learning, making predictions, solving complex problems (Arslan, 2020). In our daily life, we encounter many problems that we do not know or are not sure about. It is possible to say that this is due to the fact that the real world is blurry, uncertain, hazy and uncertain (Özkan, 2018). One of the sub-branches of artificial intelligence is fuzzy logic [FL] and it consists of modeling the solutions of fuzzy problems (Özdemir, 2017). Considering that the expectations of the changing world are constantly changing, it is obvious that putting every situation in our life into a mold will cause a loss of energy and time. Since the FL can symbolize the uncertain situations in our lives and transfer them to the machines, uncertainties in decision making, evaluation and problem solving processes can be eliminated with the FL (Güner & Çomak, 2014). In classical set theory based on Aristotelian logic, an element is either an element or not an element of that set. In classical sets, the elements belonging to a set are valued at one (1) and those that do not belong to zero (0) and there is no partial membership since the membership is separated by strict boundaries (Özdemir, 2009). On the other hand, FL is based on the fuzzy set theory and, contrary to classical logic, it expresses numerous values in the interval $[0,1]$, not $(0,1)$. The FL is used by many disciplines because it is more prone to human logic (Özkan, 2018). The definitive world consisting of binary variables such as FL, *cold-hot, fast-slow, successful-unsuccessful*; It reduces to the real world with more flexible qualifiers such as *less cold-less hot, less fast-very fast, less successful-very successful* (Elmas, 2018). As a natural consequence of this, it is possible to say that the evaluations made with the FL are more flexible and objective (Öcal, 2015). In this study, after giving information about the applications of the FL and the UN in the field of education, especially the necessity and importance of the use of the FL in science education was mentioned. It can be said that the researchers mostly focused on determining the learning style or intelligence type, performance evaluation, academic achievement classification and orientation to the field-profession. Although researchers concentrate on the use of FL in education, it has been observed that the number of studies in science education is limited. In the last part of the study, the positive results of the use of the FL in science education and the suggestions on this issue were clarified and the place and importance of the FL in science education was tried to be revealed.

Keywords: Fuzzy Logic, Science Education, Artificial Intelligence.



**EGZERSİZLE TETİKLENEN İRİSİN MİYOKİNİNİN
OBEZİTE ÜZERİNE ETKİLERİ**

THE EFFECTS OF EXERCISE-INDUCED IRISIN MYOKINE ON OBESITY

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ÖZET

Obezite, besinlerle alınan enerjinin, harcanan enerjiden fazla olmasından kaynaklanan ve vücut yağ kütlesinin artması ile açıklanan kronik bir hastalıktır. Dünya Sağlık Örgütü'nün verilerine göre Türkiye'de VKİ 27,9 ve obezite yaygınlığı da %66,8 olarak rapor edilmiştir. Aşırı ve yanlış beslenme, yetersiz fiziksel aktivite, yaş, cinsiyet, genetik faktörler, sosyo-kültürel etmenler ve psikolojik problemler obezite için risk faktörü oluşturmaktadır. İnsan sağlığını önemli derecede bozan obezite, vücut yağ miktarı ile yakından ilişkilidir. Hareketsiz yaşam ve obezitenin kombinasyonu, birçok kronik hastalığı tetiklemektedir.

İrisin düzenli egzersiz yapıldığında bireyleri metabolik hastalıklardan koruyan ve iskelet kasından salınan bir miyokindir. Egzersiz sırasında irisin, vücutta enerjiyi depolayan ve obezite, diyabet gibi hastalıklara yol açan beyaz yağ dokularında kahverengi benzeri fenotip değişikliklerini uyarır, PGC1 α ekspresyonunu artırır, böylece UCP1'i aktive eder. İrisin, lipit dokuda UCP1 salınmasını sağlayan ve termogenez eşliğinde kilo kaybı ile sonuçlanan reaksiyonlara sebep olan anahtar miyokin olup, VKİ'nin düzenlenmesi, insülin duyarlılığı ve glikoz homeostazı gibi metabolik parametrelerin iyileştirilmesinde görevlidir. Bu bilgiler neticesinde bu çalışmanın amacı egzersiz ile tetiklenen irisin miyokininin obezite üzerine etkilerini araştıran çalışmaları incelemektir.

İlgili çalışmalar ScienceDirect, PubMed, Web of Science ve Ulakbim elektronik veri tabanlarında taranmıştır. Aramalar, "obesity (obezite)", "body fat burning (vücut yağ yakımı)", "weight loss (kilo kaybı)", "body composition (vücut kompozisyonu)", "exercise (egzersiz)", "irisin (irisin)" ve belirtilen anahtar kelimelerin kombinasyonları kullanılarak gerçekleştirilmiştir.

İncelemeler sonucunda egzersizle tetiklenen irisin seviyelerinin yüksek olduğu çalışmalarda, uygulanan antrenmanların vücut yağ yüzdesi ve beden kütle indeksi üzerinde anlamlı azalmalar sağlarken yağsız vücut kütlesinde ve kas kütlesinde anlamlı artışlar meydana getirdiği rapor edilmiştir. HIIT gibi yüksek şiddetli antrenmanların aerobik egzersizlere göre FNDC5'te bulunan irisini tetikleyerek daha aktif hale getirdiği bildirilmiştir. Ayrıca uzun süreli egzersiz programları ile irisin seviyeleri, bazı çalışmalarda cinsiyete ve ortam sıcaklığına göre değişirken, bazı çalışmalarda vücut ağırlığı azalmasına rağmen irisin seviyeleri değişmemiştir. Sonuçların çelişkili olmasına rağmen irisinin yararlı etkileri,



egzersizle tetiklediğinde obezite üzerine etkili bir miyokin olarak gözükmektedir ve olası bir yeni tedavi olarak önerilmektedir.

Anahtar Kelimeler: İrisin, Egzersiz, Obezite

ABSTRACT

Obesity is a chronic disease that is explained by the increase in body fat mass as a result of the energy intake with food being more than the energy consumed. According to the World Health Organization, BMI 27.9 and obesity prevalence has also been reported as 66.8% in Turkey. Excessive and malnutrition, insufficient physical activity, age, gender, genetic factors, socio-cultural factors and psychological problems are risk factors for obesity. Obesity, which significantly impairs human health, is closely related to the amount of body fat. The combination of sedentary life and obesity triggers many chronic diseases.

The irisin is a myokine released from skeletal muscle that protects individuals from metabolic diseases when exercised regularly. During exercise, irisin stimulates brown-like phenotype changes in white adipose tissues that store energy in the body and cause diseases such as obesity and diabetes, increases PGC1 α expression, thus activating UCP1. It is the key myokine that causes the release of UCP1 in lipid tissue and causes reactions resulting in weight loss accompanied with thermogenesis and is responsible for the regulation of BMI, improvement of metabolic parameters such as insulin sensitivity and glucose homeostasis. The aim of this study is to examine studies investigating the effects of exercise-induced irisin myokine on obesity.

Relevant studies have been researched in ScienceDirect, PubMed, Web of Science, and Ulakbim electronic databases. Searches were performed "obesity", "body fat burning", "weight loss", "body composition", "exercise", "irisin" and using combinations of the keywords mentioned above.

As a result of the investigations, it was reported that in studies where the irisin levels induced by exercise were high, the applied training provided significant reductions in body fat percentage and body mass index, while significant increases in lean body mass and muscle mass. It has been reported that high intensity training such as HIIT activates the irisin in FNDC5 more than aerobic exercises. In addition, with long-term exercise programs, irisin levels changed in terms of gender and ambient temperature in some studies, while irisin levels did not change in some studies despite a decrease in body weight. Although the results are contradictory, the beneficial effects of irisin appear to be an effective myokine on obesity when induced by exercise and it is proposed as a possible new therapy.

Keywords: İrisin, Obesity, Exercise



KÖPEKLERDE DERMATOFİTOZ VE SAĞALTIM SEÇENEKLERİ

DERMATOPHYTOSIS IN DOGS AND TREATMENT CHOICES

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ÖZET

Dermatofitoz bulaşıcı zoonoz bir hastalıktır ve köpeklerde yaygın şekilde görülen bir mantar hastalığıdır. Diğer hayvan türlerine ve insanlara bulaştırılabilir. Öncelikli bulaşma yolu doğrudan temas ya da yaralı hasar yerlerindedir. Dermatofitoz *Microsporium* (M.), *Trichophyton* (T.) ve *Epidermophyton* (E.) genusu mantarlarıyla deri, kıl ya da tırnakların enfeksiyonudur.

Enfeksiyon enfekte hayvanlara, malzemelere ve ortamlara temasla meydana gelir. Dermatofitle enfekte kıl ortamda yıllarca canlı kalabilir. Ortamın halı ve döşeme ile kaplı olması enfekte kılı barındırır. Toprak da maruziyet kaynağıdır. Enfeksiyona yönelik predispoze faktörler genç yaş, immün baskılanma, iyi beslenememe, mevcut hastalık, yüksek beden ısısı, nem ve deri yaralanmasıdır. İnkübasyon süresi 1-3 haftadır.

Belirtilen nedenlerle köpeklerde dermatofit etkenlerine bağlı mantar hastalıkları oldukça önemlidir. Bu makale kapsamında köpeklerde mantar enfeksiyonlarına neden olan başlıca dermatofit etkenleri sıralandı. Son yıllara ait bilimsel kaynaklar geniş şekilde taranıp, değerlendirilerek hangi dermatofit enfeksiyonuna hangi ilaçların etkili olduğuna yönelik bilgiler verildi. Dermatofit etkenli mantar hastalığı olan köpeklerde öne çıkan klinik belirtilerin çeşidi ve şiddetine bağlı olarak yapılması gereken bölgesel ve yerel sağaltım ile sistemik antifungal sağaltım uygulamaları için kullanılacak farklı ilaç ya da ilaç kombinasyonları hakkında geniş bilgiler verildi. Ayrıca klinisyen veteriner hekimlere pratik yönden kolaylık sağlaması bakımından, köpeklerde mantar hastalıklarında sağaltım seçeneğini oluşturan öncelikli olarak seçilen sistemik antifungal ilaçların genel dozlarına ek olarak dermatofitozisin sağaltımı için tercih edilecek sistemik antifungal ilaçların genel dozları ve sıklıkları, kullanım yollarını içeren önemli bilgiler tablolar halinde sunuldu.

Anahtar Kelimeler: Deri mantar enfeksiyonu, sağaltım, köpek



ABSTRACT

Dermatophytosis is a contagious, zoonotic disease and is a fungal disease commonly appeared in dogs. Other animal species and humans are contracted. Primary transmission way is via direct contact or damage sites. Dermatophytosis is an infection of skin, hair or nails by *Microsporium (M.)*, *Trichophyton (T.)* and *Epidermophyton (E.)* genera.

Infection develops via contact with infected animals, materials and environments. Infected hair with dermatophyte may remain live for years. Covering of carpet and flooring to the environment harbors hairs. Soil is also exposure source. Predisposition factors for infection are younger, immune suppression, undernutrition, disease, fever, humidity and skin wounds. Incubation time is 1-3 weeks.

Fungal diseases due to dermatophytes in dogs are important because of described reasons. In the context of this report, primary dermatophytes causing fungal infections in dogs were explained. Knowledge was given about which drugs are effective to which dermatophytes by searching recent scientific sources in detail. Knowledge was given in detail about different drug or drug combinations to be used for local and systemic treatment applications required according to severity and variety of prevailing clinical signs in dogs with dermatophytes causing fungal disease. In addition, in respect to providing veterinary clinicians with practical convenience, important knowledge including general doses and frequencies, administration ways of systemic antifungal drugs to be chosen for dermatophytosis treatment as well as general doses of systemic antifungal drugs primarily chosen set a treatment choice in fungal diseases in dogs were presented in tables.

Keywords: Dermatophytosis, treatment, dog



EFFECT OF THE ADDITION OF SODIUM BUTYRATE ON PERFORMANCE AND EGG QUALITY PARAMETERS IN LAYER QUAILS

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ABSTRACT

The current research was carried out to determine the effects of sodium butyrate of addition to diet on performance and egg quality parameters in layer quails. In the experiment, a total of 100 layer quails at 12 weeks of age were randomly distributed to 5 treatment groups with 4 rsubgroups, each containing 5 quails. During the 10-weeks trial, quails were fed treatment diets added 0.0, 0.5, 1.0, 1.5 and 2.0 g/kg sodium butyrate to the basal diet. Treatments did not affect body weight change, feed intake, damaged egg rate, specific gravity, eggshell breaking strength, eggshell rate and Haugh unit ($P>0.05$). Among the performance parameters, egg production, egg weight and egg mass significantly improved with the addition of sodium butyrate to diets compared to the control group (0.0 g/kg sodium butyrate) ($P<0.05$). According to the results obtained from the experiment, the addition of 1.5 g/kg sodium butyrate to the diet increases the productivity of the layer quails without affecting the egg quality.

Keywords: Sodium butyrate, quail, performance, egg quality.



**“BİR HAYLAZIN YAŞAMI” ÖRNEĞİNDEN HAREKETLE ALMAN ROMANTİK
DÖNEM ANLAYIŞI**

THE GERMAN ROMANTIC PERIOD UNDERSTANDING BASED ON THE EXAMPLE
OF "THE LIFE OF A MISCHIEVOUS"

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ÖZET

Sanayi devrimi ile birlikte yaşamın her alanına hakim olan salt akılcı düşünceye karşı olarak, bireyselliğe ve duygulara yer veren Romantizm akımı ortaya çıkmıştır. Duyguları bastıran akli ön planda tutan Klasisizm’ in kuralcılığına karşın, Romantizm bütün edebiyat dallarını etkileyerek kuralsızlığı ön plana çıkarmıştır. Romantik akımın gelişmesinin en büyük kaynağı Fransız Devrimi’dir. Bu siyasi gelişmenin sonucunda insanların beklentilerinin karşılanmaması sonucunda akılcı akımlara karşı Romantizm ortaya çıkmıştır.

Romantizm ’in toplum yapısında yeniden yapılacak düzenlemelere, belli sınıflar yerine tüm insanları sanat içerisinde tutmaya çalışmıştır. Romantizm, klasik dönemde kurallardan ve kalıplardan yorulan sanatın kendini özgürleştirme çabasıdır. Doğa ile bir bütün insanın kendini doğa ile yeniden keşfetmesi sanatın her alanında kendini göstermiştir. Romantik yazarlar, insanda var olan yaratıcı gücü ön plana çıkarmaya çalışmışlardır.

Alman edebiyatında Romantizm akımının yansıması tarih, dil, edebiyat, din ve sanat alanlarına dönüş gibi olmuştur. İnsan yaşamı sürekli değişken sonsuz bir olgu gibi görünürken, felsefenin amacı bunu yansıtması gerekmektedir. Sonsuzluk özleminin ön plana çıktığı, duygu ve düşüncelerin bütünlüğünün söz konusu olduğu Romantik akımda sanatçılar eserlerinde bu konuları oldukça sık işlemişlerdir.

Bu çalışmada, Alman Edebiyatında son romantik dönem yazarlarından ve eserlerinde doğa, tarih ve hayal dünyasını ön plana çıkaran Joseph Freiherr von Eichendorf’un “Bir Haylazın Hayatından (Aus dem Leben eines Taugenichts,1826)” hayallerinin peşinden koşan maceraperest insanın yaşamının sonsuz değişkenliğinin anlatıldığı eserinden hareketle, Romantizm akımının temel motifleri irdelenecektir. Romantik dönemin öğeleri ve sanat anlayışı, nicel bir araştırma şeklinde kaynak tarama yapılarak betimleme yoluyla incelenecektir.

Anahtar Kelimeler: Duygu, Doğa, Özgürlük, Sonsuzluk, Macera

ABSTRACT

With the industrial revolution, against the mere rational thought that dominates all areas of life, the Romanticism movement, which includes individuality and emotions, emerged. Despite the normality of Classicism, which prioritizes the mind that suppresses emotions, Romanticism has brought the irregularity to the forefront by affecting all branches of literature. The greatest source of the development of the Romantic movement is the French Revolution. As a result of this political development, Romanticism emerged against rational movements as a result of not meeting people's expectations.



He tried to reconstruct the social structure of Romanticism and to keep all people in art instead of certain classes. Romanticism is the self-liberation effort of art, tired of rules and patterns in the classical period. The rediscovery of nature and the whole human being with nature has manifested itself in every field of art. Romantic writers have tried to highlight the creative power that exists in human beings.

The reflection of Romanticism in German literature has been like a return to the fields of history, language, literature, religion and art. While human life seems to be an ever-changing eternal phenomenon, the purpose of philosophy must reflect this. In the Romantic movement, where the longing for infinity stands out and the integrity of feelings and thoughts are at stake, artists have dealt with these issues quite frequently in their works.

In this work, from Joseph Freiherr von Eichendorf's "Aus dem Leben eines Taugenichts, 1826", one of the last romantic writers in German Literature and emphasizing the world of nature, history and imagination in his works, is the work of the adventurous man who pursues his dreams. the basic motives of the Romanticism movement will be examined. The elements of the romantic era and the understanding of art will be examined through a description of the sources in the form of a quantitative research.

Keywords: Emotion, Nature, Freedom, Infinity, Adventure



**ALMAN KLASİK DÖNEM EDEBİYATI ANLAYIŞI VE JOHANN WOLFGANG
VON GOETHE**

UNDERSTANDING OF GERMAN CLASSICAL LITERATURE AND JOHANN
WOLFGANG VON GOETHE

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ÖZET

Dünyadaki toplumsal değişimler, kendini edebiyatın her alanında göstermektedir. Edebiyat toplumsal değişim ve gelişmeler de rol oynadığı gibi aynı zamanda bir aynasıdır. Edebiyat, toplumsal sorunların dile getirilmesi ve geniş kitlelere ulaştırılmasında bir araçtır. Edebiyat, dünyada tarihsel süreç içerisinde her alanda yaşanan olay ve sorunlara göre farklı görüşleri yansıtsa da kitlelere bilgi aktarım işlevini dinamik olarak yerine getirmektedir.

Ortaçağ'ın dinsel dogmatik düşüncesinin yıkılması, Hümanizm ve Rönesans ile birlikte antik eserlere yönelim yeni bir dünya düzeni düşünce akımının gelişmesine neden olmuştur. İyi, güzel ve hakikat çerçevesinde yeni ideallerin bir arada olduğu "Klasik" dönem başlamıştır. İnsan imajının, akıl ve duygu ahengi ile iyi ahlak la yükseltilmesi bu dönemin karakteristik özelliğidir. Canlıların yaşam alanı olan doğa ile dengeli ve hayranlık dolu bir dengenin sağlanması insana mutluluk getirecektir.

Almanya'da edebiyatta klasik dönem J.W von Goethe'nin İtalya gezisi ile başlamaktadır. Roma'da antik dünyanın eserlerini yakından tanıyan ve insan merkezli bir felsefi düşünce geliştiren Goethe, o dönemin en önemli Fransız Devrimi'nin sonuçlarından pek etkilenmemiştir. Alman klasik düşüncesinin temel noktası evrensellik ve dünya vatandaşı kavramları üzerine inşa edilmiştir. Alman klasik dönem edebiyatı birçok eleştirilere rağmen edebiyat dünyasının her alanında kendini göstermiştir.

Bu çalışmada Johann Wolfgang von Goethe'nin mitolojik konusu olan "İphingenie Tauris'te (Iphingenie auf Tauris 1787)" eserinden hareketle, Alman edebiyatı klasik dönem anlayışı incelenecektir. Ayrıca Goethe'nin edebi kişiliğinin yanında bir bilim insanı olarak dünya görüşü nicel bir araştırma şeklinde kaynak tarama yapılarak betimleme yoluyla irdelenecektir.

Anahtar Kelimeler: İdeal İnsan, Evrensellik, Estetik, Ahlak, Ahenk

ABSTRACT

Social changes in the world manifest themselves in every field of literature. Literature is a mirror as it plays a role in social change and developments. Literature is a tool for expressing social problems and delivering them to large masses. Although literature reflects different views according to the events and problems experienced in every field in the historical process in the world, it fulfills the function of transferring information to the masses dynamically.

The destruction of the religious dogmatic thought of the Middle Ages, the orientation to the ancient works together with Humanism and the Renaissance caused the development of a new world order thought. The "Classical" period has begun, where new ideals are together within



the framework of good, beautiful and truth. It is the characteristic feature of this period that the human image is raised with a harmony of reason and emotion and good morality. Providing a balanced and admirable balance with nature, which is the habitat of living things, will bring happiness to people.

The classical period in literature in Germany begins with J.W von Goethe's trip to Italy. Goethe, who knew the artifacts of the ancient world closely and developed a human-centered philosophical thought in Rome, was not much affected by the results of the most important French Revolution of that period. The basic point of German classical thought is built on the concepts of universality and world citizen. Despite many criticisms, German classical period literature showed itself in all areas of the literary world.

In this study, based on Johann Wolfgang von Goethe's mythological subject "Iphigenie at Tauris (Iphigenie auf Tauris 1787)", the classical period understanding of German literature will be examined. In addition to Goethe's literary personality, his worldview as a scientist will be examined through a source search and description in the form of a quantitative research.

Keywords: Ideal Human, Universality, Aesthetics, Morality, Harmony



**LİSE ÖĞRENCİLERİNDE SPOR ETKİNLİKLERİNE KATILIMIN YAŞAM
BECERİLERİ ÜZERİNDEKİ ETKİSİNİN İNCELENMESİ**

INVESTIGATION OF THE EFFECT OF PARTICIPATING IN SPORTS ACTIVITIES ON
LIFE SKILLS OF HIGH SCHOOL STUDENTS

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ÖZET

Spor kavramı, literatürde farklı amaçlar için yapılan fiziksel aktiviteler olarak tanımlanmakla birlikte karşı tarafa üstün gelmek ve güç sahibi olmak şeklinde tanımlanabilir. Günümüzde spor, insan hayatı üzerinde etki alanını giderek arttırmakla birlikte toplumdaki yeri ve önemi açısından her geçen gün daha da önemli hale gelmektedir. Bireysel anlamda spor yapan insanlar, fiziksel ve zihinsel yetenekler bakımından gelişim göstermektedir. Toplumsal yönü itibarıyla da bireyler arası sosyal bağları güçlendirdiği ve bireyi sosyalleştirdiği bilinmektedir. Bu çalışma, liselerde sportif faaliyetlere katılan bireylerin yaşam becerilerinin çeşitli değişkenler açısından incelenmesi amacıyla yapılmıştır. Bu amaçla Sporun Yaşam Becerilerine Etkisi Ölçeği kullanılmıştır. Araştırmada tarama yönteminden yararlanılmıştır. Araştırma evrenini İstanbul ili Bakırköy ilçesine bağlı liselerde eğitim gören 417 öğrenci oluşturmaktadır. Kişisel bilgi formuna ek olarak, katılımcılara yaşam becerileri ölçeği ifadelerinin yer aldığı bir anket verildi. Bu formdaki ifadelere dürüstçe cevap vermeleri istendi. Öğrencilere dağıtılan 530 ölçme aracından 482'si doldurulmuştur. 65 tanesi amaca göre doldurulmadığı için değerlendirme dışı bırakıldı. Sporun genç bireylerde; takım çalışması, hedef belirleme, inisiyatif alma, başkalarına saygı gösterme, zaman yönetimi, bilişsel beceriler, duygusal beceriler, iletişim becerileri, sosyal beceriler, liderlik, problem çözme ve karar verme gibi birçok yaşam becerisini geliştirdiğine dair bulgular elde edilmiştir. Elde edilen bulgular literatür ışığında tartışılmış ve yeni araştırmalar için önerilere yer verilmiştir.

Anahtar Kelimeler: Yaşam becerileri, Spor, Eğitim, Sosyal beceri

ABSTRACT

Sport is defined as regular physical activities for different purposes and it is a concept, which is aimed at satisfying the subconscious emotions of human beings, such as integrating set of physical, psychological and mental efforts, and socializing. Nowadays, sports are becoming more and more important in terms of their place and importance in the society as well as



increasing their influence on human life. Individual athletes develop in terms of physical and mental abilities. It is known that it strengthens social ties among individuals and socializes the individual in terms of its social aspect. This study was conducted to examine the life skills of individuals participating in sports activities in high schools in terms of various variables. In this study, the Effect of Sport Scale on Life Skills was used. Screening method was used in the research. The research population consists of 417 students studying in high schools in Bakırköy district of Istanbul. In addition to the personal information form, participants were given a questionnaire with life skills scale statements. They were asked to answer the statements in this form with honesty. 482 of the 530 measurement tools distributed to students were filled. 65 of them were excluded from the assesment because they were not filled in according to the purpose. Sports in young people; it has been found that it has developed many life skills such as teamwork, goal setting, taking initiative, respecting other peoples, time management, cognitive skills, emotional skills, communication skills, social skills, leadership, problem solving and decision making. The findings are discussed with previous studies and suggestions for new research are included.

Keywords: Life skills, Sports, Education, Social skill



**THE IMPACT OF THE PROPHETIC SUNNAH ON CHARACTER BUILDING OF
AN INDIVIDUAL PERSON**

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ABSTRACT

Character building of a person is very necessary to make any society better, healthier and superior as the construction of society depends upon the people's character building. A number of crime cases are evident that the character of most people is already in alarming phase. However family members, society, Islamic schools, universities, and cultural activities can play vital role in character building. Improvement in our current situation as well as development of our future depends upon the building of people character. This study aims to highlight the impact of the Prophetic Sunnah and to show its effective role in building the character of a person individual through the selection of practical models of the true Sunnah, for example, showing great care for all aspects of human such as materialistic, mental and spiritual aspects. If we really want to improve our society or turn it to perfection, people will have to focus on character building, particularly on people's moral, spiritual and social character so that society can present the real portrait of peace and prosperity. This study concluded that the Prophetic Sunnah is rich in the educational principles which preceded the contemporary research and theories, making it first reference as a basic requirement.

Keywords: Character building, Personality, Islamic Character, Personality development, Impact of Sunnah.



ÜNİVERSİTE ÖĞRENCİLERİNİN SOSYAL ZEKA DÜZEYLERİNİN ÖZ YETERLİLİK ALGILARI ÜZERİNDEKİ ETKİSİ: TÜRKİYE, AZERBAIJAN VE POLONYA'DA BİR ALAN ARAŞTIRMASI

THE EFFECT OF UNIVERSITY STUDENTS' SOCIAL INTELLIGENCE LEVELS ON SELF-SUFFICIENCY PERCEPTIONS: A FIELD RESEARCH IN TURKEY, AZERBAIJAN AND POLAND

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ÖZET

Çalışmanın amacı, son sınıf İktisadi ve İdari Bilimler Fakültesi öğrencilerinin sosyal zekâ düzeylerinin öz yeterlilik algıları üzerindeki etkisini incelemektir. Çalışma Türkiye'de Akdeniz Bölgesinden bir, Azerbaycan'da başkentten iki ve Polonya'dan bir üniversite olmakla toplamda dört üniversitede yürütülmüştür. Araştırmaya 303'ü Türkiye'den, 215'i Azerbaycan'dan ve 98'i Polonya'dan olmak üzere toplam 616 öğrenci katılmıştır. Veriler üç bölümden oluşan anket formuyla toplanmıştır: Kişisel Bilgi Formu, Silvera vd., (2001) tarafından geliştirilen TROMSO Sosyal Zekâ Ölçeği ve Sherer ve Maddux (1982) tarafından geliştirilen Öz Yeterlilik Ölçeği kullanılmıştır. Elde edilen verilerin analizi SPSS adlı program ile yapılmıştır. Verilerin analizinde, yüzde, güvenilirlik, korelasyon ve regresyon analizleri kullanılmıştır.

Araştırmaya Türkiye'den katılan öğrencilerin %26,7'si İktisat, %26,4'ü İşletme; Azerbaycan'dan katılan öğrencilerin %48,8'i İktisat, %24,7'si İşletme; Polonya'dan katılan öğrencilerin ise %28,6'sı İşletme, %21,4'ü Uluslararası İlişkiler bölümünde eğitim görmektedir.

Regresyon analizi sonucunda, sosyal zekâ alt boyutları olan sosyal bilgi süreci, sosyal beceriler ve sosyal farkındalığın genel ve sosyal öz yeterlilik üzerinde pozitif bir etkisinin olduğu tespit edilmiştir. Bağımsız değişkenlerin (sosyal zekâ alt boyutları) bağımlı değişkenlerdeki (öz yeterlilik alt boyutları) değişimleri ne düzeyde açıkladığını anlamak için "R²" değerine bakılması gerekmektedir. Bu bağlamda, sosyal bilgi süreci genel öz yeterliliğin %10,0'unu, sosyal öz yeterliliğin ise %1,4'ünü açıklayabilmektedir. Öğrencilerin sosyal beceri düzeyleri genel öz yeterlilik algılarının %12,7'sini, sosyal öz yeterlilik algılarının ise %15,1'ni açıklayabilmektedir. Son olarak, öğrencilerin sosyal farkındalık düzeylerinin onların genel öz yeterlilik algılarını %8,9, sosyal öz yeterlilik algılarını ise %8,7 oranında açıklayabildiği görülmüştür.

Anahtar Kelimeler: Sosyal Zeka, Öz Yeterlilik, Üniversite Öğrencileri



ABSTRACT

The aim of the study is to examine the effect of social intelligence levels of senior year Faculty of Economics and Administrative Sciences students on self-efficacy perceptions. The study was conducted at four universities, including one from the Mediterranean region in Turkey, two from the capital in Azerbaijan and one from Poland. A total of 616 students, including 303 from Turkey, 215 from Azerbaijan and 98 from Poland, participated in the study. The data was collected using a three-part questionnaire: Personal Information Form, TROMSO Social Intelligence Scale developed by Silvera et al. (2001) and Self-Efficacy Scale developed by Sherer and Maddux (1982) were used. The analysis of the data obtained was made with the program called SPSS. Percentage, reliability, correlation and regression analysis were used to analyze the data.

26.7% of the students participating in the study in Turkey study economics, 26.4% Business Administration; 48.8% of the students participating in Azerbaijan study economics, 24.7% Business Administration; 28.6% of the students participating in Poland study business administration, 21.4% International Relations Department.

As a result of the regression analysis, it was determined that social knowledge process, social skills and social awareness, which are sub-dimensions of social intelligence, have a positive effect on general and social self-efficacy. To understand to what extent the independent variables (social intelligence sub-dimensions) explain the changes in dependent variables (self-efficacy sub-dimensions), the "R²" value should be looked at. In this context, social knowledge process can explain 10.0% of general self-efficacy and 1.4% of social self-efficacy. Social skill levels of students can explain 12.7% of their general self-efficacy perceptions and 15.1% of their social self-efficacy perceptions. Finally, it was seen that the social awareness levels of the students could explain their general self-efficacy perceptions by 8.9% and their social self-efficacy perceptions by 8.7%.

Keywords: Social Intelligence, Self-Sufficiency, University Students



**OKUL ÖNCESİ ÖĞRETMENİ ADAYLARININ BEDEN EĞİTİMİ VE OYUN
ÖĞRETİMİ DERSİNE İLİŞKİN GÖRÜŞLERİNİN DEĞERLENDİRİLMESİ**
EVALUATION OF PRE-SCHOOL TEACHER CANDIDATES 'OPINIONS ABOUT
PHYSICAL EDUCATION AND GAME TEACHING COURSE

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ÖZET

Oyunun bireylerin gelişimi üzerindeki etkisi oldukça fazladır. Çocuklar, oyun ile öğrendikleri tüm bilgi ve becerilerini günlük yaşamında uygulayarak yaşantısına yön verirler. Çocuk çevresini oyun ile tanır ve akranlarıyla olan ilişkilerini böylece devam ettirir. Bir takım ihtiyaçlarını oyun ile giderme yoluna gider. Çocuğun hayatında bu kadar önemli bir yere sahip olan oyuna eğitimde gerekli yerin verilmesi eğitimin amaçlarına ulaşmasını hiç şüphesiz kolaylaştırmaktadır. Dolayısı ile oyun kavramına değer verilmesi ve üzerinde durulması ile öğrenme süreci daha kolay ve daha hızlı hale gelecektir.

Bu çalışma, okul öncesi öğretmen adaylarının, beden eğitimi ve oyun öğretimi hakkındaki görüşlerini değerlendirmek amacıyla yapılmıştır. Araştırmada veri toplama aracı olarak araştırmacı tarafından geliştirilen açık uçlu sorular öğretmen adaylarına sunulmuştur. Araştırmada nitel araştırma yöntemlerinden olan mülakat yöntemi kullanılarak, veriler içerik analizi yöntemiyle analiz edilmiştir. İçerik analizinde birbirine yakın olan veriler, belirli kavramlar ve temalar çerçevesinde bir araya getirilerek yorumlanmıştır.

Sonuç olarak, araştırmaya katılan okul öncesi öğretmen adayları; beden eğitimi ve oyun öğretimi dersinin meslek olarak öğretmenlik hayatlarında önemli bir ders olduğu ve dersin genel anlamda uygulamalı bir şekilde verilmesi gerektiği ifade edilmektedir. Araştırmaya katılan öğretmen adayları, beden eğitimi ve oyun öğretiminin; psikomotor becerilerini geliştirdiğini, sağlıklı yaşam konusunda daha bilinçli olduklarını belirtmişlerdir. Araştırma grubu; beden eğitimi ve oyun öğretiminin; eğitimlerine katkı sağladığını, iletişim kurma yönünden ve sorumluluk duygusu kazanma açısından da önemli olduğu yönünde görüş bildirmişlerdir. Araştırma grubu öneri olarak; beden eğitimi ve oyunun öneminin hissettirilmesi, fiziki çevre şartlarının düzeltilmesinin gerektiği belirtirken, sonuç olarak beden eğitimi ve oyun öğretiminin; çocukların gelişimi üzerinde önemli etkileri olduğu yönünde görüş ifade etmişlerdir.

Anahtar Kelimeler: Okul Öncesi, Öğretmen Adayı, Beden Eğitimi ve Oyun Öğretimi



ABSTRACT

The impact of the game on the development of individuals is enormous. Children direct their lives by applying all the knowledge and skills they learn through play in their daily life. The child gets to know his / her environment through play and thus maintains his relationships with his peers. A team goes to meet their needs with games. Giving the game the necessary place in education, which has such an important place in the life of the child, undoubtedly facilitates the achievement of the aims of education. Therefore, the learning process will become easier and faster by valuing and emphasizing the concept of game.

This study was conducted to evaluate the opinions of pre-school teacher candidates about physical education and game teaching. In the research, open-ended questions developed by the researcher were presented to prospective teachers as a data collection tool. In the study, the interview method, which is one of the qualitative research methods, was used and the data were analyzed by content analysis method. Data that are close to each other in content analysis are brought together within the framework of certain concepts and themes and interpreted.

As a result, pre-school teacher candidates participating in the research; It is stated that physical education and game teaching course is an important lesson in their teaching life as a profession and the course should be given in a practical way in general. Teacher candidates participating in the research, physical education and game teaching; They stated that they improved their psychomotor skills and they were more conscious about healthy living. Research group; physical education and game teaching; They stated that it contributed to their education and was important in terms of communication and gaining a sense of responsibility. As the research group suggest; He stated that physical education and play should be made to feel the importance and physical environment conditions should be improved. As a result, physical education and game teaching; They expressed an opinion that it has important effects on the development of children.

Keywords: Preschool, Teacher Candidate, Physical Education and Game Teaching



EFFECTS OF SEPIOLITE USAGE IN DIETS ON SOME EGG TRAITS AND EGG CHOLESTEROL CONTENT IN LAYING HENS

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ABSTRACT

Eggshell quality and egg internal quality are of major importance to the egg industry worldwide. There are many factors affecting egg traits. Among these factors nutrition and dietary additives play an important role in eggshell quality, egg internal quality and egg cholesterol content. Sepiolite, a feed additive, is a hydrated magnesium aluminium silicate. It is a natural ingredient and clay family known as sepiolite-palygorskite. Sepiolite can be used upto 2% without adverse effects in fattening chickens, laying hens, pigs and rabbits according to EFSA panel. It has been approved as binding, anticaking and coagulating agent for all animal types in European Union as E562. Sepiolite has effects on the productive performance of poultry. In one of the study dietary sepiolite supplementation at 0.5 and 1% did not significantly affect egg weight in laying hens. The values of egg breaking strength and eggshell thickness were increased and egg yolk cholesterol content was decreased by the usage of 1% sepiolite in the diet. Dietary 0.5 and 1% sepiolite did not significantly affect egg shape index, egg albumen height, egg albumen index, egg yolk index and egg Haugh unit. In another study egg weight, shape index, shell weight, yolk index, albumen index and Haugh unit values were not affected by the dietary supplementation of 1, 2 and 3% sepiolite. Linear improvement was seen in eggshell strength and eggshell thickness. As a result dietary sepiolite supplementation improves eggshell quality and reduce egg yolk cholesterol in laying hens.

Keywords: Sepiolite, egg quality, egg cholesterol, laying hen



SUPPORT OF MN ADDITION TO CRACK PROPAGATION ALONG GRAIN BOUNDARIES IN BI-2212 SUPERCONDUCTING SYSTEM**A.T. Ulgen**

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ABSTRACT

In the current study, the effect of manganese (Mn) with different molar addition ratio in a range of $0 \leq x \leq 0.1$ on the fundamental key mechanical performance (mechanical durability, microhardness, Young's modulus, mechanical yield, tensile and fracture strength) and general mechanical characteristic (reversible and irreversible deformations) features of polycrystalline $\text{Bi}_{2.1}\text{Sr}_{2.0}\text{Ca}_{1.1}\text{Cu}_{2.0}\text{O}_y$ (Bi-2212) superconducting ceramics using Vickers microindentation hardness tests ($0.245 \text{ N} \leq F \leq 2.940 \text{ N}$). The samples studied are prepared at $840 \text{ }^\circ\text{C}$ for 24 h by means of standard solid-state reaction method. The test results reveal that the Mn addition in the crystal system damages seriously the mechanical performance features mentioned above for the Bi-2212 superconducting system due to the diminish of active operable slip systems and crystallinity quality. In fact, with the increment in the manganese addition level up to the global maximum value of $x=0.1$ the permanent structural problems including the interior cracks, internal defects, voids, pores, omnipresent flaws, coupling and connectivity between the superconducting grains are noted to increase gradually. Hence, the augmented structural problems serve as new stress raiser and concentration regions in the Bi-2212 system and the crack formation (or new crack-initiating and stress amplification regions) begins at even smaller indentation test load applied. In this regard, the presence of Mn addition increases harshly the sensitive to the test load and as a result, the crack growth size and corresponding velocity are out of control. The Mn added samples are much more easily fractured as compared to pure one. Accordingly, in case of Mn addition the crack propagation prefers through more grain boundaries than the transgranular regions in the Bi-2212 crystal system. Furthermore, the pure and Mn added Bi-2212 superconducting materials all present the typical indentation size effect (ISE) feature but in decrement trend with the addition level.

Keywords: Bi-2212 superconducting phase; Mn addition; Vickers microindentation hardness tests; Mechanical performance; Intergranular fracture.



A MECHANICAL MODELLING RESEARCH FOR MN ADDED BULK BI-2212 SUPERCONDUCTING SYSTEM

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ABSTRACT

In the current work, we model mechanically the load-independent Vickers microindentation hardness parameters of Mn added polycrystalline $\text{Bi}_{2.1}\text{Sr}_{2.0}\text{Ca}_{1.1}\text{Cu}_{2.0}\text{O}_y$ superconducting system with the standard theoretical approaches, viz. Meyer's law, elastic/plastic deformation, proportional sample resistance model, modified proportional sample resistance, Hays–Kendall and indentation-induced cracking model in the plateau limit regions so that we determine the variation of general mechanical performance and mechanical characterization quantities with the addition level. The mechanical curves grounded on the impression diagonal lengths display that there appears a significant decrease of load-dependent microhardness parameters until about 2 N test load magnitude after which the microhardness values remain constantly due to the presence of plateau limit regions depending on the induced artificial structural problems. However, with the increment in the Mn addition level the indentation test load causing the material to reach the plateau limit region tends to decrease systematically. This is because, the existence of manganese ions in the bulk Bi-2212 crystal system leads both to rise the structural problems and to reduce the related mechanical durability, mechanical strength, stiffness and fracture toughness over the test load applied. Accordingly, much less applied test load magnitude is enough to form the crack and acceleration of crack rate up to the critical size and terminal velocity in the Mn added Bi-2212 superconducting system. Moreover, the results show that the conventional indentation size effect nature regarding the elastic recovery mechanism is found to monotonously decrease depending on the manganese addition level in the Bi-2212 crystal system. Additionally, in this study the indentation-induced cracking (*IIC*) model is obtained to be the most successful model to investigate the load-independent microhardness results of bulk Mn added Bi-2212 compounds in the plateau limit regions.

Keywords: Bi-2212 superconducting phase; Mn addition; Mechanical modelling; *IIC* model.



SÜRDÜRÜLEBİLİR TÜKETİM DAVRANIŞINA DAYALI TÜKETİCİ PROFİLLERİ
CONSUMER PROFILES BASED ON SUSTAINABLE CONSUMPTION BEHAVIOR

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ÖZET

Bu çalışmanın amacı sürdürülebilir tüketim davranışı açısından tüketici profillerinin belirlenmesi ve bu kümeleri oluşturan tüketicilerin özelliklerinin tanımlanmasıdır. Bu amaçla Hane Halklarının Sürdürülebilir Tüketim Davranışları Ölçeği ile veri toplanmış ve istatistikî yöntemlerle analiz edilmiştir.

Geçmiş çalışmalarda sürdürülebilir tüketim davranışının çok boyutlu bir yapıda olduğu görülmektedir. Bu yüzden öncelikle faktör analizi ile çalışmaya katılan tüketicilerin boyutları belirlenmeye çalışılmıştır. Elde edilen güvenilirliği test edilmiş boyutlar; “kişisel ulaşım ve enerji”, “atık azaltma”, “evsel su/enerji tasarrufu” ve “duyarlı gıda tercihi” şeklindedir. Bu boyutlar ele alınarak kümeleme analizi gerçekleştirilmiş, üç tüketici kümesi ortaya konmuştur. Bu kümeler sürdürülebilir tüketim davranışı düzeyi açısından değerlendirildiğinde birinci kümeyi oluşturan tüketicilerin orta düzeyde, ikinci kümedekilerin yüksek düzeyde, üçüncü kümedekilerin ise çok yüksek düzeyde sürdürülebilir tüketim davranışı sergiledikleri görülmüştür ve sırayla; “çabalayanlar”, “uygulayanlar” ve “içselleştirenler” olarak isimlendirilmiştir.

“Çabalayanlar”, atık azaltma ve duyarlı gıda tercihi ile evsel su tüketimi boyutlarında en az skora sahip olan tüketicilerdir, bu kümenin diğer önemli özellikleri en genç tüketicilerin ve çalışmıyor olma oranının en yüksek bu kümede olmasıdır ayrıca herhangi bir gelire sahip olmama durumu da en sık bu kümede gözlenmektedir. “Uygulayanlar” tüm boyutlar açısından yüksek düzeyde sürdürülebilir tüketim davranışı sergiler bununla birlikte diğer kümelerle karşılaştırıldığında kişisel ulaşım boyutu açısından en düşük skorlara sahip olan tüketicilerdir, bu kümedekiler lisans ve lisansüstü eğitimden mezun olma oranının en yüksek olduğu kümedir ve diğer kümelerden daha fazla erkek tüketici bu kümede yer almaktadır. İçselleştirenler ise kişisel ulaşım, evsel su/enerji tasarrufu, duyarlı gıda tercihi boyutlarında çok yüksek, atık azaltma boyutunda ise yüksek skorlara sahiptir, kamu sektöründe çalışma oranının en yüksek olduğu kümedir ayrıca diğer kümelerdeki tüketicilerden daha fazla gelire sahip olan tüketicilerdir.

Tüketicilerin demografik ve davranışsal pek çok açıdan farklı oldukları düşünüldüğünde sürdürülebilir tüketim davranışı açısından homojen hale getirilen bu kümeler hedef pazarlar olarak ele alınabilir. Kümelerin özelliklerine uygun stratejik kararlar vermek mümkün olabilir, tüketicilerin yüksek duyarlılık sergiledikleri özellikler vurgulanarak medya stratejileri geliştirilebilir. Tüketicilerin daha düşük düzeyde davranış sergiledikleri boyutlar açısından bilinç düzeyini arttırmaya yönelik pazarlama mesajları tasarlanabilir. Bu bildiri ile



sürdürülebilir tüketim davranışı kavramının kuramsal temeli, boyut belirleme ve kümeleme işlemleri ile ilgili detaylar ve kümelerin özellikleri sunulacaktır.

Anahtar Kelimeler: Tüketici Davranışı, Sürdürülebilir Tüketim Davranışı, Kümeleme Analizi

ABSTRACT

The aim of this study is to determine consumer profiles in terms of sustainable consumption behavior and to define the characteristics of these consumers. With this purpose, data were collected with the Households' Sustainable Consumption Behaviors Scale and analyzed using statistical methods.

Studies show that sustainable consumption behavior is multidimensional. Therefore, the dimensions have been tried to be determined by factor analysis. "Personal transport and energy", "waste reduction", "domestic water / energy saving" and "responsive food choice" dimensions were obtained. Cluster analysis has been carried out depending these dimensions, and three consumer clusters were revealed. When these clusters were evaluated in terms of the level of sustainable consumption behavior, it was seen that the consumers in the first cluster showed moderate level, the second cluster showed high level, and the last cluster showed very high level of sustainable consumption behavior and in order; they were named as "strugglers", "implementers" and "internalizers".

Strugglers are the consumers who have the lowest score in terms of waste reduction, responsive food choice and domestic water consumption. Other important features of this cluster are they are the youngest consumers and they show highest rate of unemployment, in addition, the absence of any income, it is most frequently observed in this cluster. Implementers exhibit high level of sustainable consumption behavior in all dimensions, however, compared to other clusters, they are the consumers with the lowest scores in terms of personal transportation. In this cluster, the rate of having graduate and postgraduate degree is highest and there are more male consumers than other clusters. Internalizers, on the other hand, score very high in personal transportation, domestic water/energy saving, responsive food choice, and high scores in waste reduction. It is the cluster seen the highest rate of working in the public sector and they are also consumers who have more income than consumers in other clusters.

Considering that the demographic characteristics and behaviors of consumers are different in many aspects, these clusters, which are made homogeneous in terms of sustainable consumption behavior, can be considered as target markets. It may be possible to make strategic decisions in accordance with the characteristics of clusters. Media strategies can be developed by emphasizing the high-level sustainable consumption behavior of consumers. Marketing messages can be designed to increase the awareness level of consumers in terms of the dimensions in which they exhibit lower levels of behavior. With this paper, the theoretical basis of sustainable consumption behavior, details about dimension determination and clustering processes, and the characteristics of clusters will be presented.

Keywords: Consumer Behavior, Sustainable Consumption Behavior, Cluster Analysis



**RESIDENCE PERMITS OF FOREIGNERS IN LINE WITH INTERNATIONAL
PROTECTION LAW WITHIN THE FRAMEWORK OF MIGRATION
MANAGEMENT IN TURKEY**

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ABSTRACT

In our country, there are some rights and liabilities that a foreign person has as a result of the implementation of our national law in accordance with international law. The residence permit is one of the most important grounds on which the legal connection between the foreign person and our country regarding these rights and liabilities. General regulations on foreigners' residence in Turkey are provided in Foreigners and International Protection Law, and the Regulation on the Implementation of Foreigners and International Protection Law. This study addresses the foreigners' receiving a residence permit in Turkey within Foreigners and International Protection Law, and the Regulation on the Implementation of Foreigners and International Protection Law.

Keywords: Foreigners and International Protection Law, Regulation on the Implementation of Foreigners and International Protection Law, Residence Permit



**THE INEQUALITY VIRUS: CORONAVIRUS AND THE NEW SOCIAL CLASSES
IT HAS EMERGED**

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ABSTRACT

The Coronavirus Pandemic, also known as the COVID-19, has taken its place in the worldwide agenda as a global pandemic resulting in social, economic and political changes. Similar to all other natural disasters, pandemics, economic crises, it has treated everyone equally and hit them in the same way with no discrimination. However, it has revealed some social inequalities to the detriment of the most disadvantaged groups. Unemployment has risen and many people have lost their jobs. Furthermore, inequalities in health care have come to light. On the other hand, the pandemic has also affected the poor who have to live off their labor. While deepening all these existing inequalities, the Coronavirus pandemic has created some new social classes simultaneously. This study contains the assessments of the newly emerged social classes due to Coronavirus pandemic. The Coronavirus pandemic has emerged four social classes in US society. Apart from the privileged class that fails in meeting their basic needs, these four new social classes are as follows; the remote controls spending long hours with their laptops as well as attending online conferences; the basic worker groups; the unpaid workers or those employed with no payments and the forgotten ones. As a result, while deepening the existing inequalities, the pandemic also lays the foundation for the emergence of the new social classes.

Keywords: The Coronavirus Pandemic, COVID-19, New Social Classes



**SARIÇAM (*Pinus sylvestris* L.) ODUNUNDA KESİŞ YÖNLERİNİN VİDA TORKU
ÜZERİNE ETKİSİ**

THE EFFECT OF CUTTING DIRECTIONS ON SCREW TORQUE IN SCOTS PINE
WOOD (*Pinus sylvestris* L.)

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ÖZET

Mobilya üretiminde dikkate alınması gereken en önemli malzeme özelliklerinden birisi vidalama torkudur. Düşük vida torkuna sahip malzemelere yeterince sıkılmayan vidalar, bağlantı noktalarında vida oturma sorunlarına neden olabilir. Diğer yandan vidaya gereğinden fazla tork uygulanması malzemelerde vidanın boşa dönmesine ve dolayısı ile bağlantının başarısız olmasına yol açabilmektedir.

Masif malzeme mobilya ürünleri üretiminde en çok kullanılan materyallerden birisidir. Mobilyanın direnci bağlantı noktalarının mukavemetine bağlıdır. Bağlantı noktalarında kullanılan vidaların sabitlenmesinde uygulanan tork buradaki direnci önemli derecede etkilemektedir. Bu nedenle mobilya üretiminde kullanılacak malzemenin vidalama ve boşa dönme torklarının bilinmesi ve buna göre vidalama yapılması gerekmektedir.

Bu çalışmada mobilya üretiminde yaygın olarak kullanılan sarıçam (*Pinus sylvestris* L.) odunu kullanılmıştır. Odunun her bir kesiş yönü için 20 adet olmak üzere toplam 60 adet 5x5x5 m³ boyutlarında numuneler hazırlanmıştır. Her bir test numunesinin ilgili yüzeyine tam merkezden olacak şekilde vida çapının %80'i kadar pilot deliği açılmıştır. Pilot deliği, vida boyunun %80'i kadar delinmiştir. Çalışmada 3,5 x 50 mm ölçülerine sunta vidası kullanılmıştır. Testlerin yürütülmesi sırasında numuneler üzerine ortası uygun çapta delinmiş olan 10 mm kalınlığında metal bir plaka konularak vidalama gerçekleştirilmiştir. Vidalama esnasında sarıçam odunu numunelerinin oturma torku ve boşa dönme torku değerleri ölçülmüştür.

Sonuçlar incelendiğinde sarıçam odunu numunelerinde oturma torku değerleri enine kesitte 0,91 Nm, radyal kesitte 1,21 Nm ve teğet kesitte ise 1,27 Nm olarak bulunmuştur. Boşa dönme torku değerler ise enine kesitte 3,27 Nm, radyal kesitte 4,80 Nm ve teğet kesitte ise 5,65 Nm olarak bulunmuştur.

Anahtar Kelimeler: Tork, Vida, Mobilya, Sarıçam, Kesiş yönleri

ABSTRACT

Screw driving torque is one of the most important material properties to be considered in furniture production. Screws that are not sufficiently tightened to materials with low screw torque may cause screw seating problems at the joints. On the other hand, applying excessive torque to the screw may cause the screw to stripping in the materials and thus the joints to fail.



Solid material is one of the most used materials in the production of furniture products. The resistance of the furniture depends on the strength of the joints. The torque applied in fixing the screws used in the joints significantly affects the resistance here. For this reason, it is necessary to know the seating and stripping torques of the material to be used in furniture production and screw driving should be done accordingly.

In this study, scots pine (*Pinus sylvestris* L.) wood, which is widely used in furniture production, was used. A total of 60 samples (5x5x5 mm³ dimensions) of 20 for each cutting direction of the wood, were prepared. A pilot hole of 80% of the screw diameter was drilled on the relevant surface of each test sample exactly from the center. The pilot hole was drilled 80% of the screw length. Particleboard screws of 3.5 x 50 mm were used in the study. During the execution of the tests, a metal plate of 10 mm thickness was placed on the samples and screw driving was performed. During the screw driving, the seating and stripping torque values of the scots pine wood samples were measured.

When the results were examined, seating torque values were found to be 0.91 Nm in cross section, 1.21 Nm in radial section and 1.27 Nm in tangential section in scots pine wood samples. Stripping torque values were found to be 3.27 Nm in cross section, 4.80 Nm in radial section and 5.65 Nm in tangential section.

Keywords: Torque, Screw, Furniture, Scots Pine, Cutting Directions



ÇOCUKLARDA ATEŞ YÖNETİMİ

FEVER MANAGEMENT IN CHILDREN

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ÖZET

Ateş, çocukluk döneminde sık karşılaşılan semptomlardandır. Çocukluk döneminde görülen ateş ile ilgili ebeveynlerin çoğunun doğru ve yeterli bilgiye sahip olmadıkları, endişe ve ateş fobisi yaşadıkları görülmektedir. Ateş semptomu, her ne kadar ailelerde ağır bir tablonun ortaya çıkma riski açısından endişe ve korkuya neden olsa da savunma sisteminin önemli bir reaksiyonu olmasından dolayı da olumlu etkiye sahiptir. Bununla beraber 5 yaş altı çocukların acil başvurularında sık yer alan bu semptom çok farklı sorunların habercisi olabilir. Altta yatan neden çoğunlukla enfeksiyon hastalıklarıdır. Aşı sonrası, kan transfüzyonu sonrası, sıvı elektrolit yetersizlikleri, hematolojik hastalıklar, otoimmün hastalıklar, santral sinir sistemi tümörleri, Kawasaki hastalığı, postoperatif ateş ve bazı sendromlar sebebiyle de görülebilir. O nedenle sağlık profesyonelleri ateşi olan çocuğun değerlendirilmesinde bu unsurları dikkate almalı, ebeveynler ise çocuklarda görülebilecek ateş tablosunun neden gelişebileceği ile ilgili temel bilgiye sahip olmalı ve savunma sisteminin önemli bir reaksiyonu olan ateşin etkili yönetimine katkı sağlayabilmelidirler.

Ebeveynlerin ateş ile ilgili bilgi düzeyleri, algı ve tutumları ateş yönetiminin sağlanmasını etkilemektedir. Ebeveynler, çocuklarda normal kabul edilen vücut sıcaklığı değerleri, ölçüm yerleri, ölçüm araçları ve ateş olduğunda uygulanabilecek güvenilir nonfarmakolojik ve farmakolojik yöntemler konusunda bilgilendirilmeye ihtiyaç duymaktadırlar. Çocuklarda ateş yönetimi ile ilgili eğitimsel müdahale çalışmalarının ebeveynlerin ateş yönetim becerileri üzerine olumlu etkisi olduğu çalışmalarda görülmektedir. Bu konudaki eğitimlerin standartlaştırılmasının ve daha ulaşılabilir hale getirilmesinin hem ebeveynler hem de sağlık uygulayıcıları açısından fayda sağlayacağı düşünülmektedir.

Çocuk hemşiresi, eğitim, danışmanlık ve tedavideki rolü ile çocuklarda görülen ateşin yönetiminde aktif rol almaktadır. Eğitimlerle çocuklarda ateş yönetimi konusunda ebeveynlere güvenilir ve kanıta dayalı bilgilendirme sağlanmalı, ateşi olan çocuk hastanın takip ve tedavisi yapılırken aynı zamanda ailelerdeki stres ve korkunun azaltılabilmesi için aileye danışmanlık yapılmalıdır. Bu süreçte ateşi olan çocuk hastanın genel durumundaki değişiklikler yakından izlenmelidir.

Anahtar Kelimeler: Ateş, Çocuk, Ateş yönetimi, Çocuk hemşiresi



ABSTRACT

Fever is a common symptom in childhood. It is observed that most of the parents do not have accurate and sufficient information about fever seen in childhood, and they experience anxiety and fever phobia. Although the fever symptom causes anxiety and fear with regards to the danger of coming out a severe picture in families, it also has a positive effect due to the fact that it is an important reaction of the defense system. Nevertheless, this symptom which is frequent in the emergency admissions of children under the age of 5, may be a harbinger of many different problems. The underlying cause is mostly infectious diseases. It can also be seen after vaccination, after blood transfusion, fluid electrolyte deficiencies, hematological diseases, autoimmune diseases, central nervous system tumors, Kawasaki disease, postoperative fever and some syndromes. For this reason, health professionals should take these factors into account in the evaluation of a child with fever, and parents should have basic knowledge about why fever may develop in children, and they should be able to contribute to the effective management of fever, which is an important reaction of the defense system.

The knowledge levels, perceptions and attitudes of the parents about fever affect implementation of fever management. Parents need to be informed about the body temperature values accepted as normal, measurement locations, measurement tools and reliable non-pharmacological and pharmacological methods that can be applied when there is fever. Studies show that educational intervention studies on fever management in children have a positive effect on fever management skills of the parents. It is thought that standardizing the trainings on this subject and making them more accessible will be beneficial for both parents and health practitioners.

The pediatric nurse plays an active role in the management of fever in children with its role in education, counseling and treatment. Parents should be provided with reliable and evidence-based information about fever management in children through trainings and counseling should be provided to the family in order to reduce stress and fear in families while monitoring and treating the child with fever. In this process, changes in the general condition of the child patient with fever should be closely monitored.

Keywords: Fever, Child, Fever management, Pediatric nurse



CAMİLERİN KIBLE YÖNÜNÜN DOĞRULUĞUNUN BELİRLENMESİ: KARAMAN İLİ ÖRNEĞİ

DETERMINING THE ACCURACY OF QIBLA DIRECTION OF MOSQUES: A CASE STUDY IN KARAMAN CITY, TURKEY

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ÖZET

Gerek semâvî dinlerde gerekse diğer dinlerde inananların özellikle bazı bedenî ibadetleri yerine getirirken belli bir istikamete doğru yönelmeleri gerekli görülmüştür. İslam inancına göre Müslümanların namaz ve diğer ibadetlerini yaparken yöneldikleri doğrultuya kible denir. Müslümanlar için kible Suudi Arabistan' ın Mekke şehrindeki Mescid-i Haram' ın avlusunda bulunan Kâbe adıyla bilinen kutsal yapıdır. Kişisel olarak yapılan ibadetlerde kişilerin bu yöne yönelmeleri gerektiği gibi, cami ve mescitlerin de yine bu yönü gösterecek şekilde inşa edilmeleri gerekmektedir. Bu nedenle, kible yönünün olabildiğince doğru belirlenmesi ibadetin geçerliği açısından son derece önemlidir. Kibleye yönelmek namaz dışında diğer bazı ibadetler veya ibadet anlamı taşıyan davranışlarda da söz konusudur. Kuran okumak, ezan okumak, zenzem suyu içme, kurbanlık hayvanların kesilmesi ve cenaze defin işlemleri gibi ibadetlerin gerçekleştirilmesi için de kibleye yönelmek önemlidir. Kible yönünün açısı sabit değildir. Dünyada bulunan noktanın konumuna bağlıdır ve bu nedenle kible açısı her cami için uygun bir yöntemle çok hassas bir şekilde hesaplanmalıdır.

Kible doğrultusunun belirlenmesiyle ilgili birçok yöntem olmakla birlikte en uygun olanlarından birisi, camilerin yapılacağı yerin koordinatlarının başta GNSS tekniği olmak üzere, güncel ve yüksek doğruluklu bir yöntemle belirlenmesi ve bu koordinatlardan yararlanarak trigonometrik formüller yardımıyla kible açısının bulunmasıdır. Bunun dışında kible saati yöntemi de bir gözlem yerinde kible yönünün belirlenmesi için geliştirilmiş yüksek doğruluklu basit bir yöntemdir. Her hangi bir konum için kible saati hesabı yapıldıktan sonra, kible doğrultusunun saptanabilmesi için uydu saatiyle senkronize çalışan bir saatin hali hazırda bulunması ve güneşin görülebilmesi yeterli olmaktadır.

Bu çalışmada Karaman il merkezinde bulunan farklı zamanlarda inşa edilmiş altı caminin mevcut kible yönleri kible saati ve küresel trigonometrik formüller yardımıyla hesaplanarak gerçek kible yönleri ile karşılaştırılmıştır. Sonuçlar, yeni inşa edilen camilerin kible yönlerinin daha yüksek doğrulukla Kâbe' ye yönlendirildiğini göstermektedir. Ayrıca bulunan sonuçların, 2015 yılında Din İşleri Yüksek Kurulunun paylaşmış olduğu sınırlar içerisinde kaldığı gözlemlenmiştir.

Anahtar Kelimeler: Kible, Kible açısı, Kible saati, Küresel trigonometrik, Karaman

ABSTRACT

In both the heavenly religions and other religions, it has been deemed necessary for believers to move towards a certain direction, especially when performing some bodily worship.



According to Islamic belief, the direction Muslims turn to while performing their prayers and other acts of worship are called the qibla. The qibla for Muslims is the sacred structure known as the Kaaba located in the courtyard of the Masjid al-Haram in Mecca, Saudi Arabia. In personal prayers, people should turn in this direction, and mosques and masjids should also be built to show this direction. For this reason, determining the direction of qibla as accurately as possible is extremely important in terms of the validity of worship. Turning to the Qibla is also present in some other acts of worship or acts that have the meaning of worship other than prayer. It is also important to turn to the qiblah for worshiping such as reading the Qur'an, reciting adhan, drinking Zamzam water, slaughtering sacrificial animals and burials. The angle of the qibla direction is not fixed. It depends on the location of the point in the world and therefore the qibla angle must be calculated very precisely with a method suitable for each mosque.

Although there are many methods for determining the direction of the Qibla, one of the most suitable ones is the determination of the coordinates of the place where the mosques will be built with a current and highly accurate method, especially the GNSS technique, and the determination of the Qibla angle with the help of trigonometric formulas using these coordinates. Besides, the qibla time method is a simple method with high accuracy developed for determining the direction of qibla at an observation point. After calculating the qibla clock for any location, it is sufficient to have a clock synchronized with the satellite time and to see the sun to determine the direction of the qibla.

In this study, the current qibla directions of six mosques built at different times in the city center of Karaman are calculated with the help of qibla time and spherical trigonometric formulas and compared with the real qibla directions. The results show that the Qibla directions of newly built mosques are directed towards the Kaaba with higher accuracy. Besides, it was observed that the results found, remained within the limits shared by the High Council of Religious Affairs in 2015.

Keywords: Qibla, Qibla angle, Qibla time, Spherical Trigonometry, Karaman



ÇBAG TABANLI RÜZGAR TÜRBİNLERİNİN ÇOK MAKİNALI GÜÇ SİSTEMİ ÜZERİNDEKİ ETKİLERİNİN İNCELENMESİ

INVESTIGATION OF THE EFFECTS ON MULTI-MACHINE POWER SYSTEMS OF DFIG BASED WIND TURBINES

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ÖZET

Son yıllarda fosil yakıtların tükenmesi ve fiyatındaki yükselmelerden dolayı yenilenebilir enerji kaynaklarına yönelmeler başlamıştır. Yenilenebilir enerji kaynaklarından en popüler olanlarından birisi rüzgar enerjisidir. Rüzgar enerjisini elektrik enerjisine çevirmede asenkron ve senkron generatörler kullanılmaktadır. Güç ve moment kontrolünün yanı sıra maliyetinden dolayı Çift Beslemeli Asenkron Generatör (ÇBAG) diğer generatörlere göre daha çok tercih edilmektedir. Ancak ÇBAG tabanlı rüzgar türbinlerinin şebeke entegrasyonu esnasında bazı kararlılık problemleri ile karşı karşıya kalınmaktadır. Bu problemlerin analizinde çeşitli yaklaşımlar kullanılmaktadır. Yapılan bu çalışmada ÇBAG tabanlı rüzgar türbinlerinin şebeke entegrasyonu esnasındaki geçici kararlılık durumları incelenmiştir. Geçici kararlılık analizi için 3 faz arızası tercih edilmiştir. IEEE 14 baralı güç sisteminin analizi için Güç Sistemleri Analizi Programı (PSAT) kullanılmıştır. Farklı rüzgar güçlerinin sisteme entegrasyonunda çok makinalı güç sistemine ne gibi etkileri olduğu detaylı olarak gösterilmiştir. ÇBAG tabanlı rüzgar türbinlerinde farklı rüzgar güçleri 2 MVA, 30 MVA ve 100 MVA olarak belirlenmiştir. Farklı rüzgar güçleri için çok makinalı güç sisteminde senkron generatörün açılma hız değişimleri, senkron generatörlerin bağlı olduğu bara gerilimleri, senkron generatörün aktif ve reaktif güç değişimleri incelenmiştir. Elde edilen sonuçlar detaylı olarak yorumlanmıştır. Rüzgar türbinindeki güç artışının geçici kararlılık durumlarında sistem kararlılığını daha çok etkilediği görülürken, rüzgar türbinindeki gücün düşük olduğu durumlarda ise sistem kararlılığının daha az etkilendiği görülmüştür.

Anahtar Kelimeler: ÇBAG, Geçici kararlılık, Çok makinalı güç sistemi**ABSTRACT**

In recent years, due to the depletion of fossil fuels and increases in their price, the focus on edible energy sources has begun. One of the most popular renewable energy sources is wind energy. Asynchronous and synchronous generators are used to convert wind energy into electrical energy. In addition to power and torque control, Double Feed Induction Generator (DFIG) is more preferred than other generators due to its cost. However, some stability problems are encountered during the network integration of DFIG based wind turbines. Various



approaches are used in the analysis of these problems. In this study, transient stability of DFIG based wind turbines during network integration has been investigated. 3 phase failure was preferred for transient stability analysis. Power Systems Analysis Program (PSAT) was used for the analysis of the IEEE 14 bus power system. It is shown in detail what effects different wind powers have on the multi-machine power system when integrating into the system. Different wind powers in DFIG based wind turbines are determined as 2 MVA, 30 MVA and 100 MVA. Angular velocity changes of synchronous generator in multi-machine power system for different wind powers, bus voltages to which synchronous generators are connected, active and reactive power changes of synchronous generator were studied. The results were interpreted in detail. It has been observed that the increase in power in the wind turbine affects the stability of the system more in transient stability situations, while in cases where the power in the wind turbine is low, the stability of the system is less affected.

Keywords: DFIG based wind turbine, Transient stability, Multi-machine power system



GÜÇ SİSTEMLERİNDE FARKLI TG MODELLERİ VE UPFC-POD İLE KÜÇÜK SİNYAL KARARLILIĞININ İNCELENMESİ

INVESTIGATION OF SMALL SIGNAL STABILITY IN POWER SYSTEMS WITH DIFFERENT TG MODELS AND UPFC-POD

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ÖZET

Son yıllarda, nüfusun hızla artması ve teknolojinin gelişmesi güç sistemlerinin büyümesine neden olmaktadır. Bu büyüme beraberinde sorunları getirmektedir. Bu sorunlardan birisi de kararlılık problemleridir. Güç sistemlerinde kararlılık genel olarak sistemin herhangi bir bozunuma maruz kaldığı durumda çalışma dengesini koruyabilmesi olarak tanımlanmaktadır. Güç sistemlerinin maruz kaldığı düşük frekanslı salınımları söndürmek senkron generatörlerin senkronizasyonunu sürdürebilmesi açısından önemlidir. Bu senkronizasyonu sürdürebilme yeteneği küçük sinyal kararlılığını ifade eder. Bu çalışmada 2 alanlı, 4 generatörlü güç sisteminde 6. Derece modeliyle çalışan senkron generatörlere bağlı Güç Sistemi Kararlı Kılıcısı (PSS) model 2, Otomatik Gerilim Regülatörü (AVR) model 1 ve farklı Türbin yöneticisi (TG) modelleri ile birlikte özdeğer analizi yardımıyla küçük sinyal kararlılığı incelemesi yapılmıştır. Son yıllarda güç sistemi kararlılığı çalışmalarında kullanılan güç elektroniği tabanlı Esnek AC İletim Sistemi (FACTS) cihazlarından olan Birleştirilmiş güç Akışı Kontrolü (UPFC) ve Güç Salınım Sönümlemesi (POD) birlikte koordinasyon kontrolünün sağlanması amacıyla kullanılmıştır. Benzetim çalışması bir Matlab aracı olan Güç Sistemleri Analizi Programı (PSAT) kullanılarak gerçekleştirilmiştir. Yapılan çalışma sonucunda farklı Türbin yöneticisi (TG) modellerinin UPFC-POD ile birlikte kullanılmasıyla açısız hız, bara gerilimleri, aktif güç, reaktif güç karşılaştırmaları yapılmış ve özdeğer analiziyle küçük sinyal kararlılığı incelenmiştir. İnceleme sonuçları Türbin yöneticisinin ikinci modelinin birinci modeline göre daha üstün sonuçlar verdiğini ve kararlılık açısından kullanımının daha uygun olduğunu göstermiştir.

Anahtar Kelimeler: Küçük sinyal kararlılığı, PSS, AVR, UPFC-POD, Farklı TG modelleri**ABSTRACT**

In recent years, the rapid increase of the population and the development of technology cause the growth of power systems. The growth brings problems with it. One of these problems is stability problems. Stability in power systems is generally defined as the ability of the system to maintain its operational balance in case of any deterioration. It is important to extinguish the low frequency oscillations that power systems are exposed to so that synchronous



generators can maintain synchronization. This ability to maintain synchronization refers to small signal stability. In this study, type 2 of the Power System Stable Sword (PSS), type 1 of the Automatic Voltage Regulator (AVR) and the different Turbine Governor (TG) types are used in a 2-field, 4-generator power system. Together with the help of eigenvalue analysis, small signal stability analysis has been done. Unified Power Flow Control (UPFC) and Power System Damping (POD), which are power electronics based Flexible AC Transmission System (FACTS) devices used in power system stability studies in recent years, have been used to provide coordination control. The simulation study was carried out using the Power Systems Analysis Program (PSAT), which is a Matlab tool. As a result of the study, using different Turbine Governor (TG) types together with UPFC-POD, angular velocity, busbar voltages, active power, reactive power comparisons were made and small signal stability was investigated by eigenvalue analysis. The results of the investigation showed that the second model of the turbine manager gives superior results compared to the first model and is more suitable for use in terms of stability.

Keywords: Small signal stability, PSS, AVR, UPFC-POD, Different TG types.



İMAM BİRGİVÎ'NİN DÜŞÜNCE SİSTEMİNDEN SEMANTİK ANALİZLER: 'İMAN, KÜFÜR, BID'AT VE TEKFİR" KAVRAMLARI ÖRNEĞİ
SEMANTIC ANALYZES FROM IMAM BIRGIVÎ'S THOUGHT SYSTEM: EXAMPLE OF CONCEPTS OF 'FAITH, BLASPHEMY, BID'AH AND TAKFIR'

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ÖZET

Osmanlı Devleti'nin 16. yüzyılda yetiştirdiği Hanefî-Mâtürîdî bilginlerden biri olan İmam Birgivî, dinî ilimlerde telif ettiği eserleriyle İslâm dünyasında haklı bir şöhrete kavuşmuş bir mütefekkindir. Hayatını irşad, tedris ve telif faaliyetlerine adanmış Birgivî, yaşadığı çağın problemlerine duyarsız kalmamış, içinde bulunduğu toplumun inanç ve değerlerine karşı sorumluluk bilinciyle hareket etmiş, dinî ve ahlakî açıdan yozlaşmaya maruz kaldığını düşündüğü toplumu ıslah etmeye çalışarak, ömrünün büyük bir kısmını mücadeleler içerisinde geçirmiştir. Bu bağlamda eserlerinde İslam dini hakkında Müslümanları bilgilendirip, onları bid'at ve hurafelerden arındırarak Kur'an ve sünnetin Ehl-i Sünnet tarafından yorumlanıp hayata aktarılma biçimine uygun bir toplum tesis etmeyi temel hedef edinmiştir. Bu amaçla gerek vaazlarında gerekse eserlerinde Kur'an'a, Sünnet'e, Sünnî itikada, millete ve devlete karşı zararlı gördüğü her anlayışı ilmî çerçeve içinde eleştirmiştir. Bu çerçevede İslamî ilimlerin hemen hemen her sahasında kalem oynatmış, özellikle dinin aslı ve temel dayanağı olarak değerlendirdiği İslam akaidi ve kelamı alanında çeşitli eserler telif etmiştir. Birgivî'nin en çok üzerinden durduğu konuların başında ise din, millet, iman, İslam, küfür, tekfir ve bid'at konuları gelmektedir. Birgivî, bu konulara ilişkin temel görüşlerini genelde Ehl-i Sünnet özelde Hanefî-Mâtürîdî geleneği çerçevesinde kısa ve özlü bir şekilde anlatmaya çalışmıştır. Bu bağlamda makalenin amacı söz konusu kavramlara ilişkin Birgivî'nin semantik yorumlarını analiz edip, bu kavramlar üzerine inşa etmeye çalıştığı din anlayışını genel hatlarıyla tespit etmeye çalışmaktır.

Anahtar Kelimeler: Birgivî, Din, Millet, İslam, Küfür, Tekfir, Bid'at

ABSTRACT

Imam Birgivî, one of the Hanafî-Mâtürîdî scholars educated by the Ottoman Empire in the 16th century, is a scientist who gained a rightful reputation in the Islamic world with the works he authored in religious sciences. Birgivî, who devoted his life to guiding, education and moral activities, did not remain indifferent to the problems of the age he lived in, acted with a sense of responsibility towards the beliefs and values of the society he lived in, and spent most of his life in struggles by trying to reform the society that he thought was subjected to religious and moral corruption. In this context, in his works, he aimed to inform Muslims about Islam, purify them from bid'ahs and superstitions, and to establish a society suitable for the way the Qur'ân and Sunnah are interpreted and transferred to life by Ahl al-Sunnah. For this purpose, in both his sermons and works, he criticized every understanding he deemed



harmful against the Qur'ān, Sunnah, Sunnī faith, nation and state within a scientific framework. In this context, he wrote in almost every field of Islamic sciences in order to reveal a sound understanding of religion purified from bid'ahs and superstitions, and he wrote various works in the field of Islamic creed and theology, which he regarded as the original and basic basis of religion. Birgivī's main focus is on religion, nation, belief, Islam, blasphemy, takfir and bid'ah. Birgivī tried to explain his basic views on these issues in a short and concise manner, generally within the framework of the Ahl al-Sunnah and specifically the Ḥanafī-Māturīdī tradition. In this context, the aim of the article is to analyze the semantic interpretations of Birgivī on the aforementioned concepts, based on his basic works, and to try to determine the understanding of religion he tries to build on these concepts in general..

Keywords: Birgivī, Religion, Nation, Islam, Blasphemy, Takfir, Bid'ah



KURUMSAL İTİBAR BİLEŞENLERİNİN REKLAMDAKİ YERİ: KOÇ HOLDİNG REKLAMLARI ÖRNEĞİ

THE PLACE OF CORPORATE REPUTATION COMPONENTS IN THE ADVERTISEMENT: THE SAMPLE OF KOÇ HOLDING ADVERTISEMENTS

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ÖZET

İnsanoğlu var olduğu günden bu yana çevresindeki imgeler ve iletilerle iç içe yaşamaktadır. Reklam kavramının ortaya çıkışıyla birlikte bireyler tüketici konumuna gelmeye başlamıştır. Bunun farkında olan kurumlar da tüketicilere karşı bir arzu nesnesi olarak gözükmek, akılda kalmak ve bir ihtiyaçmış gibi algılanmak üzere sürekli olarak tüketicilerin zihinlerine yerleşmeye ve farklılık yaratmaya çalışmaktadırlar. Bu amacı gerçekleştirmek için kurum veya kuruluşlar, mal veya hizmetlerini, hedef kitlelerine tanıtmakta kullandıkları en önemli unsurlardan biri reklamlardan yararlanmaktadır. Reklamlarda mesaj yaratılırken asıl olgu tüketicinin ilgisini çekmeyi sağlamaktır. Reklamları incelediğimizde; tüketici zihnine gönderilen iletiler bireylerin tüketim davranışına yönelmesinde ya da bireylerin zihninde bir imajın oluşmasında büyük rol oynadığı görülmektedir. Reklamlarda kullanılan renkler, yazı karakterleri, kişiler, fotoğraf açıları, verilen mesajlar, müzik gibi öğelerin nasıl ve hangi duyguları çağrıştırmaya amaçlı kullanıldıklarına bağlı olarak tüketici zihninde yaratılmak istenen mesajı etkilemektedir. Böylece tüketicilerin yaşam biçimlerini etkilemekte ve duygularına hitap etmektedir. Bu çalışmada Türkiye’de yapılan araştırmalar sonucu en itibarlı marka olarak kabul edilen Koç Holdingin youtube, facebook ve instagram, twitter reklamları incelenmiş olup Koç Holding kurumsal reklamlarında, göstergebilimsel yöntemlerden yararlanarak duygusal cazibenin ne şekilde yer aldığına, kurumsal çevre ve sosyal sorumluluğunun kurumsal reklamlara ne şekilde yerleştirildiği incelenmiştir. Seçilen kurumsal reklamlar, Göstergebilim kuramcısı olan Roland Barthes’in ‘Anlamlandırma Kuramına dayandırılarak gösteren, gösterilen, düz anlam ve yan anlam açısından içerik çözümlenmesi yapılmıştır.

Anahtar Kelimeler: Reklam, Kurumsal İtibar, Göstergebilim, Koç Holding**ABSTRACT**

Mankind has been living with the images and messages around it since its existence. With the emergence of the concept of advertising, individuals have become consumers. Institutions that are aware of this are constantly trying to settle in the minds of consumers and make a difference in order to be seen as an object of desire towards consumers, to remain in mind and to be perceived as a need. In order to achieve this aim, institutions or organizations use advertising, which is one of the most important elements used in introducing their goods or services to their target audiences. The main fact when creating a message in advertising is to attract the attention of the consumer. When the advertisements are examined; the messages which were sent to the consumers’ mind play an important role in the direction of consumption behavior of individuals



or the formation of an image in the minds of individuals. The colors, characters, people, photo angles, messages, music used in advertisements and how the elements are used for the purpose of evoking emotions affect the message intended to be created in the consumer's mind. Thus, it affects consumers' lifestyles and appeals to their emotions. In this study, youtube, facebook, instagram and twitter advertisements of Koç Holding which is considered the most prestigious brand according to the results of researches conducted in Turkey have been examined. In Koç Holding's corporate advertisements, it has been examined how emotional attraction takes place by using semiotic methods and how corporate environmental and social responsibility is placed in corporate advertisements. The selected corporate advertisements were analyzed based on the Semantic Theory of Roland Barthes, a semiotic theoretician, and analyzed in terms of denotative meaning and connotative meaning.

Key Words: Advertisement, Corporate reputation, Semiotics, Koç Holding



EFFECT OF SUPPLEMENTATION OF CARDAMOM POWDER TO THE LAYING HEN DIETS ON PERFORMANCE AND EGG QUALITY PARAMETERS

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ABSTRACT

The current research was conducted to determine the effects of cardamom powder addition to ATAK-S laying hen diets on performance and egg quality parameters. In the experiment, a total of 80 ATAK-S laying hens aged 38 weeks were randomly allocated to 4 treatment groups with 4 replications, each containing 5 hens. Laying hens were fed for 10 weeks with treatment diets added 0.0, 0.5, 1.0, 1.5 and 2.0 g/kg of cardamom powder to the basal diet. With the supplementation of cardamom powder to the diet, feed intake ($P<0.01$) and feed conversion ratio ($P<0.05$) decreased significantly, while other performance parameters were not affected ($P>0.05$). The supplementation of cardamom powder to the diet did not affect the external and internal quality parameters of eggs ($P>0.05$). According to the results obtained from the experiment, adding of 1.0 g/kg cardamom powder to the diet was sufficient to improve the feed efficiency in laying hens without affecting the egg production and egg quality.

Keywords: Laying hen, cardamom, performance, egg quality.



GÜNEŞ ENERJİ SİSTEMLERİNDE VERİMLİLİK

EFFICIENCY IN SOLAR ENERGY SYSTEMS

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ÖZET

Gelişen dünyamızda en önemli sorunlardan biride enerji ihtiyacıdır. Bu enerji ihtiyacının %81'i fosil yakıt kaynaklarında karşılanmaktadır. Kısa zamanda bu kadar yoğun kullanılan fosil kaynaklı yakıtların, çevreye vereceği zararda dolayısıyla fazla olmaktadır. Bu durum, daha istikrarlı, sürdürülebilir ve çevreye zarar vermeyecek enerji kaynaklarına yönelimi arttırmaktadır. Şüphesiz en önemli enerji kaynağımız güneştir. Güneş enerjisinin bol ve daha da önemlisi yenilenebilir olması güneşin enerji alanında kullanılmasının en önemli etkenlerindedir. Bu nedenle güneş enerjisinden elektrik üretimi alternatif enerji kaynakları içinde en popüler olanıdır.

Güneş enerjisini kullanabilmek için çok önemli çalışmalar yapılmakta ve birçok farklı güneş enerjisi sistemleri geliştirilmektedir. Günümüzde güneş pillerinde verim artışı için birçok yöntem geliştirilmiştir. Bu yöntemler biri olarak kısaca; Maksimum Güç Takibi (MGT) yöntemi ile maksimum güç noktasının izlenmesi, güneş takip sistemi ile güneşin doğuş ve batış saatleri temel alınarak güneşin izlenmesi gibi yöntemlerdir. Yapılan birçok çalışmada güneş takip sistemlerinin sabit sistemlere göre FotoVoltaik (FV) panellerde elektrik enerjisi kazançlarını önemli oranda arttırdığı tespit edilmiştir. Bundan dolayı uygulanacak FV panel sistemlerinde güneş takip sistemlerinin kullanımı tavsiye edilmektedir.

Bir diğer yöntem ise Yoğunlaştırılmış Güneş Enerjisi (YGE) sistemleridir. FV sistemlerden farklı olarak YGE sistemlerin kısa süreliğine ısı enerjisini depolama özelliği, bu sistemlerin en yüksek talebin olduğu saatlerde depoladıkları ısı enerjisini elektriğe çevirebilmelerini sağlamaktadır. Bu da tesisin faydalı pik yük profiline yakın bir çalışma potansiyeli ile işletilmesini mümkün hale getirmektedir. YGE sistemleri modülerdir, küçük ölçekli sistemlerden şebeke bağlantılı büyük sistemlere kadar imal edilebilirler. Dağıtık elektrik üretim sistemlerine uyumludurlar. Hibrit uygulamalar ile eş zamanlı çalışarak, tüm gün boyunca enerji sürekliliğine katkı sağlarlar. İşletme maliyeti açısından ekonomiktirler. Farklı modülleri ile farklı uygulamalarda kullanılmaktadırlar. String Motorlu Güneş Takip Sistemi (SMGTS) gibi bazı YGE sistemli üretim yöntemleri benimsenmelidir. Zira sabit FV panelli sistemlerde sıcaklık dezavantaj olup verimi azaltırken, DMGTS gibi ısı kaynaklı YGE sistemlerinde ise sıcaklık verimi yükselten en önemli parametredir. 2060 öngörülü kaynaklara göre toplam son enerji ihtiyacı karşılama oranları YGE %18, FV %13, Rüzgâr %18, Petrol %5, Kömür ve gaz %3 olarak tahmin edilmektedir. YGE teknolojisinin geleceği nokta daha iyi anlaşılmaktadır.

Anahtar Kelimeler: Yenilenebilir enerji, Yoğunlaştırılmış güneş enerjisi, Fotovoltaik



ABSTRACT

One of the most important problems in our developing world is the need for energy. 81% of this energy need is met by fossil fuel resources. In the short time, the damage to the environment caused of fossil fuels which use so intensely will therefore higher. In this case, increases the orientation on energy sources that more stable, sustainable and will not harm the environment. Undoubtedly, our most important source of energy is the sun. The fact that solar energy is plenty and more importantly renewable, it is the most important factors in using the sun in the field of energy. Therefore, Electricity generation from solar energy is the most popular in the alternative energy sources.

Very important studies are carried out to be able to use solar energy and many different solar energy systems are developed. Today, many methods have been developed to increase the efficiency of solar cells. Briefly as one of these methods; These are methods such as monitoring the maximum power point with the Maximum Power Tracking (MPPT) method and tracking the sun based on the sunrise and sunset times with the sun tracking system. In many studies done, it has been determined that solar tracking systems significantly increase electrical energy gains in PhotoVoltaic (PV) panels compared to fixed systems. Therefore, it is recommended to use solar tracking systems in PV panel systems to be applied.

Another method is Concentrated Solar Energy (CSE) systems. Unlike PV systems, the short-term thermal energy storage feature of CSE systems enables these systems to convert the heat energy into electricity during the hours of the highest demand. This makes it possible to operate the facility with a working potential close to the useful peak load profile. CSE systems are modular, they can be manufactured from small-scale systems to large grid-connected systems. They are compatible with distributed electricity generation systems. They contribute to energy continuity throughout the all day long by working simultaneously with hybrid applications. They are economical in terms of operating costs. They are used in different applications with different modules. Production methods with some CSE systems such as String Motor Solar Tracking System (SMSTS) should be adopted. While temperature is a disadvantage in systems with fixed PV panels and decreases efficiency, in heat source CSE systems such as SMSTS, temperature is the most important parameter that increases efficiency. According to 2060 projected sources, the total final energy requirement meeting ratios are estimated as CSE 18%, PV 13%, Wind 18%, Oil 5%, Coal and gas 3%.

Keywords: Renewable energy, Concentrated solar energy, Photovoltaic



KENTİÇİ SANAYİ ALANLARININ DÖNÜŞÜMÜ: BAKÜ SİYAH ŞEHİR PETROL SANAYİ BÖLGESİ

TRANSFORMATION OF BROWNFIELDS: BAKU BLACK CITY OIL INDUSTRIAL ZONE

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ÖZET

Son yıllarda, kent içinde yer alan işlevini yitirmiş eski sanayi alanların (brownfield) yeni kentsel mekan ihtiyaçları doğrultusunda sürdürülebilir plan kararlarıyla yeni kullanım alanlarına dönüştürülmesi hem gelişmiş hem de gelişmekte olan ülkelerin güncel konularındandır. Herhangi bir işlev ilk kurulduğu zamandaki koşullar için en ideal konum olarak yer seçse bile, değişen çevre koşulları, teknolojik gelişmeler gibi nedenler sonucu zaman içinde sözü edilen alan, işlerliği azalan bir konuma gelebilmekte ve bu durumda da atıl kalan bir alanı yeniden işlevlendirilmesi kentsel dönüşüm örneklerinin ortaya çıkmasına sebep olmaktadır. Kentsel dönüşüm; eskimiş, köhnemiş, yıpranmış veya terkedilmiş kentsel alanların sosyal, ekonomik, fiziksel ve çevresel koşullarına kalıcı bir çözüm üreten kent parçalarının yeniden yapılanmasını sağlayan karar ve uygulamaları içeren kapsamlı bir projelendirme sürecidir. Kentsel dönüşüm projeleri fiziksel mekan değişiminin yanı sıra alanda yaşayan bireylerin yaşayışını, o alanı kullanımını, sosyal ve kültürel mekan değişimini yeniden şekillendirerek kentin yaşam kalitesini yükselterek mekana artı değer katmaktadırlar. Azerbaycan'ın en kapsamlı sanayi alanı dönüşüm projesi Bakü Körfezi'nin merkezinde bulunan Beyaz Şehir dönüşüm projesidir. Bu proje, önemli bir tarihi geçmişe sahip kent içinde sıkışmış ve önceki işlevini kaybetmiş sanayi alanının modern karma yaşam alanına dönüşümünün bir örneğidir. Bu kapsamda, çalışmada günümüzde eski işlevini yitirmiş olan Siyah Şehir Petrol Sanayi Bölgesi ve alan için geliştirilen Beyaz Şehir Dönüşüm Projesi kararları açıklanarak konunun incelenmesi amaçlanmıştır.

Anahtar Kelimeler: “Sanayi alanları”, “kentsel dönüşüm”, “Bakü”, “Siyah Şehir”.

ABSTRACT

In recent years, the transformation of brownfields in the city into new uses with sustainable planning decisions in line with the new urban space needs is one of the current issues of both developed and developing countries. Even if any function chooses the most ideal location for the conditions when it was first installed, due to the changing environmental conditions and technological developments, the mentioned area may become less functional over time, and in this case, the re-functioning of an idle area leads to the emergence of examples of urban



transformation. Urban transformation is a comprehensive project design process that includes decisions and practices that enable the restructuring of urban parts that produce a permanent solution to the social, economic, physical and environmental conditions of old, rundown, worn or abandoned urban areas. In addition to physical space change, urban transformation projects add value to the space by reshaping the life of individuals living in the area, the use of that area, and the change of social and cultural space, increasing the life quality of the city. Azerbaijan's most comprehensive brownfield transformation project is the White City transformation project located in the center of Baku Bay. This project is an example of the transformation of the brownfield, which was stuck in a city with an important historical past and lost its previous function, into a modern mixed living space. In this context, the aim of this study was to explain the Black City Petroleum Industrial Zone, which has lost its former function, and the White City Transformation Project decisions developed for the area.

Keywords: “Industrial areas”, “urban transformation”, “Baku”, “Black City”.



**MOTOR OIL FOR AUTOTRACTOR DIESELS BASED ON REGENERATION
PRODUCTS OF UTILIZED ENGINE OIL**

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ABSTRACT

The rapid expansion of the car and other equipment fleet from year to year creates environmental stress by polluting the environment. This applies not only to motor oils, but also to industrial, compressor, transformer, turbine and other oils. Used natural oils are partially purified or neutralized as a result of natural processes. One of the main tasks of modern petrochemical science is to minimize this damage. To reduce the environmental stress as much as possible, to improve the quality of lubricants with special additives – additives to increase their service life, as well as to ensure the reuse of used oils. Research has been carried out to partially restore and reuse. A new regeneration method for the recovery of used samples of lubricating oils – a technological process has been developed and an analogue of commercial oil with additive composition has been created on the basis of the obtained regeneration product. The recycling of used oil will also affect the cost of this product.

A new M-10G2 (API CC SAE 30) engine oil for blown and non-blown tractor diesels has been developed on the basis of used engine oil regeneration products.

In the preparation of this composition, the multi-functional additive package OLOA-9999, detergent-dispersant Lubrizol-6446, from the regeneration product of Musella-40 motor oil with high viscosity – temperature, ignition and low freezing-temperature properties, used as a



base oil for 6000 hours in the generator of Modular Power Plant. polymethacrylate depressant Viscoplex 5-309 and anti-foaming additives PMS-200A were used.

The use of regeneration products as a base oil is economically, environmentally and politically important.

Keywords: engine oil, regeneration, base oil, additive package, lubricant composition

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**TÜRKİYE’NİN SINIRAŞAN SU POLİTİKASI: MERİC-ERGENE HAVZASI
ÖRNEĞİ****TURKEY’S TRANSBOUNDARY WATER POLICY: THE EXAMPLE OF MERIC-
ERGENE RIVER BASIN****Dr. Burçin Demirbilek**

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ÖZET

Toplam uzunluğu 492 km olan Meriç Nehir havzası, Bulgaristan, Türkiye ve Yunanistan topraklarında yer almaktadır. Bu havzada, Bulgaristan yukarı kıyıdaş, Türkiye ve Yunanistan aşağı kıyıdaş ülke pozisyonundadır. Havzanın yukarı kesimlerinin dağlık, orta ve aşağı kesimlerinin düz olmasından dolayı havzadaki akım rejiminin düzensiz olması, Türkiye’de ciddi taşkınların meydana gelmesine ve tarım arazileri üzerinde ciddi tahribata yol açmaktadır. Havzada sanayileşme, tarım faaliyetleri ve kentleşmeden dolayı su kirliliği artmıştır. Bu bağlamda, Avrupa Birliği (AB) Su Çerçeve Direktifi’ne bağlı olarak AB ülkesi kıyıdaş ülkelerin ortak bir havza yönetim planı hazırlaması gerekmektedir. Bu mümkün olmadığında da ülkelerin ayrı ayrı kendi havza planlarını hazırlaması gerekir. Meriç havzası için ortak hazırlanmış bir havza yönetim planı yapılamamıştır. Ancak, havzadaki taşkın, su kirliliği, tarım alanlarının sulanması gibi meselelerin çözülmesi için kıyıdaş ülkelerin çeşitli çabaları olmuştur. Örneğin, ülkeler arasında enerji üretimi, sulama ile ilgili olarak ikili anlaşmalar imzalanmıştır. Ayrıca, yine ülkeler arasında havzanın daha iyi yönetimi için bilgi paylaşımını arttırmak, taşkın risklerinin azaltılması, gerekli altyapının oluşturulması gibi konularda ülkeler arasında Avrupa Birliği fonlarıyla çeşitli projeler oluşturulmuştur. Bu projeler, teknik desteğin sağlanması, bütün paydaşların havza yönetim sürecine dahil olması ve bilgilendirilmesi gibi meseleleri kapsamaktadır. Sonuç olarak, bu çalışma, Meriç havzasını paylaşan üç kıyıdaş ülke arasında su paylaşımı ve havzadan kaynaklı yaşanan sorunları, bu bağlamda soruların çözülmesi için yapılan anlaşmaları ve projeleri analiz etmeyi amaçlamaktadır. Bunun için doküman analizi yapılmış ve resmi raporlar, AB raporları ve projeleri incelenmiştir.

Anahtar Kelimeler: Meriç-Ergene havzası, su yönetimi, Türkiye, anlaşmalar**ABSTRACT**

Maritsa river is located in Turkey, Greece and Bulgaria and is 492 km long. Within this basin, Bulgaria is the upper-riparian, Turkey and Greece are down-stream riparian countries. The upper parts of the basin are mountainous; the regime flow in the basin is irregular due to the linearity of the middle and lower sections which has contributed to serious flooding and damage in the agricultural lands. Water pollution has been increased in the basin due to industrialisation, agricultural activities and urbanisation. In this context, the riparian countries, EU members, should develop a common basin management plan. If this is not viable, riparian countries should prepare their own basin plans individually. Relatively, a common basin management plan could not be prepared for the Maritsa basin. However, there have been various efforts of



riparian countries to resolve issues such as flood, water pollution, and irrigation of agricultural lands in the basin. For example, bilateral agreements have been signed between countries related to energy production and irrigation. Additionally, various projects have been established between the countries with European Union funds with regards to increasing information sharing amongst the countries, reducing flood risks and establishing the necessary infrastructure for better management of the basin. These projects focus on issues such as providing technical support, involving and informing all stakeholders in the watershed management process. Therefore, this study aims to analyse water sharing amongst the three riparian countries that share the Maritsa basin and the issues arising from the basin, the agreements and projects taking place.

Keywords: Maritsa-Ergene basin, water management, Turkey, agreements



**OPTIMIZATION OF THREE-ELEMENT TUNED MASS DAMPER FOR MULTI
STORY BUILDING UNDER EARTHQUAKE EXCITATIONS**

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ABSTRACT

Tuned mass dampers (TMDs) are widely used especially in reducing vibrations in buildings due to wind, traffic loads and earthquakes. A TMD consists of a stiffness element, a dashpot element and a mass. The basic principle in reducing vibration is to tune the frequency of TMD close to the dominant frequency of the structure. TMDs are divided into 4 groups as active, passive, hybrid and semi-active. Passive TMDs are more widely used than others, since they do not need any energy source. Passive dampers also vary within themselves. For example, traditional TMD, non-traditional TMD (N-TMD), series TMDs (STMDs), parallel TMDs (PTMDs) and TMD with inerter (TMD-I), etc.

This work deals with the effectiveness of the three-element TMD (T-TMD) to suppress dynamic vibrations of the multi-story building under various earthquake records. Unlike the traditional TMDs, the T-TMD contains two spring elements and one of them is connected in series with the damping element. In numerical analysis, the T-TMD is placed on the top story of a ten-story building. The mass, stiffness and damping coefficient of the building are the same on all floors. The genetic algorithm (GA) is used to obtain the optimum damping, frequency and stiffness ratios of the T-TMD. The objective function is to minimize the top story displacement.

According to the results, the optimum T-TMD is very effective in reducing vibrations of the building due to earthquake excitations.

Keywords: Dynamic response, Optimization, Tuned Mass Damper, Vibration Control



**MAYIS SİNEĞİ OPTİMİZASYON ALGORİTMASI KULLANILARAK
EKONOMİK YÜK DAĞITIMI
ECONOMIC LOAD DISPATCH PROBLEM USING A MAYFLY OPTIMIZATION
ALGORITHM**

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ÖZET

Güç sistemlerinde, teknolojik gelişmeler ve artan güç talebi nedeniyle düşük maliyetli elektrik enerjisi üretimi son derece önemli bir konu haline gelmiştir. Ekonomik Yük Dağıtımı (EYD), güç sistemlerinde uzun yıllardan beri mevcut olan ve günümüzde popülerliğini sürdüren en temel optimizasyon problemlerinden bir tanesidir. EYD probleminin temel amacı, çeşitli eşitlik ve eşitsizlik kısıtlamaları göz önünde bulundurularak, yük talebini karşılamak için sistemdeki termal ünitelerin çıkışının minimum maliyetle belirlenmesidir. EYD doğrusal olmayan ve konveks olmayan bir optimizasyon problemidir. Güç sistemlerinde çok vanalı buhar türbinlerinden oluşan termik generatör ünitelerinin maliyet fonksiyonunun konveks olmaması çeşitli dalgalanmalara neden olur. Bu nedenle, valf-nokta etkisinden dolayı EYD problemi için en iyi çözümü elde etmek zorlaşır. Bu amaçla valf-nokta etkili EYD probleminde optimum çözümü elde etmek için farklı sezgisel algoritmalar uygulanmıştır. Bu çalışmada, valf-nokta etkili EYD problemini çözmek için Mayıs Sineği Optimizasyon Algoritması (MSOA) uygulanmıştır. Sürü zekası ve evrimsel tabanlı bir yöntem olan MSOA'nın ilham kaynağı, mayıs sineklerinin uçuş davranışı ve çiftleşme sürecidir. Önerilen algoritmanın etkisini ve geçerliliğini göstermek için MSOA, 13 termik generatör ünitesinden oluşan bir sistemde güç kaybı olan ve olmayan bir şekilde test edilmiştir. Test senaryolarından elde edilen sonuçlara göre, MSOA'nın son zamanlarda kullanılan diğer sezgisel algoritmalara göre minimum maliyet değeri açısından daha iyi sonuçlar verdiği görülmektedir.

Anahtar Kelimeler: Ekonomik Yük Dağıtımı, Mayıs Sineği Optimizasyon Algoritması, Valf-Nokta Etkisi

ABSTRACT

In power systems, low-cost electrical energy generation has become an extremely important issue due to technological developments and the increasing power demand. Economic Load Dispatch (ELD) is one of the most fundamental optimization problems in power systems that has been existed for many years and continues to be popular today. The main purpose of the



ELD problem is to determine the output of the thermal units in the system at minimum cost in order to meet the load demand, considering various equality and inequality constraints. ELD is a non-linear and non-convex optimization problem. In power systems, the fact that the cost function of thermal generator units consisting of multi-valve steam turbines is not convex causes various ripples. Therefore, due to the valve point effect, it becomes difficult to obtain the best solution for the ELD problem. For this purpose, different heuristic algorithms have been implemented to obtain the optimum solution in the ELD problem. In this paper, the Mayfly Optimization Algorithm (MOA) has been implemented to solve the ELD problem with the valve-point effect. The inspiration of MOA, swarm intelligence, and evolutionary-based method, is the flight behavior and mating process of the mayflies. In order to demonstrate the effect and feasibility of the proposed algorithm, MOA was tested with and without power loss in a system consisting of 13 thermal generator units. According to the results obtained from the test scenarios, it is seen that MOA gives better results in terms of minimum cost value compared to the other heuristic algorithms used recently.

Keywords: Economic Load Dispatch, Mayfly Optimization Algorithm, Valve-Point Effect



**GÜÇ SİSTEMLERİNDE FARKLI OTOMATİK GERİLİM REGÜLATÖRÜ
MODELLERİ İLE GERİLİM KARARLILIĞI ANALİZİ****VOLTAGE STABILITY ANALYSIS WITH DIFFERENT AUTOMATIC VOLTAGE
REGULATOR MODELS IN POWER SYSTEMS****Arş. Gör. Enes KAYMAZ**

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ÖZET

Günümüzde gelişen teknolojiye bağlı olarak elektrik güç sistemlerinden talep edilen güçte ciddi oranda bir artış söz konusudur. Bu durum, şebekelerin çalışma koşullarında değişikliklere yol açarak gerilim kararlılığı açısından çeşitli sorunlara neden olmaktadır. Güç sistemlerinde gerilim-maksimum yüklenme parametre değeri arasındaki ilişki gerilim kararlılığı açısından önemlidir. Bir güç sisteminin kararlılığını arttırmak ve elektrik gücünün kalitesini iyileştirmek için en önemli faktörlerden biri, senkron generatörün uyarım kontrolüdür. Güç sistemlerinde gerilim kararsızlığı yaşanması durumunda, senkron generatörlerin çıkış gerilimini belirli bir seviyede tutabilmek amacıyla Otomatik Gerilim Regülatörü (OGR) kullanımı tercih edilen bir yöntemdir. Yapılan bu çalışmada, güç sistemlerinde senkron generatörlerin yer aldığı baralara dahil edilen farklı tipteki OGR modellerinin gerilim kararlılığı üzerinde oluşturduğu etkiler ele alınmaktadır. Benzetim çalışması, Güç Sistemi Analizi Programı (PSAT) kullanılarak WSCC 3 - makineli 9 -baralı test sisteminde OGR Tip II ve OGR Tip III modelleri için gerçekleştirilmiştir. Senkron generatör modeli olarak, 4.dinamik derece modeli kullanılmıştır. Çalışmada tercih edilen her iki tip OGR modeli de gerilim - maksimum yüklenme parametre değeri ve bara gerilim genlik profilleri açısından analiz edilmiş ve karşılaştırılmıştır. Gerçekleştirilen benzetim çalışmasına göre elde edilen sonuçlar incelendiğinde, kullanılan iki farklı tip OGR modelinin de gerilim kararlılığı konusunda sisteme olumlu etki yaptığı, ancak OGR Tip III modelinin, OGR Tip II modeline kıyasla maksimum yükleme parametresi ve baraların gerilim genlik profili açısından daha etkili sonuçlar verdiği görülmektedir.

Anahtar Kelimeler: Gerilim Kararlılığı, Otomatik Gerilim Regülatörü, Gerilim-Maksimum Yüklenme Değeri, Bara Gerilim Profilleri.

ABSTRACT

Today, depending on the developing technology, the power demanded from electrical power systems is significantly increasing. This situation leads to changes in the operating conditions of the grids, causing various problems in terms of voltage stability. In power systems, the



relationship between voltage and the maximum load parameter value is critical in terms of voltage stability. One of the most significant factors for increasing the stability of a power system and improving the quality of electrical power is the excitation control of the synchronous generator. In case of voltage instability in power systems, the use of an Automatic Voltage Regulator (AVR) is a preferred method to keep the output voltage of synchronous generators at a certain level. In this study, the effects of different types of AVR models included in buses in which synchronous generators have located in power systems on voltage stability have been discussed. The simulation study was carried out using the Power System Analysis Program (PSAT) for the AVR Type II and AVR Type III models in the WSCC 3-machine - 9-bus test system. In the simulation study, the 4th dynamic rating model was used as the synchronous generator model. Both types of AVR models preferred in the study were analyzed and compared in terms of voltage - maximum load parameter value and bus voltage - amplitude profiles. When the results obtained from the simulation study are examined, it is seen that the two different AVR models used have a positive effect on the system in terms of voltage stability, and the AVR Type III model gives more effective results in terms of the maximum loading parameter and voltage amplitude profile of the buses compared to the AVR Type II model.

Keywords: Voltage Stability, Automatic Voltage Regulator, Voltage-Maximum Loading Values, Bus Voltage Profiles



**ARAPÇADA EŞ ANLAMLILIK SORUNU VE EŞ ANLAMLILIĞIN DİLDEKİ
KONUMU**

**THE PROBLEM OF SYNONYMY IN ARABIC AND THE PLACE OF SYNONYMY IN
LANGUAGE**

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ÖZET

Dilde eş anlamlılığın olup olmadığı konusu hala tartışıla gelen bir konudur. Bu sebeple gerek araştırmacılar gerek dilbilimciler, dilde eş anlamlılığı sorun olarak görenler ile dilde eş anlamlılığı sorun olarak görmeyenler olmak üzere iki gruba ayrılmıştır. Bu anlaşmazlık geçmişte kalmamış, günümüze kadar süre gelmiştir.

Dilde eş anlamlılık yoktur diyen grup, Kur'an'ı Kerim de her kelimenin farklı bir anlamı olduğunu söyleyerek, delil olarak yüce kitabımızı göstermektedir. Dilde eş anlamlılığı savunan kesim ise bu durumun dile sanatsal ahenk kattığını ve metnin stilini ve yapısını nasıl zenginleştirdiğini dile getirmekte, aynı zamanda eş anlamlı kelimelerin her alanda aynı anlamı paylaşabildiğini ve bu durumun dilde sorun olarak karşımıza çıkmadığını savunmaktadır.

Eş anlamlı kelimeler bütün dillerde bol miktarda bulunur ve dil içinde ve diller arasında farklılık gösterebilir. Hatta bazen bu kelimeler, dilde bulunmalarının bir sonucu olarak çeviri esnasında iki dil arasında tercüme yapan çevirmenlere bile anlam benzerliğinden kaynaklı problem yaşatmaktadır. Konuşmacının o esnada karşı dile ne anlatmak istediği net olarak aktarılamamaktadır.

Arapça farklı manalar barındıran farklı kelimelere, aynı manayı barındıran farklı kelimelere (eş anlam) ve farklı manalar barındıran aynı kelimelere (çok anlamlılık) sahiptir. Bunun yanında, Kur'an'ı Kerim ile olan güçlü bir bağlantısı sebebiyle gerek Dünya da gerek Müslüman ülkelerinde büyük bir öneme sahiptir. Bu durum o dili konuşanların gerek konuşmalarına gerek duygularına gerekse hitap etme şekillerine bile yansımıştır. Aynı şekilde bu durum klasik Arapça da yazılan metinlerde de görülmektedir. Bu çalışmada eş anlamlı kelimelerin dili nasıl etkilediğine dildeki varlığına ve dilbilimcilerin konuya yaklaşımlarına değinilmiş, konuya ışık tutması ve literatüre katkı sunması hedeflenmiştir.

Anahtar Kelimeler: Eş Anlam, Arapça, Anlamsal Farklar, Çok Anlamlılık.

ABSTRACT

Whether there is a synonymy in the language is still a matter of debate. For this reason, both researchers and linguists are divided into two groups: those who see and don't see language synonymy as a problem. This issue is not just a former dispute and remains today.

The group, which suggests that there is no synonymy in language, shows our Holy Book as evidence, saying that each word has a different meaning in the Qur'an. The group suggesting the synonymy in language expresses how this synonymy contributes to language by adding



artistic harmony and enriches the text's style and structure. They also argue that synonyms can share the same meaning in any field, which is not encountered as a problem in the language. Synonyms abound in all languages and may differ within and between languages. Since such words exist in the language, sometimes even these words cause problems to translators who translate between the two languages due to the similarity of meaning during translation. The meaning meant by the speaker cannot be interpreted clearly, and the message cannot be conveyed in another language at that moment.

Arabic has different words containing different meanings, different words containing the same meaning (synonymy) and the same words containing different meanings (polysemy). Additionally, because of its strong connection with the Qur'an, it has great importance both in the world and in Muslim countries. For those who speak that language, this has even been reflected in the style of their speech, their feelings, and the way of their addressing. Similarly, this issue can also be observed in texts written in classical Arabic. In this study, we have expressed how synonyms affect language, its presence in language, and linguists' approaches to the issue; we aimed to shed light on the issue and contribute to the literature.

Keywords: Synonym, Arabic, Semantic Differences, Polysemy.



**DIFFUSION-WEIGHTED IMAGING FINDINGS OF BRAIN PARENCHYMA IN
PEDIATRIC INTRACRANIAL HYPERTENSION**

PEDİATRİK İNTRAKRANİYAL HİPERTANSİYONDA BEYİN PARENKİMİNİN
DİFÜZYON AĞIRLIKLIL GÖRÜNTÜLEME BULGULARI

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ABSTRACT

AIM: Intracranial hypertension is a confounding clinical entity encompassing a variety of assumed mechanisms. The chief aim of the study was to determine the presence of brain edema by documenting the findings of diffusion magnetic resonance imaging (MRI) conducted to evaluate the brain parenchyma in patients with pediatric intracranial hypertension.

MATERIALS-METHOD: In this study, 20 patients participated which were categorized into 2 groups as per Friedman's criteria. First group comprised of 11 patients diagnosed with intracranial hypertension while second group comprised of remaining 9 patients diagnosed with probable intracranial hypertension. The ADC_{mean} , ADC_{min} , and ADC_{max} values of the splenium and genu of the corpus callosum, bilateral occipital, parietal, temporal, and frontal cortex and white matter along with the bilateral head of caudate nucleus, putamen and thalamus were evaluated.

RESULTS: The findings indicated that there is a statistically significant difference among patients with respect to their ages ($p: 0.043$). The mean CSF opening pressure was found to be 35.5 ± 9.0 cmH₂O and 25.4 ± 2.6 cmH₂O for first and second group respectively which indicates significant difference ($p < 0.001$). Headache was found to be the most common symptom (50%) followed by double vision (30%). The sinus vein thrombosis ($n = 13, 65\%$), was the most common reason behind the development of secondary intracranial hypertension with transverse sinuses to be the most common thrombosed veins in the two groups. The ADC values (ADC_{mean} , ADC_{min} , and ADC_{max}) for brain parenchyma evaluated in various regions for the groups and controls with corresponding ages did not show any significant difference.

CONCLUSION: In our study, the percentage of the cerebral venous pathology in all patients with clinically intracranial hypertension were 65% which were focal or diffuse stenosis. The tissue compliance in pediatric patients was the main reason behind the similarity in ADC values evaluated for different parts of brain parenchyma. It was also the main factor due to which the brain parenchyma of such patients did not show any infarction.



Keywords: Pseudotumor cerebri, increased intracranial pressure, sinus vein thrombosis, diffusion MRI, childhood

ÖZET

AMAÇ: İntrakranial hipertansiyon çözülemeyen bir klinik antite olup farklı mekanizmaları kapsar. Bu çalışmanın amacı pediatrik intrakranial hipertansiyonlu olgularda beyin parankimini değerlendirmek için difüzyon manyetik rezonans görüntüleme (MRG) bulgularını dokümente ederek beyin ödeminin varlığını tespit etmektir.

MATERYAL-METOD: Çalışmamız Friedman kriterlerine göre 2 gruba ayrılan 20 olguyu içermektedir. Birinci grup intrakranial hipertansiyonlu 11 olgudan, ikinci grup ise olası intrakranial hipertansiyonlu 9 olgudan oluşmaktadır. Korpus kallozum splenium ve genu kesimlerinde, bilateral oksipital, parietal, temporal ve frontal korteks ve beyaz cevherde ve bilateral kaudat nucleus başı, putamen ve thalamusta ADC_{ort} , ADC_{min} , ve ADC_{max} değerleri ölçüldü.

BULGULAR: Gruplar arasında yaşa göre bakıldığında istatistiksel olarak anlamlı fark saptandı. ($p: 0.043$). Ortalama BOS basıncı birinci grupta 35.5 ± 9.0 cmH₂O ve ikinci grupta 25.4 ± 2.6 cmH₂O olarak hesaplandı ve istatistiksel olarak anlamlı fark mevcuttu ($p < 0.001$). Başağrısı en sık semptom idi (50%) ve ikinci sık bulgu çift görme idi (30%). Sekonder intrakranial hipertansiyonun en sık nedeni sinüs ven trombozu olup ($n = 13$, %65), her iki grupta da en sık tromboze ven transvers sinüs idi. Aynı yaşta kontrol grubu ile karşılaştırıldığında farklı beyin parankim alanlarında hesaplanan ADC değerlerinde (ADC_{ort} , ADC_{min} , ve ADC_{max}) istatistiksel olarak anlamlı fark saptanmadı.

SONUÇ: Çalışmamızda klinik olarak intrakranial hipertansiyon tanısı olan olgularda serebral venöz patolojilerin sıklığı % 65 olup fokal veya difüz darlık şeklinde idi. Farklı beyin parankim alanlarında ADC değerlerindeki benzerliğin ana nedeni pediatri olgularındaki doku kompliyansıdır. Ayrıca doku kompliyansı bu olgularda enfarkt gelişmemesinin ana nedenidir.

Anahtar Kelimeler: Psödötümör serebri, kafa içi basınç artışı, sinüs ven trombüsü, difüzyon MRG, çocukluk çağı



VERGİ NƏZARƏT SİSTEMİ**TAX CONTROL SYSTEM****Xətai Salmanov**

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ÖZƏT

Müasir dövrdə sabit iqtisadi mühitin formalaşması və iqtisadi münasibətlərin tənzimlənməsi üçün dövlət maliyyə nəzarətinin bir sıra formalarından istifadə edir. Maliyyə nəzarəti dedikdə, qanunçuluğun, məqsədəuyğunluğun, səmərəliliyinin təmin olunması məqsədi ilə nəzarət orqanları tərəfindən xüsusi üsul və metodlarla həyata keçirilən tədbirlərin məcmusu başa düşülür. Maliyyə nəzarəti fəaliyyəti aşağıdakı tədbirlərin məcmusundan ibarətdir:

- Dövlət maliyyə qanunvericiliyinin tələblərinə riayət olunmasına nəzarət;
- Məcmu ictimai məhsulun dəyərinin və milli gəlirin bölgüsünü və təkrar bölgüsünü təmin etmək;
- Büdcələrin tərtib olunması və büdcə əməliyyatlarına nəzarət;
- Maliyyə vəsaitlərinin səmərəli və məqsədəuyğun xərclənməsinə nəzarət.

Dövlət maliyyə nəzarət mexanizmlərinin əsas formalarından biri də vergi nəzarət sistemidir. Vergi nəzarəti vergi ödənişlərinin düzgün hesablanmasını, vaxtında və tam formada ödənilməsinə, vergi qanunvericiliyinə riayət edilməsinə təmin edən üsul və tədbirlərin məcmusudur. Dövlət maliyyə nəzarətinin ayrılmaz tərkib hissəsi olan vergi nəzarətinin əsas məqsədi büdcə gəlirlərinin formalaşdırılması, dövlətin sürətli iqtisadi artımının təmin edilməsi, sahibkarlığın inkişafının stimullaşdırılmasından ibarətdir. Vergi nəzarəti vergi yoxlamaları vasitəsilə həyata keçirilir ki, bu yoxlamalar müxtəlif xüsusiyyətlərinə görə qruplaşdırılır:

- Yoxlamalar həyata keçirildiyi məkanına görə iki formaya ayrılır: Səyyar yoxlamalar və Kameral yoxlamalar
- Yoxlanılan məsələlərin həcminə görə üç formaya ayrılır: Kompleks yoxlama, Seçmə yoxlama, Məqsədli yoxlama
- Yoxlamalar təşkil olunma formalarına görə iki yerə ayrılır: Növbəti və Növbədən kənar yoxlamalar
- Yoxlamalar həyata keçirilmə üsullarına görə iki yerə ayrılır: Seçmə yoxlamalar və Başdan başa yoxlamalar

Vergi nəzarəti dövlət maliyyəti nəzarəti sistemində xüsusi və əhəmiyyətli rol oynayır. Belə ki, vergi nəzarəti iqtisadiyyatın bütün sahələrinə təsir etməklə, maliyyə qanunvericiliyinin hüquqi əsaslarını təmin edir. Vergi nəzarəti dövlətin iqtisadi inkişafının əsasını təşkil edir. Bu mənada səmərəli və şəffaf vergi nəzarət sisteminin formalaşdırılması bazar iqtisadiyyatlı dövlətlərin prioritet hədəflərinə çevrilmişdir.

ABSTRACT

In modern times, the state uses a number of forms of financial control to create a stable economic environment and regulate economic relations. Financial control is a set of measures



implemented by regulatory authorities in a special way and methods in order to ensure the rule of law, expediency and efficiency. Financial control activity consists of a set of the following measures:

- To control over compliance with the requirements of the state financial legislation;
- To ensure the distribution and redistribution of the value of gross public product and national income;
- Preparing the budgets and control over budget operations;
- Control over efficient and expedient spending of funds.

One of the main forms of state financial control mechanisms is the tax control system. Tax control is a set of methods and measures to ensure the correct calculation of tax payments, timely and full payment, compliance with tax legislation. The main purpose of tax control, which is an integral part of public financial control, is to generate budget revenues, provide rapid economic growth of the state, stimulate entrepreneurship. Tax control is carried out through tax audits, which are sorted according to various features:

Audits are divided into two forms according to the audit place: On-Site audits and Cameral audits

- The audit is divided into three forms according to the scope of the issues inspected: Complex audit, Selective audit, Targeted audit
- Audits are divided into two types according to the form of organization: Regular Internal and External audits
- Audits are divided into two types according to the methods of implementation: Selective audit and Comprehensive audit.

Tax control plays a special and important role in the public financial control system. Thus, tax control provides the legal basis for financial legislation, affecting all sectors of the economy. Tax control is the basis of economic development of the state. In this sense, the formation of an effective and transparent tax control system has become a priority for market economies.



TRANSFER ÖĞRENME TEMELLİ AKTİF ÖĞRENME YAKLAŞIMI İLE TÜRKÇE METİNLERDE DUYGU ANALIZI

SENTIMENT ANALYSIS USING ACTIVE LEARNING BASED TRANSFER LEARNING APPROACH IN TURKISH TEXTS

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ÖZET

Fikir Madenciliği olarak da bilinen Duygu Analizi, metin, ses ve video verilerinden öznel görüş ve duyguları keşfeden Doğal Dil İşleme alanlarından birisidir. Günümüzde yazılı basının yanı sıra kişilerin de artık duygu ve düşüncelerini kolaylıkla paylaşmalarına olanak sağlayan web tabanlı platformların popülerliği bu çalışma alanına ilgiyi artırmaktadır. Literatürde yapılan Duygu Analizi çalışmaları daha çok etiketli veriler üzerinde çalışmaktadır. Özellikle yeni alanlarda verilerin etiketlenmesi oldukça maliyetli bir süreçtir. Etiketli verilerin az olduğu veya hiç olmadığı alanlarda Aktif Öğrenme ve Transfer Öğrenme yaklaşımları oldukça etkin çözümler sunmaktadır. Transfer Öğrenme bir problem çözerken elde edinilen bilginin başka ama ilişkili problemde kullanması prensibine dayanan bir makine öğrenme yaklaşımı olarak tanımlanabilir. Aktif öğrenmedeki ana hipotez ise, bir öğrenme algoritması öğrenmek istediği verileri seçerek, eğitim için önemli ölçüde daha az veri ile daha iyi performans gösterebileceği yaklaşımına dayanır. Bu çalışmada Türkçe metinler üzerinde etiketli verilerin kısıtlı olduğu alanlarda Aktif Öğrenme ve Transfer Öğrenme metotları hibrit olarak kullanılarak duygu analizi yapılmıştır. Önerilen modelde hedef veri kümesini sınıflandırmak için aktif öğrenmenin ilk adımı olan başlangıç veri kümesi seçiminde kaynak veri kümesini temsil eden en iyi örnekler belirlenip bu örnekler modele transfer edilmiştir. Yapılan çalışmada duygu analizinde ortalama %74 başarı elde edilmiştir. Elde edilen başarı etiketli veriler kullanılarak yapılan çalışmalarla yarışmaktadır. Ayrıca önerilen transfer öğrenme tabanlı aktif öğrenme metodu ile Türkçe metinlerde duygu analizi yapılan ilk çalışmalardan birisidir.

Anahtar Kelimeler: Duygu Analizi, Transfer Öğrenme, Aktif Öğrenme**ABSTRACT**

Sentiment Analysis, also known as Opinion Mining, is one of the fields of Natural Language Processing that explores subjective opinions and emotions from text, audio and video data. Today, the popularity of web-based platforms that allow people to share easily their feelings and thoughts as well as the print media increases the interest in this field of study. Sentiment Analysis studies in the literature mostly work on labeled data. Labeled data, especially in new areas, is expensive process. Active Learning and Transfer Learning approaches offer very effective solutions in areas with little or no labeled data. Transfer Learning can be defined as a



machine learning approach based on the principle of using the information which is obtained while solving a problem in another related problem. The main hypothesis in active learning is that a learning algorithm can perform better with significantly less data for education by selecting the data it wants to learn. In this study, Sentiment analysis was performed by using Active Learning and Transfer Learning methods as a hybrid in areas where labeled data are limited on Turkish texts. In the proposed model, the best examples representing the source data set were determined in the initial dataset selection, which is the first step of active learning, to classify the target data set, and these examples were transferred to the model. In the study, an average of 74% success was achieved in sentiment analysis. The obtained success competes with the studies using the labeled data. In addition, it is one of the first studies to analyze sentiment in Turkish texts with the proposed transfer learning-based active learning method.

Keywords: Sentiment Analysis, Transfer Learning, Active Learning



EARLY MDCT FINDINGS IN COVID-19 DISEASE: CAN VASCULAR ENLARGMENT BE A PATOGNOMONIC FIND?

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ABSTRACT

In this cross-sectional study with 278 patients, patients diagnosed as COVID-19 per clinical features, laboratory, and thorax computed tomography (CT) findings, were evaluated concerning the most common characteristic findings. The lesions were classified according to the stage of the disease. The most common findings for each phase were investigated. Typical CT results included ground-glass opacity (GGO), unilateral involvement and single lesion in the early stage, as well as bilateral involvement, and multiple lesions in the progressive and peak phases. Additionally, vascular dilatation was the most common finding after GGO. Basal segment dominance and peripheral-intraparenchymal-basal segment involvement are mostly seen in peak-phase patients. Thus, we think that this finding is an essential key to understand that the disease is in the advanced stage. The crazy-paving pattern was also a typical finding for early patients. Cavitory lesions, pulmonary nodules, and mediastinal lymph nodes were not observed in the lung.

Keywords: SARS Coronavirus; Pneumonia; Clinical Practice Guideline; Real-Time PCR



**NBA'DE 10 YILLIK DEĞİŞİM VE ÖNEMLİ OYUN İÇİ PARAMETRELER:
HÜCUM DEĞİŞKENLERİ**

10 YEARS CHANGE IN THE NBA AND IMPORTANT IN-GAME PARAMETERS:
OFFENSIVE VARIABLES

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ÖZET

Basketbolda müsabaka sonucunu etkilediği düşünülen oyun içi değişkenler yıllar içerisinde oyuncu profili, seyirci beklentisi ve bilimsel gelişmelerin ışığında farklılıklar göstermektedir. Basketbol oyunundaki trend ise değişkenlerin gösterdiği farklılıklar doğrultusunda ortaya konmaktadır. Bununla birlikte çalışmanın amacı; son 10 yılda NBA'de oynanan müsabakalardaki hücum parametrelerine ilişkin istatistiksel verilerin farklılık durumunu belirlemek ve müsabaka sonuçlarına göre bu değişkenlerin anlamlılık düzeylerini belirlemektir.

Çalışmada, NBA'deki 30 takımın son 10 sezonda oynadığı tüm müsabakalar ele alındı. Çalışmada ele alınan hücum değişkenleri saha içi şut denemesi, üç sayılık atış denemesi, serbest atış denemesi ve asist olarak belirlendi. Çalışmaya dair veriler oyun içi istatistiklerin yayınlandığı ve NBA'in resmi sitesi olan nba.com aracılığıyla elde edildi. Kazanma ve kaybetme durumunun tahmin değişkeni kullanılarak hesaplanmasında Multilayer Perception Model'i kullanıldı. Verilerin analizi ise IBM SPSS Statistics 25 programı kullanılarak gerçekleştirildi.

Çalışmanın sonucunda, müsabaka sonucunu etkileyen hücum değişkenlerinden saha içi şut denemesi, üç sayılık atış denemesi ve asist ortalamalarında 10 farklı sezon arasında anlamlı fark elde edildi. Bunun dışında, serbest atış denemesi verilerinde ise sezonlar arasında anlamlı bir fark tespit edilmedi.

Bu çalışmada NBA'de müsabakadan galibiyet ve mağlubiyetle ayrılan takımların oyun içi değişkenlerinin sezonlara ve sonuçlara göre değişim durumu tespit edildi. Çalışmamızın sonuçları literatürdeki birçok çalışmayla paralellik gösterdiği ortaya kondu. NBA organizasyonunda ortaya çıkan bu değişiklikler spor bilimciler tarafından farklı organizasyon ve takımlar üzerinde uygulanarak araştırılabilir.

Anahtar Kelimeler: Basketbol, Hücum, Analiz, Basketbolda Analiz

ABSTRACT

In basketball, in-game variables that are thought to affect the result of the game show differences over the years with the player profile, fan expectation and scientific developments. In recent years, the studies conducted for the analysis of basketball has shown a linearly



increasing trend. In this context, the purpose of our study is to determine the direction of the statistical data regarding the offensive parameters in the marches played in the NBA in the last 10 years and determine the significance rates of these variables according to the results of these competitions.

In this study, all matches played by 30 NBA teams for last 10 seasons were included in the study. In the study, the variables of field goal attempts, three point attempts, free throw attempts and assists is discussed. The data used in this study were obtained from stats.nba.com site. In the estimation of the win/lost situation by the use of nine estimative variable was carried out by employing a forward feedback artificial nerve system multilayer perception model (MPM) which can be used in the classification and regression processes. The analyses were carried out by IBM SPSS Statistics 25 program.

As a result of the study, among the offensive variables investigated were discussed and field goal attempts, three point attempts and assists showed significant difference in the 10 season period. There is no significant difference in free throw attempts.

In this study, the changes in the in-game variables of the teams that finished the match with the winning and losing in the NBA were determined according to the seasons and the results. The results of our study were found to be in line with many studies in the literature. These changes that occur in the NBA organization can be investigated by sports scientists by applying them on different organizations and teams.

Keywords: Basketball, Offensive, Analysis, Basketball Analysis



**KAVRAMA GÜCÜ VE EL REAKSİYONU DEĞERLERİNİN FARKLI
JENERASYONLARDA KARŞILAŞTIRILMASI**
COMPARISON OF GRIP FORCE AND HAND REACTION VALUES IN DIFFERENT
GENERATIONS

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ÖZET

El, karmaşık ve çok farklılaşmış bir organdır. Bu yapısıyla, beyinde duyuşsal ve motor homunkulusta geniş yer kaplayarak kavrama ve reaksiyon açısından spesifik bir öneme sahiptir. El hareketleri çok farklı paternlerde gerçekleştirilebilir. Bu patern çeşitliliği merkezi ve çevresel mekanizmaların polisentetik ilişkisi sayesinde gerçekleşir.

Bu araştırmada, Z kuşaağı (Post-millennials) ve önceki kuşaklar arasında kavrama kuvveti, çimdikleme kuvveti, el reaksiyonu gibi el performans özellikleri açısından bir fark olup olmadığının saptanması amaçlanmaktadır. Elde edilen deneysel verilerin, önceki kuşaklara ait ölçümlerle karşılaştırıldığı çalışmada, modern yaşam tarzı nedeniyle, normatif değerlerde olası değişikliklerin olup olmadığı incelenmiştir.

Bu çalışmada yaşları 18-25 arasında deęişen 111 sağlıklı birey değerlendirildi. El kavrama kuvveti el dinamometresiyle, çimdikleme kuvveti pinçmetreyle, el reaksiyonu ise Cetvel Tutma Testi ile ölçüldü. Veri analizinde, hem tanımlayıcı hem de çıkarımsal istatistiksel yöntemler kullanıldı.

El kuvveti ve el reaksiyonu açısından Z kuşaağının kendi içerisinde zayıf bir korelasyon saptandı. Ayrıca, son 5 yılda, özellikle erkekler arasında, el kuvveti parametrelerinde belirgin bir düşüş gözlemlendi. ($p < 0.005$).

Bu çalışmada elde edilen nicel sonuçlara göre, kavrama kuvveti ve el reaksiyonunun kuşaklar arasında ve cinsiyetler arasında farklılıklar teşkil ettiği saptanmıştır. Bu farklılıkların oluşturduğu yeni normların dikkate alınması, sağlık profesyonellerince hastaların değerlendirilmesi esnasında doğru sonuçlara ulaşılması açısından önemlidir.

Anahtar Kelimeler: El, El kuvveti, Parmak kavrama kuvveti.

ABSTRACT

The hand is a complicated and very differentiated organ. Its complex structure makes a measurable impact on the nervous system and its role in the sensory and motor homunculus.



The pattern of hand movements depends substantially on polysynthetic interactions between central and peripheral mechanisms

This research purposes to determine if there exists a correlation between such characteristics of hand performance as grip strength, pinch strength and hand reaction concerning post-millennials and previous generations. Comparing the obtained experimental data with analogous measurements for previous decades, the study attempts to reveal the potential change in normative values due to modern lifestyle.

In this study, 111 healthy individuals aged between 18-25 were evaluated. Grip strength is measured with hand dynamometer, pinch strength with pinch meter, and hand reaction with the Ruler Drop Test. The data analysis includes methods of both descriptive and inferential statistics.

In a group of post-millennials, there is either no or very weak correlation between hand strength and reaction. Also, a noticeable decline in hand strength parameters is observed over the past 5 years, mainly among males ($p < 0.005$).

This study reveals a few quantitative outcomes that could lead to significant clinical implications. The change in the pinch strength for the post-millennial population indicates that further investigation is required as to the norms. The updated standards will allow healthcare professionals to more accurately assess the improvement among patients.

Key words: Hand, Hand strength, Pinch strength.



BIS(1,3-DIBROMOISOPROPIOXY)METHANE AS SYNTHON**Farzaliyev Vagif Medjid oglu**

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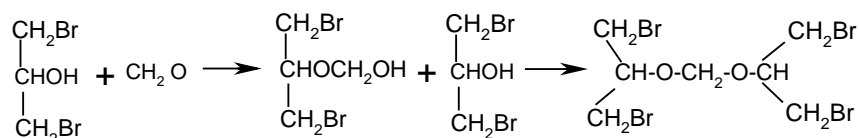
ABSTRACT

The presented work involves the production of new biologically active and medicinal substances, multifunctional additives to lubricating oils and a new chemical compound – bis(1,3-dibromisopropoxy)methane, which is offered as a synthesis in fine organic synthesis. 1,3-dibromopizoropanol was synthesized from a 1:2 molar ratio of glycerin with 40-45% hydrobromic acid [1]:



Only two halogen atoms of 1,3-dibromisopropanol are known to be involved in nucleophilic substitution reactions.

In order to expand the field of application of new compounds obtained by increasing the number of halogen atoms in fine organic synthesis, bis(1,3-dibromisopropoxy)methane was obtained according to the following scheme with the simultaneous composition of four bromine atoms [2].



The obtained substance is a crystalline substance with a melting point of 61-62⁰C. It was checked by gas-liquid chromatography and the purity was 97%.



The structure of the obtained compound was confirmed by nuclear magnetic resonance (NMR) spectra.

The NMR spectrum of bis(1,3-dibromoisopropoxy)methane consists of the following resonant signals. ^1H NMR (300 MHz, C_6D_6). δ , m. h.: 3.11d (4H, $2\text{CH}_2\text{Br}$); 3.13 d (4H, $2\text{CH}_2\text{Br}$); 3.42 m (2H 2CH); 4.19 s (2HCH_2); ^{13}C NMR (300 MHz, C_6D_6). δ , m. h.: 32.77(4 CH_2Br), 75.90 (2 CH-O), 93.57 ($\text{O-CH}_2\text{-O}$).

It was supposed to obtain derivatives of alkylxanthates, dithiocarbamates, thiocyanates based on synthon bis (1,3-dibromoisopropoxy)methane.

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THE EFFECT OF MOTIVATIONAL INTERVIEWS ON PERCEPTION OF BIRTH AND SELF-EFFICACY IN NULLIPARS WITH TRAUMATIC BIRTH PERCEPTION

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ABSTRACT

Aim: The aim of this study to determine the effect of motivational interviews on the perception and self-efficacy of birth in nullipars with a perception of traumatic birth.

Materials and Methods: The study was conducted in a randomized controlled, between November 2019 and November 2020 in the obstetrics outpatient clinics of Elazığ Fethi Sekin City Hospital. In the power analysis, the sample size was calculated as at least 83 pregnant women for each group (83 experiment, 83 control). Data were collected with Descriptive Information Form, Traumatic Childbirth Perceptions Scale (TCPS) and Childbirth of Self-Efficacy Scale-Short Form (CBSE). Pregnant women in the experimental group were held with four sessions of motivational interviews one week a part. No intervention was made for the pregnant women in the control group. Descriptive statistics, chi-square test, t test for dependent and independent groups were used in data analysis

Results: It was determined that there was no statistically significant difference between the total mean scores of TCPS and CBSE of pregnant women in the experimental and control groups before the motivational interview ($p > 0.05$). After the motivational interview, the mean score of the pregnant women in the experimental group was 33.57 ± 19.39 and the mean score of the control group was 80.67 ± 22.18 , and the difference between the mean scores was statistically significant ($p < 0.001$); After the motivational interview, it was determined that the average score of the pregnant women in the experimental group was 285.03 ± 33.35 , the mean score of the control group was 186.46 ± 46.66 , and the difference between their averages was statistically significant ($p < 0.001$).

Conclusion: It was determined that motivational interviews decreased the perception of traumatic birth and increased childbirth self-efficacy. Motivational interviews can be recommended to be used in pregnant women with a perception of traumatic birth.

Key words: Pregnancy, motivational interview, self-efficacy, traumatic birth perception, midwifery



MİGREN PROFİLAKSİSİNDE TOPİRAMAT KULLANIMININ ÖNEMİ
THE IMPORTANCE OF TOPIRAMATE USA IN MIGRAINE PROPHYLAXIS**Kübra OLAGAN**

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ÖZET

Migren sıklık, şiddet ve devam süresi bakımından değişiklik gösteren, genellikle gastrointestinal bozukluğun eşlik ettiği baş ağrısı krizleri ile karakterize nörolojik bir hastalıktır. Migrenin farmakolojik tedavisi akut veya profilaktik olmak üzere iki gruba ayrılmaktadır. Profilaktik tedavi, atak sıklığını, süresi ve şiddetini azaltmak, akut atakta tedaviye duyarlılığı arttırmak ve hastanın yaşam kalitesini iyileştirmek amacıyla kullanılır. Migren profilaksisinde kullanılan farmakolojik ilaç grupları çok çeşitli olup başlıca β adrenerjik antagonistler, antiepileptikler, antidepresanlar, kalsiyum kanal blokerleri ve nörotoksinlerdir. Profilaktik ilaç belirlenirken ise komorbid durumlar dikkate alınmaktadır.

Antiepileptikler nöronlarda hipereksitabiliteyi azaltarak etki eder. American Academy of Neurology (AAN) ve American Headache Society'nin 2012 kılavuzları, antiepileptik bir ilaç olan topiramate tedavisini desteklemekte ve profilaksi tedavisi için önermektedir. Topiramate çeşitli nörotransmitterleri modüle ederek migren ataklarını önlediği öne sürülmektedir. Profilakside 50-200 mg/gün dozunda kullanılmaktadır.

Topiramate çoklu mekanizmalar üzerinden nörosterabilizasyonu, voltajla aktive olan Na^+ ve Ca^{++} kanal blokajı ile glutamat blokajı, karbonik anhidraz inhibisyonu ve GABA üretimi stimülasyonu, NMDA olmayan reseptörler dahil olmak üzere birçok reseptör kapılı ve voltaja duyarlı iyon kanalını modifiye ettiği gösterilmiştir. Bu reseptörler, hem epilepsi hem de migren patofizyolojisinde yer almıştır. Migren nöbetlerinin tetiklenmesinde önemli bir role sahip olan trigeminovasküler sistemin uyarılmasını da inhibe ederek migren nöbetlerinin oluşmasını da önlemektedir.

Vücut ağırlığına olan olumlu etkisi nedeniyle topiramate kilo alımına neden olan migren profilaksisindeki diğer ilaçlara bir alternatiftir. Epilepsinin de eşlik ettiği migren hastalarında, beta-blokerleri tolere edemeyen diyabetik veya kalp-damar sistemi hastalıklarına sahip migren hastaların da kullanılabilmesi topiramate tedavisini öne çıkaran faktörler arasında yer almaktadır.

Anahtar Kelimeler: Topiramate, migren profilaksisi, farmakodinami

ABSTRACT

Migraine is a neurological disease that varies in frequency, severity and duration, and is characterized by headache attacks, usually accompanied by gastrointestinal disorder. Pharmacological treatment of migraine is divided into two groups as acute or prophylactic. Prophylactic treatment is used to reduce the frequency, duration and severity of attacks, to



increase sensitivity to treatment in acute attacks and to improve the patient's quality of life. Pharmacological drug groups used in migraine prophylaxis are diverse and the mainly β adrenergic antagonists, antiepileptics, antidepressants, calcium channel blockers and neurotoxins. Comorbid conditions are taken into consideration when determining prophylactic drugs.

Antiepileptic medications affect by reducing hyperexcitability in neurons. The 2012 guidelines of the American Academy of Neurology (AAN) and the American Headache Society support the use of topiramate, an antiepileptic drug, and recommend it for prophylaxis. It is suggested that topiramate prevents migraine attacks by modulating various neurotransmitters. It is used in prophylaxis at a dose of 50-200 mg/day.

Topiramate has been indicated to modify many receptor-gated and voltage-sensitive ion channels, glutamate blockade by voltage-activated Na^+ and Ca^{++} channel blockade, carbonic anhydrase inhibition and stimulation of GABA production, non-NMDA receptors and neurostabilization through multiple mechanisms. These receptors have been involved in the pathophysiology of both epilepsy and migraine. It also prevents the occurrence of migraine attacks by inhibiting the stimulation of the trigeminovascular system, which has an important role in triggering migraine attacks.

Due to its positive effect on body weight, topiramate is an alternative to other drugs in migraine prophylaxis that cause weight gain. It is among the factors that highlight topiramate treatment that it can be used in migraine patients with diabetic or cardiovascular system diseases who cannot tolerate beta-blockers or in migraine patients accompanied by epilepsy.

Keywords: Topiramate, migraine prophylaxis, pharmacodynamic



**BEDEN EĞİTİMİ ÖĞRETMENLERİNİN DESTEKLEME VE YETİŞTİRME
KURSLARINA İLİŞKİN GÖRÜŞLERİNİN DEĞERLENDİRİLMESİ**
EVALUATION OF THE OPINIONS OF PHYSICAL EDUCATION TEACHERS ON
SUPPORT AND TRAINING COURSES

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ÖZET

Bilim ve teknolojiye gelişmelere ayak uydurabilmek için nitelikli bir eğitimin olması gerekmektedir. Eğitimin nitelikli ve kaliteli olması öğrenciyi de olumlu yönde etkileyecektir. Destekleme ve yetiştirme kursları, 23.09.2014 tarih ve 4145909 sayılı milli eğitim bakanlığı örgün ve yaygın eğitimi destekleme ve yetiştirme kursları yönergesi kapsamında dershanelerin dönüşüm sürecine girmesi ile birlikte 2014-2015 eğitim öğretim yılında Türkiye'deki ortaokul ve liseler ile lise mezunları için halk eğitim merkezlerinde uygulanmaya başlamıştır. Bu çalışmanın amacı beden eğitimi öğretmenlerinin, destekleme ve yetiştirme kurslarına ilişkin görüşlerini ortaya koymaktır. Araştırmada veri toplama aracı olarak araştırmacı tarafından geliştirilen açık uçlu sorular beden eğitimi öğretmenlerine sunulmuştur. Araştırmada nitel araştırma yöntemlerinden olan mülakat yöntemi kullanılarak, 2017-2018 eğitim öğretim yılında, Gaziantep İl Milli Eğitim Müdürlüğüne bağlı okullarda görev yapmakta olan ve kurslarda görev alan 40 beden eğitimi öğretmeninden elde edilen veriler, içerik analizi yöntemi ile çözümlenmiştir.

Sonuç olarak, beden eğitimi öğretmenleri, kursun öğrenciler açısından faydalı ve önemli olduğunu belirtmişlerdir. Ancak, öğrencilerin kursa yeteri kadar önem vermemesi, devamsızlık yapmalarından dolayı sorun yaşadıklarını belirtirken, az da olsa kursa önem verilmesi için ücret alınması gerektiğini ifade etmişlerdir. Bunun yanında araştırmaya katılan öğretmenler; araç-gereç eksikliği ve fiziki şartların yetersiz olmasından dolayı da sorun yaşadıklarını ifade etmişlerdir. Ayrıca araştırma grubu, kursun devamlılığı ve etkili olması için yeteri kadar kaynak sağlanması ve okul-aile işbirliğinin sağlanması gerektiği sonucuna ulaşmıştır.

Anahtar Kelimeler: Beden eğitimi, Öğretmen, Destekleme ve yetiştirme kursu.

ABSTRACT

In order to keep up with the developments in science and technology, there should be a qualified education. The quality and quality of the education will also affect the student positively. Support and training courses, 23.09.2014 date and 4,145,909 No. of ministry of education formal and informal educational support and training courses directive covered the years 2014-2015 academic with entering the classroom of the transformation process for



middle school and high school with high school graduates in Turkey's public education centers started to be implemented. The aim of this study is to reveal the opinions of physical education teachers about support and training courses. Open-ended questions developed by the researcher were presented to physical education teachers as a data collection tool in the study. Using the interview method, which is one of the qualitative research methods in the study, the data obtained from 40 physical education teachers working in the schools of Gaziantep Provincial Directorate of National Education in the 2017-2018 academic year were analyzed by content analysis method.

As a result, physical education teachers stated that the course was beneficial and important for the students. However, they stated that they had problems due to the students not paying enough attention to the course and their absenteeism, and they stated that a fee should be charged to give importance to the course, even if it was a little. In addition, the teachers who participated in the research; They also stated that they had problems due to the lack of equipment and physical conditions. In addition, the research group reached the conclusion that sufficient resources should be provided and school-family cooperation should be provided for the continuity and effectiveness of the course.

Keywords: Physical education, Teacher, Supporting and breeding course.



**PSİKOLOJİK SÖZLEŞME İHLALİNİN ÖRGÜTSEL SİNİZM VE ÖRGÜTSEL
GÜVEN ARASINDAKİ ARACILIK ETKİSİ**

MEDIATING EFFECT OF THE PSYCHOLOGICAL CONTRACT BREACH IN BETWEEN
ORGANIZATIONAL CYNICISM AND ORGANIZATIONAL TRUST

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ÖZET

Günümüz iş yaşamında, örgütlerin başarılı olabilmek ve sürdürülebilirliği için insan kaynağı önemli faktörlerden biridir. Bu nedenle, örgütler insan kaynağına olan ihtiyacının karşılamak için ciddi yatırımlar yapmaktadırlar. İnsan kaynağına yapılan yatırımların temel amacı, çalışanların performansını ve motivasyonunu artırarak çalışandan daha fazla verim ve performans elde etmek ve örgüte karşı güven duygusu uyandırmaktır.

Çalışanların iş yaşamındaki diğer insanlar ile etkileşimini belirten; örgüt ile çalışan arasındaki etkileşimi sürdüren durum işgören ile örgütü arasındaki yazılı sözleşmelerdir. Fakat yazılı sözleşmelerin yanında daha çok “beklenti” olgusunu içeren ilişkinin sürdürülebilirliğini etkileyen bir kavram olarak “Psikolojik Sözleşme” karşımıza gelmektedir. Psikolojik sözleşme kavramı, yazılı olmayan tarafların karşılıklı olarak birbirlerinden beklentilerini ifade etmektedir. Bu beklentilerin karşılanmaması durumunda psikolojik sözleşme ihlali kavramı ortaya çıkmaktadır. Psikolojik sözleşme ihlali yaşanan bir örgütte işgören sinik davranışlar gözlemlenebilir ve sinik davranışların sonunda örgüte karşı duyguları güvende azalış gözlemlenebilmektedir.

Bu çalışmada örgütsel güven ve örgütsel sinizm ilişkisinde psikolojik sözleşme ihlalinin aracılık etkisinin olup olmadığının ortaya konulması amaçlanmıştır. Bu amaç doğrultusunda “Psikolojik Sözleşme İhlali Ölçeği”ne ait 9 soru, “Örgütsel Sinizm Ölçeği”ne ait 13 soru, “Örgütsel Güven Ölçeği”ne ait 10 sorudan oluşan ve demografik sorularla birlikte toplam 37 soruluk olmak üzere bir anket formu aracılığıyla veriler elde edilmiştir. Araştırmanın evrenini, Yükseköğretim Kurumu’na bağlı bir devlet üniversitesinin üç fakültesinde (İlahiyat, Mühendislik ve Turizm fakültelerinde) çalışmakta olan hem akademik hem de idari olmak üzere 312 personel oluşturmaktadır. Araştırmanın örneklemini olarak ise, kolayda örnekleme yöntemiyle 108 akademik ve idari personele anket uygulanmış, buradan elde edilen veriler bir paket program aracılığı ile analize tabii tutulmuş ve yorumlanmıştır. Araştırma hipotezlerini test etmek amacıyla çalışmada korelasyon ve hiyerarşik regresyon testleri yapılmıştır. Araştırma sonucunda çalışmada belirtilmiş olan bütün hipotezler anlamlı olup desteklenmiş ve psikolojik sözleşme ihlalinin, örgütsel sinizm ve örgütsel güven üzerinde kısmi bir aracılık etkisinin olduğu tespit edilmiştir.

Anahtar Kelimeler: Psikolojik Sözleşme İhlali, Örgütsel Sinizm, Örgütsel Güven



ABSTRACT

This paper has been written in order to able to determine whether psychological contract breach has a mediating effect in between organizational trust and organizational cynicism. Indicating the interaction of employees with their colleagues and administrative staff in business life, the situation of that maintains the interaction in between staff and the organization which is the written contracts in between employees and their organization. Nevertheless Psychological contract apperas as a concept that influences the sustainability of relationship that includes expectation in addition to he written contracts the concept of psychological contract refers to the bileterial expectations from each sides whether employee or people who is at administrative phases. The concept of Psychological contract breach comes out unless expectations are fulfilled. In the case of psychological contract breach in an organization cynical attitudes can be observed furthermore at the end of the cynical attitudes trust of employees towards organization can dramatically decrease.

The main purpose of this research is to determine whether pshycological contract breach has a mediating effect in-between organizational trust and organizational cynicism. Total target population of this research is made up of 312 either academic staff or administrative staff who have been working at faculties of theology, engineering and tourism which are related to a governmental university that is tied to Council of Higher Education in Turkey.As a sample of the target population,108 employees were included and analyzed by utilizing a package Programme. Multiple correlations analysis,simple regression analysis as well as multiple regression analysis tests were thoroughly utilized in order that it could evaulate the research hypotheses.As a consequence of this research as stated in findings, it can be obviously seen that all of hypotheses was supported on the other hand it was clearly observed that pshycological contract breach has a partial mediating effect in between organizational trust and organizational cynicism

Keywords: Pshycological Contarct Breach, Organizational Cynicism, Organizational Trust



DÜNYADA SAĞLIK İŞ GÜCÜ KAYNAKLARI
HEALTH WORKFORCE RESOURCES IN WORLD

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ÖZET

Dünya ülkeleri, Bin yıl Kalkınma Hedeflerine ulaşılmasına yardımcı olmak için sağlık sistemlerini güçlendirmeye çalışmaktadır. Eğitimli ve motive edilmiş bir işgücünün eksikliği, bunu başarmanın önündeki en büyük engel olmaktadır. Bu durum, Birleşik Krallık ve Amerika Birleşik Devletleri gibi gelişmiş ülkeler de dâhil olmak üzere birçok ülkedeki sağlık çalışanı eksikliği, kronik hastalık ve çatışmalardaki artış ve gelişmekte olan ülkelerdeki beyin göçü gibi bir dizi faktöre bağlıdır. Bir sağlık işgücü, öncelikle sağlığı geliştirmeyi amaçlayan doktorlar, hemşireler, eczacılar, diş hekimleri, doğrudan hizmet vermeyen yöneticiler ve çalışanlar gibi işe katılan tüm kişiler olarak tanımlanır. Dünya ciddi bir sağlık işgücü sıkıntısı çekmektedir, 2030'da 18 milyon sağlık çalışanı açığı beklenmektedir. Sağlık işgücünün koşullarını iyileştirmek için, sağlık işgücünün eğitim ve desteğine doğrudan yatırımın artırılması, sağlık işgücü için ulusal bir plan geliştirmek ve sağlık çalışanları için koruma sağlamak gerekmektedir. Sağlık hizmeti kalitesini ve sağlık sonuçlarını iyileştirmek için stratejiler geliştirmeye ek olarak karşılaşılan tüm zorluklar ulusal sınırlarla sınırlı değil, aynı zamanda bölgesel eylem ve hatta küresel eylemi de gerektirmektedir.

Bu çalışma, dünya ülkelerindeki, özellikle sağlık alanındaki insan gücü (insan kaynakları) açığını netleştirmeyi, krizi çözme ve insan gücü sıkıntısı sorununu azaltmanın yollarını geliştirmeyi ve ülkelerin yeteneklerini kısıtlayan bu krizi incelemeyi amaçlamaktadır.

Anahtar Kelimeler: Sağlık işgücü, Dünya ülkeleri, Gelişmekte olan ülkeler, İşgücü Yetersizliği

ABSTRACT

Countries of the world seek to strengthen their health systems to help achieve the Millennium Development Goals. The lack of a trained and motivated workforce is the main obstacle to achieving it. The shortage of healthcare workers in many countries, including developed countries like the United Kingdom and the United States, is due to a number of factors, such as an increase in chronic disease and conflict, and a brain drain in developing countries. A health workforce is defined as all persons who participate in work aimed primarily at promoting health. Such as doctors, nurses, pharmacists, dentists, administrators and employees who do not provide services directly. The world suffers from a severe shortage of health workforces, a shortage of 18 million healthcare workers is expected in 2030. In order to improve the



conditions of the health workforce, it is necessary to directly increase investment in training and support of the health workforce, to develop a national plan for the health workforce, and to provide protection for health care workers. In addition to developing strategies to improve health care quality and health outcomes. The challenges are not limited to national borders, but they also require regional action or even global action.

This study aims to clarify the deficit of the workforce in the countries of the world, especially in the health field, to develop ways to solve the crisis and reduce the problem of manpower shortage, and to address this crisis that restricts the capabilities of countries..

Keywords: Health workforce, Countries of the world, Development countries, Workforce Shortage



**OECD ÜLKELERİNDE SAĞLIK HARCAMALARI, HASTANE YATAĞI
KAPASİTESİ VE SAĞLIK ÇALIŞANI İSTİHDAMI İLE COVID-19 KAYNAKLI
MORTALİTE**

HEALTH EXPENDITURES, HOSPITAL BED CAPACITY AND HEALTHCARE
EMPLOYMENT AND MORTALITY FROM COVID-19 IN OECD COUNTRIES

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ÖZET

Bu çalışma, OECD ülkelerinde Covid-19 mortalite oranları, GSYİH kaynağından sağlık için ayrılan pay, hastane yatağı kapasitesi, hekim ve hemşire istihdamı değişkenlerini birlikte incelemeyi amaç edinmektedir. Covid-19 pandemi öncesinde sağlık harcamalarının ülkelerin milli gelirlerini olumsuz derecede etkilediğine birçok çalışmada yer verilirken ülkelerin pandemi sürprizini nasıl karşıladıklarını görmemiz önem arz etmektedir. Yine benzer şekilde hastane yatağı kapasitesi, sağlık çalışanı istihdamı da sağlık sektöründe önemli göstergeler olmaktadır.

Bu kapsamda OECD bünyesinde 37 ülke 2010-2019 yıllarında sağlığa ayırdıkları pay, hastane yatak kapasitesi ve sağlık çalışanı istihdamı çalışmada değerlendirmeye alınmıştır.

GSYİH kaynağından sağlığa ayrılan pay konusunda ülkeler değişik politikalar yürütmektedir.

Genel anlamda OECD ülkelerin 2010-2019 yılları sağlığa ayırdıkları payın ortalaması son dört yılın (2016-2019) gerisinde kalmaktadır. Nüfusa göre en az ölüm Avustralya, Estonya, Finlandiya, İzlanda, Norveç ve Yeni Zelanda ülkelerinde görülmektedir. En fazla mortaliteye sahip OECD ülkeleri Çek Cumhuriyeti, Belçika, Slovenya ve Birleşik Krallık olarak sıralanmaktadır. OECD ülkeleri içinde hastane yatağı sayısı ile Covid-19 kaynaklı ölümler arasında en büyük fark Japonya ve Güney Kore ülkesidir. Meksika'da Covid-19 nedeniyle ölenlerin sayısı hastane yatağı kapasitesini aşmaktadır. OECD ülkeleri içinde Avustralya, Norveç, İzlanda, Japonya, Güney Kore ve Yeni Zelanda'da hekim sayısı fazla ve mortalite düşük olarak görülmektedir. Kolombiya'da hemşire istihdamı ile Covid-19 kaynaklı mortalite birbirine yakın olarak görülmektedir. Türkiye'de diğer OECD ülkelerine göre hemşire sayısının oldukça az olduğu ancak buna rağmen mortalite oranlarının da düşük olduğu görülmektedir.

Ülkelerin sağlık sistemlerini oluşabilecek salgınlar, afetler ve savaşlarda halkın sağlığını koruyacak planlamalar yaparak geliştirmeleri önerilmektedir.

Anahtar Kelimeler: OECD Ülkeleri, Sağlığa Ayrılan Pay, Hastane Yatak Kapasitesi, Sağlık Çalışanı İstihdamı, Covid-19 Kaynaklı Mortalite.



ABSTRACT

This study aims to examine the variables together of Covid-19 mortality rates, share of GDP source for health, hospital bed capacity, physician and nurse employment in OECD countries. It is important to see how countries respond to the pandemic surprise, while many studies have included the negative impact of health expenditures on the national income of countries before the Covid-19 pandemic. Similarly, hospital bed capacity and healthcare worker employment are also important indicators in the health sector.

In this context, the funding for healthcare in 2010-2019, hospital bed capacity and health worker employment in 37 countries within the OECD were evaluated in the study.

Countries have different policies regarding the share allocated to health from source of GDP. In general, the average share of allocated to health in OECD countries between 2010 and 2019 is behind the last four years (2016-2019). According to the population, the least deaths are seen in Australia, Estonia, Finland, Iceland, Norway and New Zealand. In the OECD countries the highest mortality are listed as the Czech Republic, Belgium, Slovenia and the United Kingdom. Among OECD countries, the biggest difference between the number of hospital beds and deaths from Covid-19 is Japan and South Korea. The number of deaths because of Covid-19 are exceeds the capacity of the hospital bed in Mexico. The number of physicians is high and mortality is low in Australia, Norway, Iceland, Japan, South Korea and New Zealand among the OECD countries Nurse employment and Covid-19-induced mortality are seen to be close to each other in Colombia. The number of nurses compared to other OECD countries, in Turkey, which is quite a few, but nevertheless it is seen that the low mortality rates

It is recommended that countries develop their health systems by making plans to protect the health of the people in possible epidemics, disasters and wars.

Keywords: OECD Countries, Share Allocated to Health, Hospital Bed Capacity, Health Professional Employment, Mortality from Covid-19.



**ÜNİVERSİTE ÖĞRENCİLERİNDE BENLİK SAYGISININ, YAŞAM DOYUMU VE
MOTİVASYONA ETKİSİNİN İNCELENMESİ**

INVESTIGATION OF THE EFFECTS OF SELF-PERCEPTION, LIFE SATISFACTION
AND MOTIVATION IN UNIVERSITY STUDENTS

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ÖZET

Motivasyon; kişiyi daha önce yapamayacağı şeylere yöneltebilen, iç ve dış unsurlarla beraber kişiye enerji ve yön veren dolayısıyla eyleme geçirme isteği yaratan güç olarak ifade edilmektedir. Bireyin sahip olduğu benlik algısı, motivasyonun şekillenmesinde etkili görülmekte dolayısıyla motivasyon, benlik saygısının doğurduğu bir kaynak olarak kabul edilmektedir. Benlik saygısı, kişinin kendisini başkalarından üstün ya da aşağıda görmeden kendine değer vermesi ve kendinden hoşnut olmasıdır. Benlik saygısı yüksek kişiler zorluklar karşısında yılmayan, başarmak için çabalayan, yeniliklere açık insanlardır. Bu kişilerin yaşam doyumları da bu ölçüde yüksek ve birbiriyle ilişkilidir. Yaşam doyumunu bireyin hayatından memnun olması ve hayattan aldığı doyumdur. Bununla birlikte üniversite öğrencileri mutluluk ve yaşam doyumuna önem vermekte, bireylerin sahip olduğu motivasyon ile benlik algısı ve yaşam doyumunu durumlarının araştırılması önemli bir hale gelmektedir. Bu amaçla bu çalışmada üniversite öğrencilerinde benlik saygısının, yaşam doyumunu ve motivasyona olan etkisinin incelenmesi ve aralarında var olabilecek ilişkinin açığa çıkarılması amaçlanmıştır.

Çalışmada nicel araştırma yöntemlerinden ilişkisel tarama modeli kullanılmıştır. Çalışmanın örneklemini Ereğli Eğitim Fakültesinde 2020-2021 akademik yılında öğrenim gören öğrenciler oluşturmuştur. Veriler kişisel bilgi formu, “Yaşam Doyumu Ölçeği”, “Üniversite Öğrencilerinde Motivasyon Ölçeği” ile “Mesleki Benlik Saygısı Ölçeği” yardımıyla toplanmıştır. Verilerin analizinde bağımsız gruplar “t” testi, tek yönlü varyans analizi ve çoklu regresyon analizinden yararlanılmıştır.

Çalışmadan elde edilen sonuçlar; öğrencilerin genel anlamda mesleki benlik saygılarının ortalamasının üstünde, motivasyonlarının ise ortalamasının altında olduğunu, kadın üniversite öğrencilerinin mesleki benlik saygısı düzeylerinin erkek öğrencilerin mesleki benlik saygısından daha yüksek olduğunu göstermiştir. Ayrıca mesleki benlik saygısının yaşam doyumunu ve motivasyon ile düşük düzeyde ancak anlamlı bir ilişki verdiğini göstermiştir. Elde edilen sonuçlara dayanılarak üniversite öğrencilerinin meslek doyumlarına ulaşılması noktasında destekleyici mekanizmalara önem verilmesi gerektiğinden bahsedilmiştir.

Anahtar Kelimeler: mesleki benlik saygısı, motivasyon, yaşam doyumunu



ABSTRACT

Motivation is expressed as a power that can direct the person to things that this could not do before, gives energy and direction to the person together with internal and external factors, thus creating a desire to take action. Self-perception of the individual is seen as effective in shaping motivation, so motivation is accepted as a source that comes from self-esteem. Self-esteem is that self-contentment without considering oneself as superior or inferior to others. People with high self-esteem are those who do dare in the face of difficulties, strive to succeed, and are open to innovations. Also, the life satisfaction of these people is high and related to each other. Life satisfaction is the satisfaction of the individual this receives from life. However, university students attach importance to happiness and life satisfaction, and it becomes important to investigate individuals' motivation, self-perception, and life satisfaction. For this purpose, this study, it was aimed to examine the effect of self-perception on life satisfaction and motivation in university students and to reveal the relationship that may exist between them.

A relational survey model, one of the quantitative research methods, was used in the study. The sample of the study consisted of students studying at Ereğli Faculty of Education in the 2020-2021 academic year. The data were collected with the help of personal information form, "Satisfaction with Life Scale", "Motivation Scale for University Students" and "Professional Self Perception Scale". Independent samples "t" test, one-way ANOVA, and multiple regression analysis were used to analyze the data.

Results obtained from the study showed that students' professional self-perception, in general, was above average and their motivation was below average, and that female university students' professional self-perception levels were higher than male students' professional self-perception. It also showed that professional self-perception has a low but significant relationship with life satisfaction and motivation. Based on the results, it was mentioned that supporting mechanisms should be given importance in achieving the professional satisfaction of university students.

Keywords: professional self-perception, motivation, life satisfaction



**PANDEMİ SÜRECİ ÇOCUKLARDA EV KAZALARININ GÖRÜLME DURUMUNU
NASIL ETKİLEDİ?**

HOW DID THE PANDEMIC PROCESS AFFECT THE SITUATION OF HOME
ACCIDENTS IN CHILDREN?

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ÖZET

Ev kazaları, evin içinde veya bahçesinde, ahırında, garajında meydana gelen kazalardır. Ev kazaları her yaş grubunda görülmekle beraber özellikle çocuklar için mortal ve morbid sonuçları nedeniyle önemli bir sorundur.

TUIK verilerine göre 2017 ve 2018 yılında dışsal yaralanma ve zehirlenme sebebiyle ev kazalarında ölen çocukların sayısı 5 yaş altı grupta daha fazladır. Çocukların gelişimsel özellikleri, çoğunlukla evde olmaları, çevrelerini keşfetme ve öğrenme tutkuları, çevresel risklere açık olmaları, her şeyi ağızlarına götürme istekleri, yaşam alanlarının çocukların özelliklerine göre düzenlenmemesi, kazalardan kendilerini koruyabilecek gelişimsel beceriye sahip olmamaları, devamlı hareket halinde olmaları, gibi sebeplerle ev ortamında kazaya uğrama oranı en yüksek gruptur.

COVID-19 döneminde çocuklar zamanlarının büyük bölümünü evde kısıtlı alanlarda geçirmek zorunda kalıyor. Yaşamın eve sığdırılmaya çalışıldığı COVID-19 pandemi sürecinde uzun vadeli ev izolasyonu çocuklarda ev içi kaza riskini de artırmıştır.

Çalışmalarda, pandemi sürecinde pediatrik acil servislere ev kazası nedeniyle başvuruların bir önceki yıla göre önemli ölçüde arttığı bildirilmiştir. Çalışmalarda pandemi dönemi ile birlikte evde dezenfektan ürünlerin kullanımının artmasının çocukların bu maddelere daha sık maruz kalmasına ve zehirlenme durumlarının yaşanmasına yol açtığı bildirilmiştir.

Pandemi sürecinde çocuklarda ev kazalarının artışına dikkat çekilmesi, ev kazalarının önlenmesine yönelik ailelerin ve toplumun bilgilendirilmesi önemlidir.

Anahtar Kelimeler: Çocuklar, Covid 19 pandemisi, Ev Kazaları

ABSTRACT

Home accidents are accidents that occur in the house or garden, barn, garage. Although home accidents occur in all age groups, they are an important problem especially for children due to their mortal and morbid consequences.

According to TUIK data, the number of children who died in home accidents due to external injuries and poisoning in 2017 and 2018 is higher in the group under 5 years of age. Children's developmental characteristics, being mostly at home, their desire to explore and



learn their surroundings, their desire to bring everything to their mouths, their living spaces not being organized according to the characteristics of children, not having developmental skills to protect themselves from accidents, being in constant motion, etc. It is the group with the highest rate of exposure.

In the period of COVID-19, children have to spend most of their time at home in restricted areas. During the COVID-19 pandemic process, where life is tried to fit into the home, long-term home isolation has also increased the risk of domestic accidents in children.

In the studies, it has been reported that applications to pediatric emergency services due to home accidents increased significantly during the pandemic period compared to the previous year. Studies have reported that the increase in the use of disinfectant products at home during the pandemic period causes children to be exposed to these substances more frequently and to experience poisoning.

It is important to draw attention to the increase in home accidents in children during the pandemic process and to inform families and society about the prevention of home accidents.

Keywords: Children, Covid 19 pandemic, Home Accidents



**LİSE ÖĞRENCİLERİNİN SOSYAL MEDYA KULLANIM AMACI İLE YALNIZLIK
DÜZEYLERİ ARASINDAKİ İLİŞKİ**

THE RELATIONSHIP BETWEEN HIGH SCHOOL STUDENTS' PURPOSE OF USING
SOCIAL MEDIA AND LEVEL OF LONELINESS

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ÖZET

İnternetin hayatımızdaki yerinin yaygınlaşmasıyla birlikte sosyal medya kullanıcı sayısında da artış gözlenmiştir. Son zamanlarda en çok tercih edilen uygulamaların sosyal medya uygulamaları olduğu görülmektedir. Sosyal medyanın ergenler açısından iyi yönde ve yararlı kullanımı onlara akademik, kişisel ve toplumsal açıdan yarar sağlarken kötü yönde ve gereğinden fazla kullanımı kendi hayatlarını ve akademik başarılarını olumsuz yönde etkilemektedir. Özellikle yalnız ve depresif bireyler, sosyal medya üzerinden yeni arkadaşlıklar kurabilmekte ve hiç tanımadığı kişilerle oluşturduğu kimlikler üzerinden bir şeyler paylaşabilmektedirler. Birey, yalnızlık duygusunu sosyal medya ortamları vasıtasıyla giderdiğini düşünse de telefon, bilgisayar, tablet gibi sosyal medya araçlarından ayrıldığında tekrar yalnızlık hissiyle yüz yüze gelmekte bu durum yalnızlık duygusunun daha da yoğunlaşmasına neden olmaktadır. Gençler ergenlik döneminin getirdiği ruhsal sıkıntıları sosyalleşerek atmaya çalışacaklardır fakat bu sosyalleşme gelenekselden ziyade sosyal medya yoluyla sağlanmaktadır. Bu bağlamda, çalışmanın amacı ergenlik çağındaki gençlerin sosyal medya kullanım amaçları ile yalnızlık seviyeleri arasındaki ilişkiyi incelemektir.

Bu çalışmada lise öğrencilerinin sosyal medya kullanım amacı ile yalnızlık düzeyi arasındaki ilişkinin incelenmesi amaçlanmaktadır. Bu amaçla çalışma, nicel araştırma yöntemlerinden ilişkisel tarama modeli ile desenlenmiştir. Çalışmanın evreni, 2020-2021 eğitim öğretim yılında öğrenim görmekte olan lise öğrencileridir. Çalışmanın örneklemi ise İç Anadolu Bölgesinde öğrenim görmekte olan lise öğrencileridir. Çalışmada lise öğrencilerinin sosyal medya kullanım amaçları ile yalnızlık düzeylerini ve bu iki değişken arasındaki ilişkiyi belirlemek amacıyla kişisel bilgi formu, "Sosyal Ağların Kullanım Amaçları Ölçeği" ile "UCLA Yalnızlık Ölçeği (Kısa Formu)" kullanılmıştır. Verilerin analizinde betimsel istatistiklerin yanı sıra bağımsız örneklem için t-testi, tek yönlü varyans analizi ve



korelasyon analizi kullanılmıştır. Çalışmadan elde edilen sonuçlara göre lise öğrencilerinin sosyal medyayı önem sırasına göre işbirliği, içerik paylaşma ve iletişimi sürdürme amaçlarıyla kullandıkları, sosyal medya kullanım amacının cinsiyete göre değiştiği, lise öğrencilerinin sosyal medyayı araştırma ve işbirliği amaçlı kullanımlarının sınıf düzeylerine göre değiştiği, kadın lise öğrencilerinin yalnızlık düzeylerinin erkek lise öğrencilerinden daha yüksek olduğu görülmüştür. Çalışmadan elde edilen sonuçlara dayanarak araştırmacılar ve uygulayıcılar için öneriler sunulmuştur.

Anahtar Kelimeler: ergenler, sosyal medya, yalnızlık düzeyi

ABSTRACT

With the widespread use of the internet in our lives, the number of social media users has also increased. Recently, it is seen that the most preferred applications are social media applications. While the good and beneficial use of social media for adolescents provides them with academic, personal, and social benefits, it's negative and overuse affect their own lives and academic achievements negatively. Especially loneliness and depressed individuals can make new friends on social media and share something with people they do not know over the identities they have created. Although the individual thinks that this relieves the feeling of loneliness through social media environments when he leaves the social media tools such as phones, computers, and tablets, he faces the feeling of loneliness again, and this situation causes the feeling of loneliness to become more intense. Young people will try to overcome the mental distress of adolescence by socializing, but this socialization is provided by social media rather than traditional. In this context, the aim of the study is to examine the relationship between the purposes of using social media and the level of loneliness of adolescents.

This study, it is aimed to examine the relationship between the purpose of social media use of high school students and their level of loneliness. For this purpose, the study was designed with the relational survey model, one of the quantitative research methods. The universe of the study is high school students studying in the 2020-2021 academic year. The sample of the study is high school students studying in the Central Anatolia Region. In the study, personal information form, "The Usage Purposes of Social Networks Scale" and "UCLA Loneliness Scale (Short Form)" were used to determine the social media usage purposes and loneliness levels of high school students and the relationship between these two variables. In the analysis of the data, besides descriptive statistics, independent samples t-test, one-way ANOVA, and correlation analysis were used. According to the results of the study, high school students used social media for cooperation, content sharing, and maintaining communication in order importance, the purpose of using social media varies according to gender, high school students' use of social media for research and cooperation varies according to their grade levels, loneliness levels of female high school students are male higher than high school students. Based on the results obtained from the study, suggestions for researchers and practitioners were presented.

Keywords: adolescents, social media, level of loneliness



**EXCHANGE RATE AND OIL PRICE PASS-THROUGH INTO INFLATION IN
ALGERIA**

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ABSTRACT

Review of economic developments in Algeria over the past four decades shows that oil revenues have deep and wide impact on economic indicators. This study investigates the asymmetric effects of exchange rate and oil price shocks on inflation in Algeria, using monthly data from 2008 to 2018 and the impulse response from an estimated vector autoregressive error correction (VECM) model. The empirical analysis uncovers evidence of asymmetries. The results suggest that the immediate effect of a shock to the exchange rate in 12 months is about 51% increase in the price level. While the effect of an exchange rate depreciation shock is about 42% increase in the price level, the effect of an exchange rate appreciation is about 15% decrease in the price level. Similarly, the immediate effect of a shock to the oil price in 12 months is about 53% increase in the price level. While the effect of an increase in oil price in 12 months is about 44% increase in the price level, the effect of a decrease in oil price is surprisingly about 30% increase in the price level. Moreover, there is an evidence of significant effects of exchange rate and oil price shocks on inflation in the long-run..

Keyword: Inflation, Pass-through, Oil Prices, Exchange Rates, VECM Analysis, Algeria.

JEL Classification: E44, Q35, C39, E31



WE ARE THE COVID-19'S VICTIMS TOO: A QUALITATIVE STUDY OF THE INFORMAL AND MSME (MICRO, SMALL, AND MEDIUM) ENTREPRENEURS AT THE TIME OF COVID-19 PANDEMIC

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ABSTRACT

The covid-19 pandemic affected not only the medical but also economics, social, and political life. It causes fears for people to make direct contact. The pandemic pushes people practices the personal and social distancing procedure which in turn disturbing the activity of selling and buying goods, disturbing manufacture and service business activities. It disturbed everything. Many workers were sent home or forced to work from home. All food stalls, shopping malls, and markets are closed. Thus all economic activities are crash and closed. The research focused on the other viewpoint victims of covid-19. The research question is, 1) Who are other victims of the covid-19 pandemic? 2) How can they become victimized? 3) How badly they suffered? Since this is a social and humanism research on the phenomena of Covid-19 pandemic, The Qualitative research methods and phenomenology approach is used in this study. Field participant observation and in-depth interviews was conducted to collect data.

From data analysis the researcher found four types of covid-19's suffering victims from another viewpoint, these types of victims are the micro and small-sized entrepreneurs' bankruptcy, starvation, unemployment, and stigmatization. This research revealed that the pandemic is damaging not only in medical matters but also the social and economic matters. This information is important to the authorities to make the proper recovery programs and tackling suffering victims from another aspect of the pandemic. The research also enriched the organizational management's view, especially how to manage the organization to survive in a disastrous time.

Keywords – covid-19 victims, entrepreneurs, organizational management, pandemic, work from home.



**ATEŞBAZ-I VELİ VE ATEŞBAZ-I VELİ'DEN SONRA AŞÇILIK MAKAMINA
GELMİŞ KİŞİLER**

AFTER ATEŞBAZ-I VELİ AND ATEŞBAZ-I VELİ, PEOPLE WHO CAME TO THE
COOKERY OFFICE

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ÖZET

Mevlevilik yapısının ilk adımının atıldığı ve Mevleviliğin başladığı yer dergahın mutfağıdır. Mevlevilikte mutfak hem ruhen hem de fiziken beslenmenin yeridir. Mevlevilik için de mutfak, eğitimin başladığı nokta olması nedeniyle önemli bir yer edinmiştir. Mutfaktan sorumlu kişi ise Mevlevilikte Mevlana'dan sonraki en yetkili ve bilgili kişidir. Birçok idari iş mutfaktan sorumlu aşçıbaşının görevidir. Mevlana zamanında yaşamış ve bu önemli mertebeye ulaşmış en önemli şahsiyet, asıl adı İzzeddin Yusuf olan Ateşbaz-ı Veli'dir. Mevlana'nın aşçıbaşısı olarak görev yapmış, acemi dervişleri eğitmiş son derece bilgili bir kişidir. Görev yaptığı makam onunla bütünleşmiş aşçıbaşılığa Ateşbaz-ı Veli makamı ismi verilmiştir. Ateşbaz-ı Veli vefat ettikten sonra bile makam bu şekilde anılmıştır. Bu çalışmada da Ateşbaz-ı Veli ve sonrasında bu makamda bulunan kişiler hakkında araştırmalar yapılmıştır. Mevlevilik için önemli bir mevki olan Ateşbaz makamının, bu makamda bulunmuş kişilerin bilinmesi ve tanınması büyük önem arz etmektedir. Araştırmada tez, kitap, makale, dergi gibi kaynaklardan geniş literatür taraması yapılmış, bilgiler derlenmiştir. İlave bu konu hakkında detaylı bilgiye sahip bir yazarla görüşülüp, yazarın verdiği bilgiler doğrultusunda kaynak taraması genişletilmiştir. Ulaşılan aşçıbaşı isimleri listelenmiş ve çalışmanın daha fazla detaylandırılabilmesi için Mevlevihanelerin arşivlerine ulaşılması önerisinde bulunulmuştur.

Anahtar Kelimeler: Ateşbaz-ı Veli, Ateşbaz-ı Veli Makamı, Mevlevilik ve aşçıbaşılık, Mutfak (Matbah)

ABSTRACT

The kitchen of the dergah is where the first step of the mevlevism structure was taken and the Mevlevism began. In Mevlevi, the kitchen is a place of nutrition both spiritually and physically. For mevlevism, the kitchen has gained an important place because it is the point where education begins. The person in charge of the kitchen is the most competent and knowledgeable person after Mevlana in Mevlevi. Many administrative tasks are the duty of



the chef responsible for the kitchen. The most important person who lived in the time of Mevlana and reached this important order is Ateşbaz-ı Veli, whose real name is Izzeddin Yusuf. He is an extremely knowledgeable person who has served as the chef of Mevlana and trained novice dervishes. His office was named Atesbaz-ı Veli Maqam. Even after Atefbaz-I Veli died, maqam was remembered like this. In this study, research was conducted on Ateşbaz-ı Veli and the people who were in this maqam afterwards. It is of great importance that the Ateşbaz maqam, which is an important position for mevlevism, is known and recognized by the people who have been in this position. In the research, a wide literature review was conducted from sources such as these, books, articles, journals, and information was compiled. In addition, an author with detailed information about this topic was interviewed and the source scan was expanded in accordance with the information provided by the author. The names of the cooks reached were listed and it was suggested that the archives of the Mevlevihanesi be accessed for further details of the work.

Keywords: Ateşbaz-ı Veli, Ateşbaz-ı Veli Maqam, Mevlevism and Head Cooks, Kitchen (Matbah)



TÜRK PARLAMENTOSUNDA KADININ SİYASAL TEMSİLİNİN TARİHİ
HISTORY OF POLITICAL REPRESENTATION OF WOMEN IN THE TURKISH
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ÖZET

Tarihte uzun süre siyasi katılım yanında temsilde kadın ve erkekler arasında hukuksal açıdan cinsler arası eşitlik konusu kadınların mücadele ettiği önemli davalardan birisi olmuştur. Osmanlıda II. Meşrutiyet ile başlayan ve Birinci Dünya Savaşı'na kadar süren birinci dalga feminizm döneminde kadınlar, hem siyasi hem de sosyal haklar açısından her türlü eşitsizlik için mücadeleye giriştikleri bir dönemi yaşamıştır. Cumhuriyetin İlanı ile birlikte kadınlar konusunda siyaset başta olmak üzere tüm alanlara katılımı konusunda ciddi adımlar atılmaya başlanmıştır. 1934 tarihinde kadınların siyasi haklarını kazanmalarıyla birlikte girmeye hak kazandıkları 1935 seçimlerinde Meclis'e 18 kadın milletvekili girmiş meclisteki temsil oranı erkek milletvekillerine göre % 4,6 olmuş bu temsil oranı ile Türkiye, dünyada ikinci sırada yer almış, onun ölümünün ardından temsil oranında düşüş yaşanmıştır.

12 Mart 1971 tarihinde gerçekleşen askerî muhtıranın ardından başlayan ara rejim hükümetleri döneminde kadınların mecliste düşük oranlarla temsil edilmesi sorunu devam etse de önemli bir gelişme yaşanmış, ilk kez bir kadın, Türkan Akyol bakanlar kurulunda görev almış, 1993 yılında da siyasi temsilde başbakanlık düzeyinde önemli bir gelişme yaşanarak Tansu Çiller Başbakan olmuştur. Kadınların siyasi haklarını elde etmelerinin ardından girmeye hak kazandıkları ilk 1935'teki seçimlerde aldıkları %4,6'lık oran sonraki seçimlerde düşmüş bu düşüş 2000'li yıllara kadar devam etmiş, 2007 seçimlerinden itibaren yukarı doğru bir gelişme göstermişse de istenilen düzeye maalesef gelememiştir.

Türkiye nüfusunun yarısını oluşturan kadınların siyasi alanda; seçilme hakkından yararlanma ve siyasi karar mekanizmalarında yer alma konusunda büyük oranlarda aktif katılımını engelleyen çeşitli toplumsal, kültürel, ekonomik ve siyasi nedenler vardır. Sonuç olarak, konu ile ilgili bildiride esas teşkil "Türk Parlamentosunda Kadının Siyasal Temsilinin Tarihi" konusunda Türkiye'de yaşanan gelişmeler ortaya konulmaya çalışılacaktır.

Anahtar Kelimeler: Demokrasi, Kadın, Siyasal Temsil, Seçim, Parlamento.

ABSTRACT

In the history, in addition to political participation, the issue of legal gender equality between women and men in representation has been one of the important cases where women struggle. During the period of first-wave feminism, which began with The Legitimacy of World War II in the Ottoman Empire and lasted until the First World War, women experienced a period in which they fought for all kinds of inequalities in terms of both political and social rights. With the Declaration of the Republic, serious steps have been taken in terms of women's participation in all areas, especially politics. 1934 in the Assembly in the 1935 elections, they



won the right to enter with winning the political rights of women 18 represents the woman entered the deputy parliament ratio was % 4.6 compared to the male MPs with proportional representation, Turkey ranks second in the world have taken place, there has been a decrease of representing the wake of his death.

Even though the problem of low representation of women in the parliament continued during the interim regime governments that started after the military memorandum on March 12, 1971, an important development took place, for the first time a woman took office in the Council of Ministers of Türkan Akyol, and in 1993, an important development in political representation at the prime ministerial level. Tansu Çiller became Prime Minister. The rate of 4.6% that women received in the first elections in 1935, where they were entitled to enter after they obtained their political rights, fell in the following elections, this decline continued until the 2000's, although it has shown an upward development since the 2007 elections, unfortunately it could not reach the desired level.

Turkey's women constitute half of the population in the political arena; There are various social, cultural, economic and political reasons that prevent their active participation in the enjoyment of the right to be elected and taking part in political decision-making mechanisms. As a result, essential in a statement on the subject "History of the Women's Political Representation in the Turkish Parliament" will be put forward regarding the developments in Turkey.

Keywords: Democracy, Woman, Political Representation, Election, Parliament.



**OLTU-ŞENKAYA İLÇELERİ ARASINDAKİ BÖLGEDE BULUNAN KIRMIZI
TOPRAKLARIN GAMA IŞINI TRANSMİSYON FAKTÖRLERİ****GAMMA-RAY TRANSMISSION FACTORS OF RED SOILS IN THE REGION
BETWEEN THE OLTU-SENKAYA DISTRICTS****Dr. Öğr. Üyesi Burcu AKÇA**

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ÖZET

Tabiatta doğal ve yapay radyasyon kaynaklarıyla birlikte yaşamaktayız. Uzaydan gelen kozmik ışınlar, vücudumuzdaki radyoaktif elementler, yapı malzemelerinin içerdiği doğal uranyum ve toryumun parçalanmasıyla ortaya çıkan radyoaktif radon ve toron gazları, fosfor içeren suni gübreler, yiyecek ve içeceklerimizdeki radyoizotoplar, fosil yakıtlar, hastalıkların teşhis ve tedavisinde kullanılan cihazlar, nükleer tesisler radyasyonun başlıca kaynaklarıdır.

Radyasyondan tamamen izole edilmiş bir ortamda yaşamamız ve ondan tümüyle korunmamız mümkün gözükmemektedir. Fakat bazı önlemler alarak maruz kalabileceğimiz radyasyon miktarını minimuma indirmeye çalışabiliriz. Bu önem ve sebepler dikkate alınarak özellikle son dönemde radyasyon zırlama malzemeleri oldukça önem kazanmıştır. Bu malzemelerin kolay ulaşılabilir olması, ucuz olması ve uygulanabilirliğinin kolay olması oldukça önemlidir.

Bu nedenle, bu çalışmada Oltu-Şenkaya ilçeleri (Türkiye’de) arasındaki bölgede bulunan kırmızı toprakların gama-ışınlarını zırlama kapasitesine fikir oluşturacak gamma-ışını transmisyon faktörleri (*TF*) deneysel olarak ölçülmüştür. 59.54 keV enerjili gama ışınlarını üretmek için Am-241 radyoaktif kaynağı kullanılmıştır. Bundan başka, Am-241 radyoaktif kaynağı için bir Si(Li) dedektör kullanılmıştır. Sayma sistemi ise Enerji ayrımlı X-Işını Fluorescence Spektrofotometredir (EDXRFS).

Anahtar Kelimeler: Türkiye, Oltu-Şenkaya, Kırmızı toprak

ABSTRACT

Cosmic rays from space, radioactive elements in our body, radioactive radon and thoron gases produced by the breakdown of natural uranium and thorium contained in building materials, artificial fertilizers containing phosphorus, radioisotopes in our food and beverages, fossil fuels, devices used in the diagnosis and treatment of diseases, nuclear facilities are the main sources of radiation.

It does not seem possible for us to live in an environment completely isolated from radiation and to be completely protected from it. However, we can try to minimize the amount of radiation we may be exposed to by taking some precautions. Considering this importance and reasons, especially in the recent period, radiation shielding materials have gained great importance. It is important that these materials are easily available, inexpensive, and easy to apply.

Therefore, in this study, gamma-ray transmission factors (*TF*), which will give an idea of the gamma-ray shielding capacity of the red soils in the region between Oltu-Şenkaya districts,



were experimentally measured. Am-241 radioactive sources were used to generate gamma rays with an energy of 59.54 keV. Furthermore, a Si(Li) detector was used for the Am-241 radioactive source. The counting system is an Energy Dispersive X-Ray Fluorescence Spectrometry (EDXRFS).

Keywords: Turkey, Oltu-Şenkaya, Red soil



THE INVESTIGATION OF CHARGE CARRIER CONCENTRATION OF SEMICONDUCTORS BY USING TWO-PARAMETER FERMI-DIRAC FUNCTION

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ABSTRACT

As it is known, materials can be categorized under three headings as conductor, insulator and semiconductor, according to their electrical conductivity. Especially the semiconductors have become the center of attention due to their use in the electrical electronics industry nowadays. The ability of electrical conduction of a material is directly related to its electron configuration (distribution). Electron distributions of non-degenerate semiconductors are defined by the Boltzmann distribution. Also, electron distributions of degenerated semiconductors fit the Fermi-Dirac distribution. As is known, the concentration of charge carriers in semiconductors depends on variables such as temperature, forbidden band gap, effective mass of electrons and holes. An efficient expression for the charge carrier concentration is of great significance for the evaluation of thermoelectric properties of semiconductors and materials. In this paper, a new analytical algorithm of charge carriers of degenerated semiconductors is presented by using two-parameter Fermi-Dirac function. The efficiency of given method is analyzed for some semiconductors.

Keywords: Degenerated Semiconductors, Charge Carrier Concentration, Two-Parameter Fermi-Dirac Function



**ON THE STUDY OF SEEBECK COEFFICIENT FOR A SINGLE PARABOLIC
BAND IN SEMICONDUCTOR BY USING FERMI-DIRAC FUNCTION**

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ABSTRACT

The Seebeck coefficient of a material (also known as thermopower, thermoelectric power or thermoelectric sensitivity) is a measure of the magnitude of an induced thermoelectric voltage in response to a temperature difference induced by the Seebeck effect on that material. Hence, the Seebeck effect is a type of thermoelectric effect such as the Peltier effect and the Thomson effect. The Seebeck effect is often used in thermocouples to measure temperature differences or to operate electronic switches that can turn on-off a system. The Seebeck effect is also used in a thermoelectric generator that works like a heat engine. Also, we know that a semiconductor with large Seebeck coefficient can be a good material in thermoelectric. So giving reliable approximations for determining Seebeck coefficients of semiconductors has prime importance in explaining the behavior of semiconductor devices and thermoelectric materials. For this purpose, by using Fermi-Dirac function we have defined a new analytical formulation for the calculation of Seebeck coefficient. Our results have been checked with available literature data and it can be seen that our method is satisfactory.

Keywords: Thermoelectric Properties, Semiconductor Materials, Seebeck Coefficient, Fermi-Dirac Function



**EVDE SAĞLIK HİZMETİ ALIP COVID-19 SEBEBİYLE ÖLEN HASTALARIN
DEĞERLENDİRİLMESİ**

EVALUATION OF PATIENTS WHO RECEIVE HEALTH SERVICE AT HOME AND
DIE DUE TO COVID-19

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ÖZET

Evde Bakım Hizmetleri; hekimlerin önerileri doğrultusunda hasta kişilere, aileleri ile yaşadıkları ortamda, sağlık ekibi tarafından rehabilitasyon, fizyoterapi, psikolojik tedavi de dahil tıbbi gereksinimlerini karşılayacak şekilde sağlık bakımı ile sağlık hizmetlerinin sunulması şeklinde tanımlanmıştır. Aralık 2019'da, koronavirüs hastalığı (COVID-19) salgını ilk olarak Çin'in Wuhan kentinde tespit edildi hızla yayılarak 18 Mart 2021 tarihi itibarıyla dünyada 121.941.358 onaylanmış vaka, 98.277.081 iyileşen vaka varken virüs nedeniyle 2.694.944 kişi öldü. Covid-19 hastalığının eşlik ettiği komorbid hastalıklar ile kişilerin mortalitesini nelerin etkilediğiyle ilgili sınırlı sayıda çalışma mevcut olup eşlik eden komorbid hastalığı olan bireylerin COVID-19'u daha şiddetli bir şekilde geçirdikleri ve sonucun ölümle sonuçlandığı yönünde yapılmış çalışmalar mevcuttur. Ancak hangi komorbid hastalığın daha mortal seyrettiği tam olarak bilinmemektedir. Bildiğimiz kadarıyla Evde Sağlık Hizmeti(ESH) alıp Covid-19 sebebiyle ölen hastaların eşlik eden komorbid hastalıklarını inceleyen bir çalışma yoktur. Çalışmamız 22/03/2020-10/03/2021 tarihleri arasında ESH alıp Covid-19 sebebiyle ölen hastaların yaş, cinsiyet, eşlik eden komorbid hastalıkları, ESH aldıkları gün sayısı, Covid-19 sebebiyle hastanede yattıkları süre ve ölüm yerleri gibi parametreler değerlendirilmiştir. Ölen hastaların ortalama yaşı 78,45±9,46 yıl olup 12'si (%60) erkek, 8'i (%40) kadın idi. Ölen hastalar ortalama 436,25±367,16 gün evde bakım hizmeti almaktalardı. Tüm ölen hastalar en az 1 komorbid hastalığa sahipti. Ölenlerin % 10'u (n=2) 6 komorbid hastalığa sahipken sadece 1 hastanın 1 komorbid hastalığı vardı. Kalp yetmezliği ve Koroner arter hastalığını eş zamanlı barındıran 3 hasta mevcutken bu iki hastalıktan en az birini taşıyan hasta yüzdesi %60 olup Kardiyovasküler hastalık tanısı, ölen hastalarda en fazla görülen comorbid hastalık idi. Ölen hastalarda görülen diğer komorbid hastalıklar sırasıyla %50sinde (n=10) diyabet, %50sinde (n=10) hipertansiyon,%45'inde astım/KOAH ,%45'inde Koroner Arter Hastalığı, %40'ında Kalp Yetmezliği (n=8), %25'inde SVH/SVO (n=5), % 10'unda KBY (n=2) ,%10'unda Alzheimer /Demans (n=2) var idi.Ölen hastaların (%95)i Yoğun bakımda(n=19),%5i(n=1) Acil Serviste ölürken bu 1 yıllık süreçte ESH alıp Covid-19 sebebiyle ev ölümü olmadı.

Anahtar Sözcükler: COVID-19,Evde Sağlık Hizmetleri,Mortalite,Komorbid Hastalıklar



ABSTRACT

Home Care Services; It is defined as the provision of health care and health services to sick people in the environment they live with their families in line with the recommendations of physicians in a way that meets their medical needs, including rehabilitation, physiotherapy, psychological treatment, by the healthcare team. In December 2019, the coronavirus disease (COVID-19) outbreak was first detected in Wuhan, China, spreading rapidly and as of March 18, 2021, there were 121,941,358 confirmed cases in the world, 98,277,081 recovered cases, and 2,694,944 people died due to the virus. There are a limited number of studies about the comorbid diseases accompanied by Covid-19 disease and what affects the mortality of people, and there are studies that show that individuals with accompanying comorbid diseases have more severe COVID-19 and the result results in death. As far as we know, there is no study examining the accompanying comorbid diseases of patients who received Home Health Care (HHC) and died due to Covid-19. In our study, parameters such as age, gender, accompanying comorbid diseases, the number of days they received HHC, the duration of hospitalization due to Covid-19 and places of death of patients who received HHC between 22/03/2020 and 10/03/2021 and died due to Covid-19 were evaluated. The mean age of the patients who died was 78.45 ± 9.46 years and 12 (60%) were male and 8 (40%) were female. Patients who died were receiving home care services for an average of 436.25 ± 367.16 days. All patients who died had at least 1 comorbid disease. While 10% ($n = 2$) of the deceased had 6 comorbid diseases, only 1 patient had 1 comorbid disease. While there were 3 patients with concomitant heart failure and coronary artery disease, the percentage of patients with at least one of these two diseases was 60%, and the diagnosis of cardiovascular disease was the most common comorbid disease in the patients who died. Other comorbid diseases seen in patients who died were diabetes in 50% ($n = 10$), hypertension in 50% ($n = 10$), asthma / COPD in 45%, Coronary Artery Disease in 45%, Heart Failure in 40% ($n = 8$), 25% had SVH / SVO ($n = 5$), 10% had CRF ($n = 2$), 10% had Alzheimer / Dementia ($n = 2$). While 95% of the patients who died in Intensive Care ($n = 19$) and 5% ($n = 1$) in the Emergency Department, nobody died at home due to Covid-19 who received HHC during this 1-year period.

Keywords: COVID-19, Home Health Care, Mortality, Comorbid Diseases



**TÜRKİYE VE AZERBAIJAN İŞ KAZASI ORANLARININ TANIMLAYICI
İSTATİSTİKSEL YÖNTEM İLE KARŞILAŞTIRILMASI**
COMPARISON OF TURKEY AND AZERBAIJAN OCCUPATIONAL ACCIDENT
RATES WITH DESCRIPTIVE STATISTICAL METHOD

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ÖZET

Sayısal veriler, ait oldukları durumu en iyi açıklayan araçlardan biridir. Ancak önemli olan husus verilerin ne kadar doğru tutulduğu ve verilerin ulaşılabilir olup olmadığı ile ilgilidir. Ülkelerin bir çok konuda verilerini genele açması da bu yüzden önemli bir husustur. Verilerin herkesin ulaşabileceği bir platformda yer alması hem o ülkeye güvenilirlik getirirken hem de diğer ülkelerle durum kıyaslamasına olanak sağlamaktadır.

Verilerin varlığına ihtiyaç duyulan alanlardan biri de iş sağlığı ve güvenliğidir. Bu alan için özellikle iş kazası verileri büyük önem taşımaktadır. Ülkeler, kendi iç dinamikleri ile yürüttükleri iş sağlığı ve güvenliği bilimsel faaliyetlerinin neticelerini iş kazası oranlarına göre rahatlıkla ölçebilmektedir. Hatta iş kazası verileri ulusal durumu gösterdiği gibi dahil olduğu uluslararası bölgelerde de diğer ülkelerle karşılaştırma sonucu sıralamasını da belirtmektedir.

Bu çalışma, Türkiye Cumhuriyeti ve Azerbaycan Cumhuriyetinde yaşanan iş kazalarının sayısal yönden karşılaştırılmasını içermektedir. Karşılaştırmanın yapılabilmesi için aynı başlıkları içeren ve uluslararası güvenilirliği kabul edilen ILOSTAT verileri dikkate alınmıştır. En son kayıtların 2019 yılına ait olması nedeniyle 2019 verileri ile çalışma yürütülmüştür. Çalışmanın sonuçlandırılmasında tanımlayıcı istatistik yöntemi kullanılmıştır. Bu yöntem belirli konularda elde edilmiş olan verilerin özelliklerinin belirlenmesinde kullanılmaktadır. Veriler hem çalışma hayatı hem de iş kazası ile ilgili oranları içermekte ve aynı başlıkların incelenmesi ile iki ülkenin durumunun ortaya çıkarılması ile sonuçlanmaktadır.

Anahtar Kelimeler: İş Sağlığı ve Güvenliği, Türkiye, Azerbaycan, İş Kazası, Oran Karşılaştırma

ABSTRACT

Numerical data is one of the tools that best explain the state to which they belong. However, the important issue is about how accurate the data are kept and whether the data are accessible. Therefore, it is an important issue that countries open their data on many subjects to the general. The fact that the data is available on a platform that is accessible to everyone not only brings credibility to that country, but also enables a comparison with other countries.

One of the areas where data is needed is occupational health and safety. In this area, especially occupational accident data are of great importance. Countries can easily measure the results of



the occupational health and safety scientific activities they carry out with their own internal dynamics according to the occupational accident rates. Also, the occupational accident data show the national situation as well as the ranking of the results of comparison with other countries in the international regions where it is included.

This study includes the Republic of Turkey and Azerbaijan in the Republic of experienced work-related accidents compared to the in terms of numerical. In order to make a comparison, including the same titles and international reliability accepted ILOSTAT data were taken into consideration. Since the most recent records belong to 2019, a study has been conducted with 2019 data. Descriptive statistics method was used to conclude the study. This method is used to determine the properties of data obtained on certain subjects. The data includes rates related to both working life and occupational accidents and results in revealing the situation of the two countries by examining the same headings.

Keywords: Occupational Health and Safety, Turkey, Azerbaijan, Occupational Accident, Rate, Comparison



**TÜRKİ CUMHURİYETLERİN MUHASEBE SİSTEMLERİNİN
KARŞILAŞTIRILMASI**

COMPARISON OF THE ACCOUNTING SYSTEMS OF THE TURKISH REPUBLICS

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ÖZET

İşletmeler ve insanlar geçmişten günümüze tarihin her safhasında muhasebeyi dönemin şartlarına uygun olarak ihtiyaçlar doğrultusunda geliştirmişlerdir. Muhasebeden; analiz, kontrol, yönetim, ticari delil, vergi toplama ve raporlama aracı olarak yararlanılmıştır.

Türkiye Cumhuriyeti ve 1991 yılında Sovyetler Birliğinin dağılmasından sonra özgürlüğünü ilan eden Azerbaycan Cumhuriyeti, Kazakistan Cumhuriyeti, Kırgızistan Cumhuriyeti, Özbekistan ve Türkmenistan Cumhuriyetlerinin muhasebe sistemlerinde öncelikle her birinin belge düzeni, kayıt düzeni, hesap planları ve mali tabloları araştırılıp tanımlanması sonucunda çalışmamız gerçekleşmektedir.

Bu çalışma ile her anlamda yakınlaşan iletişim halinde olan ticari ilişkilerin giderek arttığı bu ülkeler arasında birbirini daha sade ve anlaşılır bir hesap sistemi kurarak veya aralarında en yaygın ve basit olan sistemlerini seçerek ortak bir muhasebe önerisine ulaşılabilecektir. Muhasebe 'Ticari Hayatın Lisansı' olarak tanımlanmaktadır. Günlük hayatta Türki Cumhuriyetlerinin de aynı lisansı konuştuğu bilinmektedir. Çalışmamızdaki amaç Türki Cumhuriyetlerin muhasebe işleyişini incelemek, karşılaştırmak ve bunun için her ülkenin ayrı ayrı başta muhasebe olmak üzere hukuk ve tarih alanlarından faydalanarak bilgiler elde edip, muhasebelerinin benzerlik ve farklılık arz eden yönlerini karşılaştırılarak ortak bir muhasebe önerisi sunmaktır.

Ülkeler arasındaki ilişkiler giderek stratejik özellik kazanmaktadır. Bu çalışmanın ülkeler arasındaki ticari diyalogu olumlu yönde etkileyeceği düşünülmektedir. Çünkü işletmeler muhasebe bilgilerine dayanarak çeşitli kararlar alırlar. Alınacak kararların isabeti bu bilgilerin niteliğine bağlı olduğu kadar nasıl toplandığına da bağlıdır. Bu araştırma sonucunda ulaşılan ortak muhasebeden elde edilen veriler ve tablolar sayesinde daha anlaşılır bir hesaplama, kaydetme ve raporlama sistemi ortaya çıkacak ve farklılıklar ve anlaşmazlıklar azalacaktır. Literatür taraması sonucunda elde edilen verileri ile amaca ulaşmaya çalışılmıştır.

Anahtar Kelimeler: Muhasebe, Türki Cumhuriyetler, Muhasebe Sistemi

ABSTRACT

Businesses and people have developed accounting in every stage of history from past to present in accordance with the needs of the period. From accounting; It has been used as an analysis, control, management, commercial evidence, tax collection and reporting tool.



Republic of Turkey and its freedom after the collapse of the Soviet Union in 1991 proclaimed the Republic of Azerbaijan, Republic of Kazakhstan, Kyrgyz Republic, Uzbekistan and priorities of each document layout in the Republic of Turkmenistan accounting system, record layout, chart of accounts and financial statements of our work as a result of the identification explored is realized.

With this study, it is to reach a common accounting proposal by establishing a more simple and understandable account system among these countries, where commercial relations are increasingly in close communication in every sense, or by choosing the most common and simple systems among them. Accounting is defined as the 'Language of Commercial Life'. It is known that Turkic Republics also speak the same language in daily life. The aim of our study is to examine and compare the accounting process of the Turkic Republics and to obtain information from each country's separate accounting, especially accounting, law and history fields, and to present a common accounting proposal by comparing the similar and different aspects of their accounting.

Relations between countries are gradually gaining strategic features. It is thought that this study will positively affect the commercial dialogue between countries. Because businesses make various decisions based on accounting information. The accuracy of the decisions to be made depends on the quality of this information as well as on how it is collected. A more understandable calculation, recording and reporting system will emerge thanks to the data and tables obtained from common accounting as a result of this research, and differences and disputes will be reduced. The aim was tried to be reached with the data obtained as a result of the literature review.

Keywords: Accounting, Turkish Republics, Accounting System



ROBUST IDENTIFICATION BASED ON FRACTIONAL-ORDER MODEL FOR A VEHICLE ELECTRO-RHEOLOGICAL (ER) SUSPENSION SYSTEM**Prof. Dr. Samir Ladaci**¹National Polytechnic School of Constantine, 25100, Constantine Algeria.²Signal Processing Laboratory, UMC university, Constantine 25000, Algeria.

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ABSTRACT

In this paper, we consider the identification of a semi-active Electro-Rheological (ER) suspension system. We propose a linear fractional order model in order to represent the nonlinear quarter-car model equipped with the dynamic nonlinear model of (ER) damper. The objective is to reduce the effects of road profile disturbance and output measurement noise (two acceleration of spring mass and unsprung mass). Simulation results show the effectiveness of fractional order system comparatively to the integer order model used in practice.

Suspension systems play a key role in enhancing the performances of vehicle, with regard to ride comfort and road handling. Suspension system is divided into the sprung mass part and unsprung mass part. Semi-active suspensions are today more and more used in automotive industry because of their efficiency, while being less expensive and consuming less energy than pure active suspension. Many work addressed compared advantage of active and passive elements [1-2]). A major issue of these applications include dynamics and modeling control designs based on a reduced number of sensors to improve vehicle comfort and road holding. Many models have been designed depending on the characteristics of adjustable shock absorber in each semi-active suspension type, using several methodologies with different complexity and precision. Main models may be classified in term of static and dynamic characteristics [3-4].

Recently, The theory of fractional calculus developed rapidly, mostly as a foundation for a number of applied disciplines, including fractional differential equations (FDE) and fractional dynamics. The applications of FC are very wide nowadays. Many authors made a great effort to apply this knowledge in practice (physics and engineering science problems). However, some physical problems are still under debate and controversy as well as modeling and identification of fractional system.

In contrast to the integer order differential equations which are well studied, analytical solution of (FDEs) is rather complicated, and for higher order equations, almost impossible. The difficulty arises especially when the system order increases. In this work we have used some approximation methods in time and frequency domains like Grüwold-Letnikov approach [5] and singularity function method proposed by Charef [6] used to modeling and simulation fractional systems defined by FDE equation.



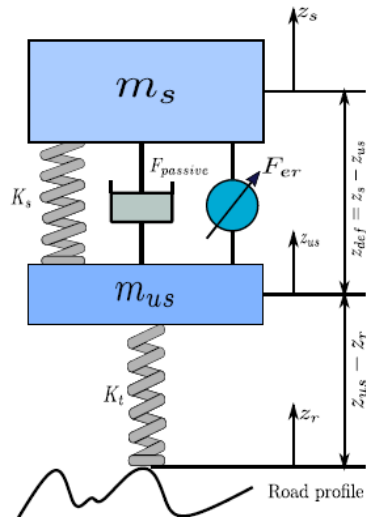


Figure 1. Model of quarter-car with semi-active suspension

In this work we propose a linear fractional order model to identify and approximate the nonlinear semi-active (ER) suspension model generally represented by a linear integer order model as in [7-10]. The recursive least square (RLS) with forgetting factor using to estimate parameters of linear model [8,13].

Keywords: Semi-active suspension system — fractional order model — disturbance — identification — nonlinear system.

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MACROPHAGE TARGETING VIA TOPICAL DRUG DELIVERY FOR THE TREATMENT OF CUTANEOUS LEISHMANIASIS**Fakhar-ud-Din*¹, PhD, Sibgha Batool¹, Fatima Zahid¹, Gul Majid Khan^{1,2} PhD**¹Department of Pharmacy, Quaid-i-Azam University Islamabad, Pakistan; Email:²Islamia College University Peshawar, Khyber Pakhtoonkhwa, Pakistan**Abstract**

Leishmania is considered to be one of the severe tropical diseases according to the World Health Organization (WHO). It affects about 350 million people all over the world. More than 2 million cases occur every year and 12 million people are already affected. Various routes of drug administration are used for the treatment of Leishmania, however the WHO recommended route of drug administration is the topical administration. Drug delivery through topical route against *Cutaneous leishmaniasis* (CL) is a constructive approach for improving the drug availability by targeting it to its site of action and reducing the toxicity associated with other routes of anti-leishmanial drugs. We recently developed novel transfersomes as drug delivery carrier for various antileishmanial drugs including Sodium stibogluconate, Rifampicin, vancomycin and miltefosine (HePC). The basic purpose of these studies was to develop drug loaded transfersomes for targeting the leishmania infected macrophages in the dermis. Drug loaded transfersomes were prepared by ethanol injection method and the formulations were optimized for lipid to surfactant ratio at different stirring speeds. The optimized drug loaded transfersomal formulations were characterized in terms of their particle size, polydispersity index (PDI), zeta potential and incorporation efficiency. Moreover, TEM analysis, deformability index (DI), *in-vitro* release, *ex-vivo* permeation and macrophage uptake studies were also conducted. The drug-loaded transfersomes were further incorporated in the carbopol or chitosan gel and were assessed on the basis of their viscosity, pH, spreadability, drug content, *in-vivo* skin irritation and histopathological studies. All the studies proved the safety of topically applied transfersosomal gel formulation. The macrophage cytotoxicity assay and anti-leishmanial activity were also conducted both *in vitro* and *in-vivo*. The drug loaded transfersomes showed enhanced cytotoxicity potential as compared to the drug solution. Similarly, the anti-leishmanial activity on the intra macrophage amastigote model of *Leishmania major* showed the reduced IC₅₀ value of drug loaded transfersomes as compared to drug solution, thus exhibiting better antileishmanial activity. Additionally, flow cytometry analysis and *in-vivo* study demonstrated enhanced apoptosis and better antileishmanial effects of the drug-loaded transfersomes. All the outcomes revealed that targeted delivery of anti-leishmanial loaded transfersomes could be attained by topical application of these antileishmanial drug loaded transfersomes for the treatment of CL.

Key words: Leishmania, Topical delivery; Transfersomes, Macrophage targeting

**ASSESSMENT OF WATER QUALITY NORTHERN ASSUIT GOVERNORATE,
UPPER EGYPT**

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ABSTRACT

55 water samples were collected from the surface water (18 samples) and the groundwater (37 samples). These samples were analyzed for physical and chemical characteristics. Therefore, the calculation of the water quality index using The Canadian Council Water Quality Index (CCWQI) program to assess the water quality for drinking and human consumptions. Beside all concentrations of the parameters were compared with the permissible limits for drinking water set by the World Organization Health (WHO) and the Egyptian Ministry Health (EMH). The results have been revealed 92% of the studied surface water samples are suitable for drinking and excellent for human purposes. unfortunately, third of the studied groundwater samples are not suitable for drinking and human consumption due to the highest salinity and water hardness. This attributed to infiltrated or recharge the groundwater with the agricultural wastewater and the role of the dissolution which affects the life of human animals and some plants. So, we should be carrying out a treatment for this groundwater before using it.



**A RESILIENT TINY IOT SENSOR NETWORK BASED BATTERY LIFE
SIMULATION FOR REMOTE COMMUNICATION****Dr. Zameer Gulzar¹, Dr. Fatima Almahri²**¹BSAR Crescent Institute of Science and Technology, Chennai, India²University of Technology and Applied Sciences Salalah, Oman**ABSTRACT**

The extensive augmentation of IoT-based sensor networks represents the subsequent evolution of the internet having the capacity to accumulate, evaluate, and distribute the data which will turn data into information, knowledge, intelligent decision making, and the ultimate goal is to attain wisdom in terms of prediction. This latest state-of-the-art progressively taking people a step nearer to the future era of things where everything is coupled, by means of wired and wireless connectivity. To accomplish this vision, energy-efficient systems are needed to support the most challenging necessities for future internet to survive. Energy consumption is the most important performance metric for wireless ad hoc sensor networks because it directly relates to the operational lifetime of the network. Tiny IoT devices are susceptible to attacks among them the main important one is battery life. The sole motivation of a large portion of research efforts has been to maximize the lifetime of the IoT based network, where network lifetime is typically measured from the instant of deployment to the point when one of the nodes has expended its limited power source and becomes unoperational commonly referred as first node failure. A range of attacks exists in Sensor-based nodes which drain the battery life from network nodes. These attacks permanently disable networks by quickly draining nodes' battery power, among them is the Carousel attack and Stretch attack. The most difficult problem in Tiny wireless sensor networks is resilience against attacks. So, the most motivation of this proposed methodology is to make Tiny IoT-based wireless sensor network energy efficient & improve the lifetime of the nodes.

Keywords: IoT, Sensors, Attack, Battery life, Nodes, Network, Healthcare.



**ROLE OF QUEUING THEORY MODEL IN EFFECTIVE BUSINESS STRATEGIES
PLANNING**

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ABSTRACT

Queuing theory Model play vital role in effective business analysis and to design new policy for grow the business. In present competitive environment to attract the customers is a big challenge for executives. Introducing some new policies and other offers on product and services play vital role to attract customers. Due to good attractive offers of the company, new customers attract towards the company to take product and services. Such type of customers is known as motivated customers. Due to motivation policy of the company, intake of customers increases in the system and result is heavy rush in waiting areas and also in waiting time. Due to long waiting, customers can get impatience and may leave the system without getting services. Such type of behavior of customers is known as renegeing. Renegeing of customers is a loss of business and so it is very important for any organization to design strategies to retain the renegeing customers.

This paper concerns the analysis of a two server Markovian queuing model with renegeing of customers. We obtain explicit expressions for steady state probabilities of the queuing model, using iterative procedure. Further, we obtain some important performance measures of the queuing system.

Keywords: Markovian property, Motivated Arrivals, Steady state, Renegeing, retention, Iterative Procudure



^{222}Rn , ^{226}Ra , and ^{238}U IN SOIL SAMPLES COLLECTED FROM KERBALA UNIVERSITY, FREIHA, LRAQ

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ABSTRACT

In the earth's climate natural radioactivity is prevalent and it occurs in soils, plants, air, rocks, and water in different geological formations, in several nations the increasing worldwide interest in natural radiation exposure has led to comprehensive surveys. In this study, alpha particles in the sixty soil samples of the University of Kerbala (Freiha -Sites) were determined using a CN-85 detector. The results show that the radon concentrations ^{222}Rn , Annual effective dose AED, Radium content ^{226}Ra , radon exhalation rates EM and ES, and uranium concentrations ^{238}U . It was concluded that as recommended by (ICRP) and (WHO), the average value of alpha particle concentrations in This study was within safe limits, and the results showed that these areas are healthy with regard to radon gas in terms of a health threat.

Keywords: Alpha particles, Soil, CN-85 , Freiha Site.



**DİYABETİK ANNE BEBEKLERİNDE MAKROZOMİ VE MAKROZOMİLİ
BEBEĞİN BAKIMI**

CARE OF BABIES WITH MACROSOMIA AND MACROSOMIA IN INFANTS OF
DIABETIC MOTHERS

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ÖZET

Makrozomi, bebeğin gestasyonel yaşına veya cinsiyetine bakılmaksızın doğum ağırlığının 90persantil ve üstü, 4000gr< olmasıdır. Artan vücut yağı, iç organ hipertrofisi ve artmış iskelet büyümesi ile karakterizedir.

Hipoglisemi diyabetik anne bebeklerinde yaklaşık %15-50 oranında görülür. Literatür bebek makrozomili ise diyabeti olmayan annelerin bebeklerine kıyasla daha yüksek şiddetli hipoglisemi oranlarına sahip olduğunu vurgulamaktadır. Yeni doğanın glikoz kaynağı doğum sırasında aniden kesildiğinde, devam eden insülin üretimi kısa süre sonra dolaşımdaki kanın glikozun tüketerek, hipoglisemiye neden olur.

Hem anne hem de bebek için kuşkusuz en iyi beslenme seçeneği emzirmedir. Emzirme ve bebeğin anne sütüyle beslenmesi hipogliseminin önlenmesinde temeldir. Literatürde gebelikte diyabeti olan annelerde emzirme oranlarının düşük olduğunu gösteren kanıtlar vardır. Diyabetik annelerde laktasyonun gecikmesi, sezaryen doğum oranının yüksek olması, emzirme zorlukları, yenidoğanın emmedeki güçlüğü, hipoglisemi, bebeğin sağlığından endişe duyulması gibi nedenler emzirmenin kesintiye uğramasına neden olmaktadır.

Makrozomik bebeğin hemşirelik bakımı; yeterli termoregülasyonun sağlanması ve sürdürülmesi, beslenmenin erken başlatılması, uygun aralıklarla kan şekeri takibi, bebeğin hijyenik bakımı ve dikkatli izlemine içerir. Emzirmeye erken başlanması ve uygun aralıklarla beslenmenin sürdürülmesi, plazma glikoz seviyelerini korumak için çok önemlidir. Bebekler doğumdan sonraki ilk yarım saat içinde emzirmeye başlanmalıdır. Emmede sorun varsa anne sütü sağılarak kaşıkla bebeğe verilebilir. Tekrarlayan hipoglisemi ataklarında uygun beslenme sürdürülmeli ve önerilen tedavi protokolü uygulanmalıdır.

Laktasyon hemşireleri tarafından doğum öncesi dönemden başlanarak diyabetik anneler, emzirme konusunda bilgilendirmeli ve bu danışmanlık hizmetlerine doğum sonrası süreçte de devam etmelidir.

Anahtar Kelimeler: Diyabetik Anne Bebeği, Emzirme, Hemşirelik Bakımı, Hipoglisemi, Makrozomi



ABSTRACT

Macrosomia is seen in up to 40% of babies of diabetic mothers. Macrosomia is the condition where the birth weight of the baby is more than 4000 grams and the percentile value is 90 or more, regardless of the gestational age or gender of the baby. It is characterized by increased body fat, visceral hypertrophy and increased skeletal growth.

Hypoglycemia is seen in approximately 15-50% of babies of diabetic mothers. The literature emphasizes that mothers with diabetes have higher rates of severe hypoglycemia in macrosomic newborns compared to mothers without diabetes. When the newborn's glucose supply is suddenly cut off during birth, the ongoing insulin production soon consumes the circulating blood glucose, causing hypoglycemia.

The best feeding option for both mother and baby is breastfeeding. Breastfeeding is fundamental to preventing hypoglycemia. There is evidence in the literature showing that breastfeeding rates are low in mothers that have diabetes during pregnancy. The followings cause the interruption of breastfeeding: delay in lactation, high rate of cesarean delivery, breastfeeding difficulties, difficulty in breastfeeding of the newborn, hypoglycemia, concern for the health of the baby.

Nursing care of macrosomic baby includes ensuring and maintaining adequate thermoregulation, early initiation of feeding, blood glucose monitoring at appropriate intervals, hygienic care and careful monitoring of the baby. Starting breastfeeding early and continuing to feed at appropriate intervals is crucial to maintaining plasma glucose levels. Babies should be breastfed within the first half an hour after birth. If there is a problem in sucking, breast milk can be expressed and given to the baby with a spoon. In recurrent episodes of hypoglycemia, appropriate nutrition should be maintained and the recommended treatment protocol should be applied.

Starting from the prenatal period, diabetic mothers should be informed by lactation nurses about breastfeeding and these consultancy services should continue in the postpartum period.

Keywords: Breastfeeding, Hypoglycemia, Infant of Diabetic Mother, Macrosomia, Nursing Care



**TÜRKİYE'DE SÖZLEŞMELİ TARIMSAL ÜRETİM
CONTRACT FARMING IN TURKEY**

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ÖZET

Tarımda pazara dönük üretimle birlikte ihtisaslaşma artarken, üretim için gerekli girdilerin işletme dışından sağlanması, üretilen ürünlerin işletme dışında değerlendirilmesi şeklinde bir yapılanma ortaya çıkmış ve bu şekilde tarım-sanayi ilişkisi gelişmiştir. Bu gelişmeler tarımda ekonomik işbirliği ve entegrasyonu zorunlu kılmıştır. Ülkemizde belli alanlarda ve ürünlerde uzun yıllardır sözleşmeli üretim yapılmaktadır ve giderek tarımsal ticaretin daha önemli bir yönü haline gelmektedir. Özellikle Türkiye gibi küçük ölçekli tarım işletmelerinin yaygın olduğu ülkelerde kayda değer bir potansiyele sahiptir. Çünkü küçük ölçekli işletmelerin sözleşmeli üretim modelinin sunduğu hizmetlerden yararlanmadan günümüz piyasalarında rekabet etmeleri oldukça güçtür. Bu nedenle sözleşmeli üretim, dünyadaki başarılı örnekler dikkate alındığında Türk tarımına başarı katacak bir modeldir. Ancak bu sistemi üretici ve sanayicilerin uyum içinde olacağı, çözüm odaklı bir model haline getirmek önemlidir.

Anahtar Kelimeler: Sözleşmeli üretim, tarım, sanayi, Türkiye

ABSTRACT

Specialization has increased with market oriented production in agriculture. A structure has emerged in the form of providing the necessary inputs for production in agriculture from outside the enterprise and evaluating the products produced outside the enterprise. Agriculture-industry relationship has developed. These developments are necessary for economic cooperation and integration in agriculture. Contractual production has been carried out in certain areas and products in our country for many years and it is gradually becoming a more important aspect of agricultural trade. Especially noteworthy is common in countries where small-scale agricultural enterprises like Turkey has a potential. Because it is very difficult for small-scale enterprises to compete in today's markets without benefiting from the services offered by the contracted production model. For this reason, contracted production is a model that will add success to Turkish agriculture when successful examples in the world are taken into account. However, it is important to turn this system into a solution-oriented model in which producers and industrialists will be in harmony.

Keywords: Contract farming, agriculture, industry, Turkey



**KANSER VAKALARININ AVRUPA ÜLKELERİ VE TÜRKİYE
KARŞILAŞTIRMASI**

COMPARISON OF CANCER CASES IN EUROPEAN COUNTRIES AND TURKEY

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ÖZET

Avrupa'da kanser, dolaşım hastalıklarından sonra ölümlerin ikinci önde gelen nedenini oluşturmaktadır. ICD-10 tanı kodlamasına göre Avrupa ülkelerinde en çok mortalite ile sonuçlanan kanser türü akciğer (trakea, soluk borusu, bronş) kanseridir. Akciğer kanserinden sonra Avrupa kıtasında en çok ölümle sonuçlanan kanser türü, kolon, rektosigmoid bileşke, rektum, anüs ve anal kanal kanserleri gelmektedir. Daha sonra mortalite ile en çok sonuçlananlar sırasıyla meme kanseri, pankreas ve prostat kanserleridir.

Kanser insidansı ve mortalitesi ülkeler arasında farklılık göstermektedir. Nüfusa göre kansere bağlı ölüm sayılarının Macaristan'da yüksek seyretmesi mamografi ve rahim ağzı tarama programlarına başvuru oranının az olması ve kişi başına düşen mamografi tıbbi ekipman sayısının mevcut Avrupa ülkelerine göre az olması ile ilişkili olabilir. Macaristan'a ilave olarak Hırvatistan, Letonya, Slovenya ve Estonya'da kansere bağlı ölümler nispeten yüksektir. Öte taraftan İrlanda, Güney Kıbrıs, Lüksemburg, Finlandiya, Malta ve Türkiye'de nüfusa göre kansere bağlı gelişen mortalite oranları düşük gerçekleşmiştir.

Bu çalışma tanımlayıcı bir çalışma olup Avrupa ülkeleri ve Türkiye ile sınırlı tutulmuştur. Çalışmada, bu kapsamda Türkiye ve Avrupa'da bireylerin kanser tarama programlarına başvuru sayıları, ülkelerin kanser tedavisine yönelik sahip olduğu tıbbi ekipman sayıları ve kanser insidansı ve nüfusa göre kanser kaynaklı toplam ölüm sayıları karşılaştırılarak kanser ölümlerine ilişkin genel durum analizinin yapılması amaçlanmış ve ilgili konularda uluslararası değerlendirmelerde bulunulmuştur. Son olarak bu çalışmanın gelecek zamanda daha kapsamlı çalışmaların yapılmasına fayda sağlayarak yürütülecek diğer çalışma sonuçlarına referans olması amaçlanmıştır.

Anahtar Kelimeler: Kanser Mortalitesi, Kanser İnsidansı, Avrupa Ülkeleri, Kanser Vakaları

ABSTRACT

In Europe, cancer is the second leading cause of death after circulation diseases. According to ICD-10 diagnostic coding, lung (trachea, trachea, bronchus) cancer is the most common type of cancer that results in mortality in European countries. After lung cancer, the most fatal cancer type in the European continent is colon, rectosigmoid junction, rectum, anus and anal canal cancers. Then, breast cancer, pancreatic and prostate cancers are the most common results of mortality, respectively.



Cancer incidence and mortality differ between countries. High number of cancer-related deaths in Hungary according to the population, the rate of application to mammography and cervical screening programs is low and it may be related to the smaller number of mammography medical equipment per capita compared to available European countries. In addition to Hungary, cancer-related deaths are relatively high in Croatia, Latvia, Slovenia and Estonia. On the other hand, in Ireland, South Cyprus, Luxembourg, Finland, Malta and Turkey, the rates of mortality that are developing due to cancer have been low, according to the population.

This study is a descriptive study was limited to European countries and Turkey. Within this study the number of applications to the individual's cancer screening program in Turkey and Europe, the number of medical equipment countries have for cancer treatment and by comparing the cancer incidence and the total number of cancer-related deaths by population it is aimed to analyze the general situation of cancer deaths and international assessments have been made on related issues. Finally, this work will help to make more comprehensive studies in the Future, it is intended to be a reference to the results of other studies to be conducted.

Keywords: Cancer Mortality, Cancer Incidence, European countries, Canser Cases.



KAFKAS İSLAM ORDUSU KOMUTANI NURİ PAŞA'NIN BAKÜ ÇIKARTMASI
IMMEDIATION OF BAKU BY NURI PASHA, COMMANDER OF THE ISLAMIC
ARMY OF THE CAUCASUS

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ÖZET

1917 yılında Rusya'da ortaya çıkan Bolşevik İhtilali sonucu Çarlık rejimi sona ermiş, Kafkas halkları da gerçekleşen bu ihtilalden yararlanmak ve kendi bağımsızlıklarını ilan edip hedeflerine ulaşmak için çeşitli yollara başvurmuşlardır. Osmanlı İmparatorluğu'nun Birinci Dünya Savaşı'nın başındaki başarıları Kafkas halklarının Osmanlı Devleti'ne yönelmesini sağlamıştır. Daha önce Osmanlılara kuşkuyla yaklaşan Gürcüler bile bağımsız bir Gürcistan devletinin Osmanlı koruması altına girebileceğini düşünmeye başlamışlardır. Bu dönemde Osmanlı Devleti Kafkasya'ya bir ordu gönderme kararını alınca, Enver Paşa bu ordunun kumandanlığına kardeşi Nuri Paşa'yı atamıştır. Azerbaycan Türklerinin neslinin tükenme tehlikesi altında olduğunu anlayan Osmanlı Devleti askeri hazırlıklar yapmak üzere Nuri Paşa komutasında 'Kafkas İslam Ordusu' adı verilen bir orduyu hiç tereddüt etmeden Azerbaycan'a göndermiştir. Bu ordu Gence'den ilerleyerek yerel Azerbaycanlı gönüllülerle güçlerini birleştirip Bakü'ye doğru hareket etmiştir. Bakü'ye varmasıyla birlikte kuşatma ve çatışmalar sonucunda Ermeni, Bolşevik-Rus ve İngiliz kuvvetlerini mağlup ederek 15 Eylül 1918 tarihinde Bakü'yü kurtarmıştır. Beş aydan uzun süren ve yaklaşık 1.200 Osmanlı ve Azeri Türkünün şehit olduğu bu hareket sonucunda Azerbaycan tümüyle kurtarılmış ve ülkenin toprak bütünlüğü sağlanmıştır. Kafkas İslam Ordusu'nun Azerbaycan hareketinin en dikkat çekici yönü askeri, siyasi, ve sosyal gibi tarihsel sonuçlar elde etmek olmuştur. Fakat en önemli sonucu yeni kurulan Azerbaycan Demokratik Cumhuriyeti'nin kurulması, güçlendirilmesi ve toprak bütünlüğünün sağlanmasıdır. Bunun yanında bir diğer önemli sonuç ise Azerbaycan ile Türkiye arasında sarsılmaz bir şekilde oluşan kardeşlik ve güven duygularını güçlendirmiştir. Osmanlı Devleti'nin Nuri Paşa komutasında Bakü'ye gönderdiği Türk askerlerini Azerbaycan halkı memnuniyetle karşılayarak bağrına basmışlardır. Bu tebliğde Osmanlı Devleti'nin kardeş olarak gördüğü Azerbaycan'a Ermeni, Bolşevik-Rus ve İngilizlere karşı kahramanca mücadele verdiği bilgiler ele alınmaktadır.

Anahtar Kelimeler: Nuri Paşa, Kafkas İslam Ordusu, Bakü, Azerbaycan, Bolşevikler, Ermeniler.

ABSTRACT

As a result of the Bolshevik Revolution in Russia in 1917, the Tsarist regime came to an end, and the Caucasian peoples resorted to various ways to take advantage of this revolution, declare their independence and reach their goals. The successes of the Ottoman Empire at the beginning of the First World War enabled the Caucasian peoples to turn towards the Ottoman Empire. Even Georgians, who were previously suspicious of the Ottomans, began to think



that an independent Georgian state could fall under Ottoman protection. During this period, when the Ottoman Empire decided to send an army to Caucasia, Enver Pasha appointed his brother Nuri Pasha as the commander of this army. The Ottoman Empire, realizing that the Azerbaijani Turks are in danger of extinction, sent an army under the command of Nuri Pasha to Azerbaijan without hesitation, under the command of Nuri Pasha. This army advanced from Ganja and joined forces with local Azerbaijani volunteers and moved towards Baku. With his arrival in Baku, he defeated the Armenian, Bolshevik-Russian and British forces as a result of the siege and clashes and saved Baku on 15 September 1918. As a result of this operation, which lasted more than five months and in which approximately 1,200 Ottoman and Azerbaijani Turks were martyred, Azerbaijan was completely liberated and the territorial integrity of the country was ensured. The most striking aspect of the Azerbaijan movement of the Caucasian Islamic Army has been to achieve historical results such as military, political and social. However, the most important result was aimed at establishing, strengthening and ensuring the territorial integrity of the newly established Azerbaijan Democratic Republic. Another important result with the addition of Azerbaijan has strengthened the feelings of brotherhood and trust between Turkey that occur in a steady manner. The Azerbaijani people welcomed the Turkish soldiers sent by the Ottoman Empire to Baku under the command of Nuri Pasha and embraced them. In this study, it deals with the information that the Ottoman Empire heroically fought Azerbaijan against Armenians, Bolsheviks-Russians and the British, whom it regarded as brothers.

Keywords: Nuri Pasha, Caucasian Islamic Army, Baku, Azerbaijan, Bolsheviks, Armenians.



YÜKSEK SÜT VERİMLİ İNEKLERDE SEXED VEYA KONVANSİYONEL SPERMA KULLANIMININ GEBELİK ORANLARI ÜZERİNE ETKİSİ

THE EFFECT OF SEXED OR CONVENTIONAL SEMEN USE ON PREGNANCY RATES IN HIGH MILK YIELD DAIRY COWS

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ÖZET

Bu çalışmanın amacı, 1. laktasyondaki yüksek süt verimli ineklerde (45 litre ve üzeri) tohumlamada kullanılan sexed ve konvansiyonel payetlerdeki doz farkının gebelik başarısı üzerine etkilerini değerlendirmektir. Çalışmamızda suni tohumlama işlemlerinde, aynı boğaya ait sexed dişi sperma ve konvansiyonel payetler kullanılmıştır. Tedarik edici firma tarafından istenilen raporlarda; sexed sperma içeren payetlerde 1.7 milyon motil spermatozoa, konvansiyonel sperma içeren payetlerde ise 7.2 milyon motil spermatozoa olduğu bildirilmiştir. Denemede 96 tane Holstein ırkı ineğe PGF₂ alfa uygulaması yapılmıştır. Uygulamalardan sonra 48-72. saatlerde kızgınlık takibi gerçekleştirilmiştir. Kızgınlığın tespiti amacıyla; dış kızgınlık bulguları ve folikül çapları değerlendirilmiş olup, ovaryumlarında 1,5 cm ve üzeri folikül bulunan inekler tohumlanmışlardır. Kızgınlık belirtilerini gösteren 46 inek sexed sperma, 50 inek ise konvansiyonel sperma içeren payetler ile tohumlanmışlardır. Tohumlama sonrası sexed sperma ile tohumlanan ineklerin olduğu grupta 30 gebelik, diğer grupta ise 33 gebelik elde edilmiştir. Gruplar arasında istatistiksel olarak bir farklılık gözlemlenmemiştir ($p>0.05$). Sonuç olarak sexed ve konvansiyonel sperma içeren payetlerin benzer bir başarı oranıyla kullanılabileceği görülmüştür.

Anahtar Kelimeler: Sexed Sperma, Suni Tohumlama, İnek

ABSTRACT

The aim of this study is to evaluate the effects of dose difference on the pregnancy of sexed and conventional straws used for insemination in cows with high milk yield (45 liters and above) in the 1st lactation. In artificial insemination, sexed female sperm and conventional straws belonging to the same bull were used. In the reports requested by the supplier company; 1.7 million motile spermatozoa in straws containing sexed semen and 7.2 million motile spermatozoa in straws containing conventional semen. PGF₂ alpha was administered to 96 Holstein cows in the experiment. After the applications, estrus was monitored 48-72 hours. In order to detect heat; External estrus findings and follicle diameters were evaluated. Cows with follicles of 1.5 cm or more in their ovaries were inseminated. 46 cows showing signs of estrus were inseminated with sexed semen and 50 cows with sequins containing conventional semen. After insemination, 30 pregnancies were obtained in the group of cows inseminated with sexed



semen, and 33 pregnancies in the other group. There was no statistically significant difference between the groups ($p > 0.05$). As a result, it has been observed that straws containing sexed and conventional semen can be used with a similar success rate.

Keywords: Sexed Semen, Artificial Insemination, Cattle



FİİLİMSİLERLE KURULAN BASİT CÜMLELER
SIMPLE SENTENCES SET UP WITH GERUNDIAL

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ÖZET

Dil, iletişimi sağlayan temel unsurdur. Bu sebeple, insanlar bir duyguyu, düşünceyi veya hareketi yansıtırken dili kullanır ve yansıtım esnasında çoğu zaman bir söz dizimi birliğine ihtiyaç duyar.

Sözdiziminde yüklem belirleyicidir. Yüklem de çekimli fiil olarak oluşmaktadır. Cümle dildeki esas birimdir. Duygu, düşünce ve hareketi ifade eden ve içerisinde mutlaka çekimli bir fiil barındıran kelime grubu cümleyi meydana getirmektedir. Söz dizimi çalışmalarında üzerinde en çok durulan konu, yapılarına göre cümlenin nasıl ele alınacağıdır. Türkoloji’de uzun yıllardır tartışılan cümle sorunu beraberinde birleşik cümle sorununu da getirmiştir. Birleşik cümle sorununun temelinde yan cümle kavramı yatmaktadır. Yan cümlenin yargı bildirip bildirmediği ayrı bir problem olarak varlığını sürdürürken bu soruna fiilimsiler de dâhil olmuştur. Türkologlar birleşik cümlenin yapısı ve tasnifi konusunda tam bir birlik sağlayamazlar da cümleyi oluşturan esas noktasının yargı olduğu konusunda ortak bir paydada buluşmuşlardır.

Bu çalışmada araştırmacılar tarafından yapılan cümle tanımları, birleşik cümle kategorisi ve bu kategorinin sınıflandırılmasına değinilmiştir. Daha sonra fiilimsilerin ve yan cümlelerin anlam düzleminden bahsedilmiştir. Fiilimsilerle oluşan yan cümlenin çekimli fiil almamasından dolayı cümlede tam bir yargı veya hüküm bulunmadığına değinilmiştir. Daha sonra tam yargının bulunmadığı bir cümlenin cümle kategorisinde olamayacağı, fiilimsilerin bulunduğu yan cümleleri basit cümle kategorisinde ele alınması gerektiği savunulmuştur. Çalışmanın sonunda da cümle konusunda yeni bir sınıflandırma önerisinde bulunulmuştur.

Anahtar Kelimeler: Cümle, Basit Cümle, Yargı, Fiilimsiler.

ABSTRACT

Language is the basic element that enables communication. For this reason, people use language to reflect an emotion, thought, or gesture, and often need a syntax unity during projection. The predicate is decisive in syntax. Prediction is formed by taking a conjugated verb. Sentence is the main unit of language. The group of words expressing emotion, thought and movement and containing an inflected verb make up the sentence. The most emphasized subject in syntax studies is how to handle the sentence according to its structure. The sentence problem, which has been discussed for many years in Turcology, has brought the compound sentence problem with it. The concept of subordinate sentences lies at the heart of the compound sentence problem. Whether the subordinate sentence declares a judgment or not continues to exist as a separate problem, but verbalists are also included in this problem. Although Turcologists cannot provide a complete unity about the structure and classification of the compound sentence, they



have come to a common ground that the main point of the sentence is the judiciary. In this study, the definition of sentences made by the researchers, the compound sentence category and the classification of this category are discussed. Later, the semantic plane of verbs and subordinate sentences is mentioned. It is mentioned that there is no full judgment or judgment in the sentence because the subordinate sentence formed with verbs does not take a conjugated verb. Afterwards, it was argued that a sentence without full judgment cannot be in the sentence category, and the subordinate sentences with verbs should be considered in the simple sentence category. At the end of the study, a new classification proposal on the sentence was made.

Keywords: Sentence, Simple Sentence, Judgment, Verbs.



**DEOXY-SUGAR RELEASING PRO-ANGIOGENIC DRESSINGS TO
ACCELERATE HEALING IN BURNS INJURIES AND DIABETIC FOOT ULCER
WOUNDS**

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ABSTRACT

To develop an effective, safe and low-cost wound dressing to stimulate angiogenesis. Angiogenesis is an absolute requirement for wound healing. With extensive burns and diabetic ulcers neovascularization is very difficult to achieve due to the loss of blood vessels (with burns) or damage to blood vessels (in diabetes). Research has shown that growth factors stimulate endothelial cells to migrate, proliferate and form new blood vessels. However, the most commonly used proangiogenic growth factor-vascular endothelial growth factor (VEGF) while central to angiogenesis in vivo has not proven an effective therapy when delivered directly to wound beds. Recombinant VEGF and its relatively poor stability make it unlikely to be adopted by countries lacking financial resources for advanced wound healing biomaterials. Also, very high local levels of VEGF have been found to lead to the sort of vasculature associated with tumours. In the body VEGF is produced and released in a highly regulated manner.

In the current study we explored the ability of D-sugar a simple small organic molecule to stimulate new blood vessels. This D-sugar can be loaded into a number of clinically acceptable carriers. These materials were tested in the chick chorionic allantoic membrane (CAM) assay to investigate their role in angiogenesis and these were then tested on a full thickness wound model in rats. Sugar loaded materials showed a strong pro-angiogenic activity in the CAM assay and excellent wound healing properties in rats.

The proangiogenic activity of this sugar may be due to indirect activation of the VEGF angiogenic pathway –this needs further investigation. However, its potency and stability are extremely promising and a biotechnology company, Cannenta has now been established to bring affordable, effective advanced wound care products to emerging markets around the world.

Key words: angiogenesis, biomaterials, tissue engineering, chronic ulcer and burn wounds



**COMPARATIVE ANALYSIS OF APRIORI AND FP-GROWTH ALGORITHMS FOR
FREQUENT PATTERN MINING USING APACHE SPARK**

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ABSTRACT

Looking for frequent patterns from the large database in Data Mining (DM) is a difficult task and researchers are working extensively to develop novel algorithms. In recent years, a number of scalable and effective algorithms for frequent itemsets mining (for big data analytics) have been proposed by many researchers. The two most efficient algorithms used for this purpose are FP-Growth and Apriori. Apriori algorithm candidate itemsets and tests if they are frequent. FP-Growth technique generates a tree dynamically and uses pattern fragment growth to unearth the frequent itemsets from the dataset. The purpose of this work is to discover the best among these two algorithms, while using the widely used big data platform “Apache Spark”. The paper has employed Istacart open-source data available on the Kaggle website, having approximately 3 millions transactions. The performance has been evaluated on the basis of execution time, cost, and number of scans. It is found that FP-Growth is many times faster and less resource consuming than apriori algorithm.

Keywords: association rules mining, FP-Growth, apriori, apache spark



**POLISH MODEL OF ELECTRONIZATION OF THE EXAMINATION
PROCEDURE IN CIVIL CASES**

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ABSTRACT

The Polish system of justice in civil cases is in the course of an extensive and long-term process of computerization and electronization of procedural actions. The development of this area of activity of common courts in civil cases is manifested on two levels.

The first level is activities aimed at creating comprehensive proceedings that will be entirely conducted in the ICT system – from their initiation to the enforcement of the judgment. Currently, examples of such proceedings are electronic proceedings by writ of payment, which are accelerated proceedings for the recovery of cash benefits.

The second area of activity of the Polish legislator is the creation of detailed solutions for the electronization of the examination proceedings in a classic form, such as electronic evidence, e-service or electronic protocol. In this regard, the Polish legislator uses a hybrid model that takes into account the legal protection of persons with high digital competences, but also, the legal protection of persons who not only have insufficient digital competences, but also do not have access to a computer and the Internet.

The Polish legal system is in the *in statu nascendi* phase in the field of computerization of the system of justice, which means that many solutions are still in the design and development phase, such as the ICT system supporting each stage of the examination and auxiliary proceedings (proceedings to secure claims and enforcement proceedings).

Keywords: law, civil procedure, electronization



**THE ELECTRONIZATION OF ENFORCEMENT PROCEEDINGS IN CIVIL CASES
IN POLAND - CURRENT STATE AND PROSPECTS**

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ABSTRACT

In the era of increasing electronic communication and striving to introduce new technologies to civil proceedings, also in enforcement proceedings, there are created solutions that involve the electronization of proceedings. In connection with more and more new regulations, it should be indicated at what stage of electronization of the judicial enforcement proceedings in Poland are.

The electronization of judicial enforcement proceedings, which started in Poland in 2010, is related to the introduction of the electronic procedure by writ of payment into the Polish legal system of civil procedure with the Act of 9 January 2009 amending the Act on the Code of Civil Procedure and some other acts. There are many regulations that modified certain actions taken by enforcement authorities and parties of enforcement proceedings by attributing a separate electronic form thereto. The newly introduced regulations constituted a breakthrough for the electronization of judicial enforcement proceedings in Poland, resulting from the quick development of modern information technology (IT). There are some amendments to the regulations that concern the issue of a writ of execution for an enforcement order that exists in an electronic form and the issue of a European enforcement order certificate to court rulings given in the electronic procedure by writ of payment. Other provisions include new possibilities of submitting petitions or statements by e-mail in enforcement proceedings; under other regulations (e.g. concerning e-auctions and the seizure of a bank account), such communication will be exclusive.

Currently, an important aspect of electronization of judicial enforcement proceedings there are regulations of electronic bailiff files as the only form of keeping files and reducing costs and the need for archiving.

Keywords: Law, civil law, civil procedure, electronization, e-enforcement proceedings



**THE EFFECT OF NANOPARTICLES ON MHD BLOOD FLOW IN STRETCHING
ARTERIAL POROUS VESSEL WITH THE INFLUENCE OF THERMAL
RADIATION, CHEMICAL REACTION AND HEAT GENERATION /ABSORPTION**

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ABSTRACT

Numerical and theoretical analysis of the effect of nanoparticles on MHD blood flow in stretching arterial porous vessel with the influence of thermal radiation, chemical reaction and heat generation/absorption has been examined. The governing non linear partial differential equations of momentum, energy and nanoparticles concentration are converted into ordinary differential equations using similarity transformations which are solved numerically. The dimensionless governing equations are solved using Runge-Kutta- Fehlberg fourth-fifth order along with shooting method. The effect of physical parameters viz., Hartmann number, unsteadiness parameter, permeability parameter, Brownian motion parameter, thermophoresis parameter, thermal radiation parameter, heat source parameter, chemical reaction parameter and Lewis number on flow variables viz., velocity of nanofluid, temperature and nanoparticles concentration has been analyzed and discussed graphically. From the simulation study the following important results are obtained: velocity of nanofluid flow increases with an increment of unsteadiness and permeability parameter; velocity of nanofluid decreases with an increment of Hartmann number; temperature profile of the model problem increases as Brownian motion parameter, thermophoresis parameter, thermal radiation parameter and heat source parameter increases. An increment in Lewis number and chemical reaction parameter results in decrement of nanoparticles concentration of the nanofluid. As the value of thermophoresis parameter increases nanoparticles concentration of the nanofluid increases.

Keywords: Nanoparticles, Brownian motion parameter, thermophoresis parameter, thermal radiation, chemical reaction.



AN UNAVOIDABLE TANDEM OF INTERESTS: SOVEREIGN AND GLOBAL**Francisco José Leandro**

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ABSTRACT

Considering that the new globalization centre of gravity will move from the Northern Euro-Atlantic area to the indo-Asia-pacific region and the advancement of the Chinese B&R initiative, this paper attempts to shed light on the new features of globalization and the need to pursue the compromise between national interest and state responsibility. Understanding global governance as the management of several formal, informal, multilateral and multilevel processes of consensus-forming, addressed to shaping the international order, this paper seeks to identify the new trends and the ultimate role of new-born quasi-global institutions. It further attempts to answer questions such as **what shall we understand as national interest?** What sort of new state responsibilities are arising? Is there a core relationship between national interest and state responsibility? If that exists, what are the consequences to multilateral global governance? To what extent is global interest adverse to national interest? The proposed paper adopts geopolitical-geo-economic perspectives, grounded in the theories of international relations parity, qualitative research methodology and semi-structured interviews.

Keywords: Global Governance, Globalism, Community of Shared Future, National Interest, China, B&RI, Common Interests, Responsible Sovereignty.

Short BIO:

Francisco José **Leandro** received a Ph.D. in political science and international relations from the Catholic University of Portugal in 2010. From 2016 to 2017 he took part in a post-doctoral research programme on state monopolies in China - One belt one road studies. In 2014, 2017 and 2020, he was awarded the Institute of European Studies in Macau (IEEM) Academic Research Grant, which is a major component of the Asia-Europe Comparative Studies Research Project. From 2014 to 2018, he was the Programme Coordinator at the Institute of Social and Legal Studies, Faculty of Humanities at the University of Saint Joseph in Macau, China. He is currently Associate Professor and Assistant-Dean of the Institute for Research on Portuguese-Speaking Countries at the City University of Macau (China). His most recent books are titled: *Steps of Greatness: The Geopolitics of OBOR* (2018), University of Macau; *The Challenges, Development and Promise of Timor-Leste* (2019), City University of Macau; and *The Belt and Road Initiative: An Old Archetype of a New Development Model* (2020), Palgrave MacMillan. Francisco Leandro is member of the OBSERVARE - The Observatory of Foreign Relations, created in 1996 as a center for studies in International Relations at the Autonomous University of Lisbon, Portugal (<https://orcid.org/0000-0002-1443-5828>).



ENERGY IN SMART FARMS**Brahim Lejdel**

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ABSTRACT

Actually, the need for energy in the agriculture field is increasing as a result, increasing the productivity of these fields. The appearance of Smart Grid and IoT (internet of objects) enabled farmers to control, manage and optimize the energy consumption. In the other sides, agriculture will continue to rely on energy to increase its productivity in line with increasing population and great demand. In this paper, we present an integrated model between SmartFarms, the Smart-grid and optimization methods. The objective of this model is to focus on ways, which can improve the decision support systems in Smartfarms to enable optimal decision making in term of energy consumption and crop quantity. In this way, smart forms can participate actively and benefit from the energy market. Also, it can support the reliable operation of Smart grids while minimizing their expenditures on energy and increasing farm productivity.

In the last decade, the energy used in agriculture is a recent issue of research. The flames consume increasingly the Energy, which is used directly in farm activities such as fertilization, irrigation and indirectly in different forms such as liquid fuels to power vehicles and electricity for other processes. The rise in energy used has been a result of the intensification of agricultural production systems due to the need to match food production with increasing demand with increasing populations. The Optimization of energy is an important subject in this decade. In this paper, we achieve the optimization of energy consumption using the genetic algorithm.

In this paper, we consider the electrical energy that is directly used in activities ranging from field processes such as irrigation of land. Energy is also indirectly consumed in synthetic additives notably fertilizers, pesticides, and herbicides. In addition, we can consider the electrical energy, which used for powering some agricultural machines.

Keywords: Crop, Genetic algorithm, optimization, energy consumption.

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GENETIC ALGORITHM TO FIND OPTIMAL PATH ACCORDING TO TIME AND DISTANCE

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ABSTRACT

Route planning in transportation networks is an important issue. When we want to Travel, we ask always what is the efficient routing methods which can allow us to reach our destinations through the transportation scheme. Especially, the agents of the fire department which preventing and fighting fires, need to define the shortest path with go to the place of fire. In this paper, we propose a new approach for computing the shortest paths between two points. We will combine The travel time and the distance to define our cost function. Our proposed approach is based on the Genetic Algorithm (GA). We compare our approach with the exact shortest path algorithm Dijkstra. Results have shown that the success rate of our approach in terms of converging to optimum/near-optimum solutions is highly better than a pure Dijkstra .

Keywords-Genetic Algorithms; Optimization, optimal path.



ARDL BOUNDS TEST OF GREENHOUSE GAS EMISSIONS**^{1*}Olorunpomi, O.T., ²Olorunpomi, C. K. and ³Asongo, S. T.**¹Department of Computer Science and Mathematics, Nigeria Police Academy, Kano; Nigeria.²Department of Statistics, Kwara State University, Malete, Kwara; Nigeria.³Department of Economics and Management Science, Nigeria Police Academy, Kano;
Nigeria**ABSTRACT**

The bounds test for cointegration via the autoregressive distributed lag model was used to define the long-run relationship between carbon dioxide emission, carbon dioxide emission from liquid fuel consumption, and carbon dioxide emission from solid fuel consumption in Nigerian economy for periods 1960 to 2014. Irregular fluctuations in the mean and variances of the series accounted for non-uniform variability in the time series. Strong evidence in favour of the unit root process in log levels of the series makes it possible to describe the underlying equilibrium behaviour thereby identifying the presence of two significant stable long-run linkages between the series. At disequilibrium, it takes carbon dioxide emission a speed of -1.06 to return back to equilibrium, thus the deviation from long-term growth rate in carbon dioxide emission is corrected by 106% the following year; while, carbon dioxide emission from solid fuel consumption takes a speed of -1.07 to return back to equilibrium; thus the deviation from long-term growth rate in carbon dioxide emission from solid fuel consumption is corrected by 107% the following year. Carbon dioxide emission from solid fuel consumption is quicker to the adjustment. Thus, there is a correction of previous errors in subsequent periods and long-run Granger-causality exists between the variables. Nigeria's INDC target to reduce 45% GHG emissions, ending gas flaring, achieving off-grid solar PV generation of 13 GW, making use of efficient gas generators by 2030 will provide increased energy efficiency and significantly reducing the use of fuel generators. Similarly, reducing emissions from deforestation and forest degradation will enable sustainably socio-economic development.

Keywords: ARDL, CO₂ emission, Cointegration, Granger-causality, Socio-economic, Unit root



NON-ZERO CROSS-SECTION CORRELATION OF INDIVIDUAL EFFECTS

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ABSTRACT

This article investigates the dynamics of adjustment among trade, export, import and merchandise trade in Niger, Morocco, Madagascar, Kenya, Ghana and Nigeria over periods 1960-2019 via panel data modelling for capturing heterogeneity across samples. Strong evidence in favour of the unit root process and unidirectional relationships between some variables emerged. Export has a more important effect on import and merchandise trade's fluctuation in the sub-region; also, trade has a more important effect on import's fluctuation in the sub-region. Hausman test revealed that random effects are independent of the explanatory variables. Wald test for the coefficient restriction was statistically significant and the estimated coefficients fit well within 90, 95, and 99 per cent confidence intervals. No cross-section dependence residual in the estimated model and cointegration relationships were confirmed; hence, the influence of a shock will be transitory and eventually disappear as the economy returns to steady-state. Concisely, 1% increase in export will tend to increase trade by 39%; also, 1% increase in import will tend to increase trade by 42% and, 1% increase in merchandise trade will tend to increase trade by 11%. The three variables exerted upward pressure on the change, while positive effects of import have been larger on trade.

Keywords: Random effect, Shocks, Steady-state, Transitory effect, Unidirectional, Unit root



***Helianthus annuus* ASSISTED GREEN SYNTHESIS OF Co_3O_4 AND $\text{Ag-Co}_3\text{O}_4$ AND
EVALUATION OF THEIR CATALYTIC ACTIVITIES TOWARDS
PHOTODEGRADATION OF CRYSTAL VIOLET DYE**

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ABSTRACT

Nowadays, plants assisted green synthesis of metal oxides nanoparticles attracted the interest of researchers due to economic and environmental points of view. This article reports the *Helianthus annuus* (sunflower) leaves assisted green synthesis of Co_3O_4 and $\text{Ag-Co}_3\text{O}_4$ particles. In this method, the leaves extract of *Helianthus annuus* (sunflower) is utilized as a reducing and stabilizing agent for the synthesis of Co_3O_4 and $\text{Ag-Co}_3\text{O}_4$ particles. XRD and FTIR confirmed the crystalline and spinel phase of prepared Co_3O_4 and $\text{Ag-Co}_3\text{O}_4$ particles. The catalytic activities of prepared particles were evaluated over the photodegradation of crystal violet dye under visible irradiation. About 64 and 98% of 100 mg/L degraded over 0.002 g/mL of Co_3O_4 and $\text{Ag-Co}_3\text{O}_4$ respectively. The reaction kinetics and mechanism were described in terms of the Eley-Rideal mechanism. The rate constant was determined as 0.0075 and 0.0167 per minute for Co_3O_4 and $\text{Ag-Co}_3\text{O}_4$ respectively.

Keyword: Green synthesis; *Helianthus annuus*; $\text{Ag-Co}_3\text{O}_4$; Crystal violet; Eley-Rideal mechanism



Ag@ZnO: GREEN SYNTHESIS AND EVALUATION OF PHOTOCATALYTIC ACTIVITY TOWARDS PHOTODEGRADATION OF RHODAMINE B DYE**Ayesha Rafiq**

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ABSTRACT

The semiconductor metal oxides-based photocatalysis is one of the efficient techniques used for the eradication of pollutants from wastewater. The plants mediated biosynthesis of metal oxides nanoparticles have got much interest due to environmentally friendly and cost-effective nature. This article reports the *Calotropis gigantea* mediated biosynthesis of ZnO and Ag@ZnO as effective catalysts for the degradation of rhodamine B dye. After characterization with advanced techniques like XRD, SEM, TGA and EDS, the biosynthesized ZnO and Ag@ZnO were tested as photocatalysts on the degradation of rhodamine B dye under irradiation. Results showed that 50% and 90% of a solution of rhodamine B (100 mg/L) dye degraded over ZnO and Ag@ZnO as photocatalysts in 120 minutes respectively. The effect of various experimental parameters (effect of catalyst dose, effect of pH, effect of temperature, effect of initial concentration of rhodamine B) on catalytic activity were investigated. The biosynthesized Ag@ZnO was a stable and re-usable catalyst in degradation experiments. It was found that degradation kinetics correspond to the pseudo-first-order kinetic model in terms of the Elay-Rideal mechanism.

Keywords: ZnO, Ag@ZnO, Rhodamine B, *Calotropis gigantea*, Kinetics analysis, Elay-Rideal mechanism



ELECTRODEPOSITION OF CHROMIUM COATINGS FROM ENVIRONMENTALLY SAFE PLATING BATHS BASED ON A DEEP EUTECTIC SOLVENT TO FABRICATE ELECTROCATALYSTS FOR HYDROGEN PRODUCTION

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ABSTRACT

The use of hydrogen as an energy source can enhance the security of energy supply, appreciably mitigate the emission of greenhouse gases and create an inexhaustible source of energy. Thus, widespread adoption and implementation of technologies based on hydrogen will ensure reliable and sustainable energy production and satisfy all ecological and technical requirements. Accelerated development of "hydrogen economy" as a main trend of modern science and technology stimulates the search for new and efficient sources of hydrogen.

Hydrogen can be synthesized by different methods, electrolysis of water being a simple and viable technique with a low environmental impact. Therefore, there is an urgent need to create available, high-performance and environmentally friendly electrocatalysts for the hydrogen evolution reaction (HER).

It is known that the electrocatalysts based on noble metals (Pt, Pd, etc.) show high electrocatalytic activity but suffer from very high cost and scarcity. Therefore, the development of electrocatalysts for the HER using base metals attracts special attention. In this regard, chromium and its alloys are considered as promising materials.

In this work, we studied the electrodeposition of Cr-C alloys from trivalent chromium plating baths based on the so-called deep eutectic solvents (DESs), a new generation of room temperature ionic liquids. DESs-based electrolytes are characterized by high performance and stability as compared with both aqueous systems and those based on organic solvents.



The DES-based trivalent chromium bath contained choline chloride, chromium (III) chloride and extra water in 2.5:1:15 molar ratios, respectively. Coatings were electrodeposited at the current density of 5 A dm^{-2} and the bath temperature of $40 \text{ }^\circ\text{C}$. Platinum plates served as an anodes. The chromium-based coatings deposited under these conditions contained about 5 wt.% of carbon. Their average thickness was $10 \text{ }\mu\text{m}$.

The electrocatalytic properties of Cr-C deposited films were studied by means of linear voltammetry method and electrochemical impedance spectroscopy in alkaline and acid media (1 M NaOH and 0.5 M H_2SO_4) at the temperature of $25 \text{ }^\circ\text{C}$.

It was shown that the exchange current density of the hydrogen evolution reactions for Cr-C electrodeposited electrocatalysts was higher than that for "common" Cr coatings ($6.58 \cdot 10^{-7} \text{ A cm}^{-2}$ and $0.60 \cdot 10^{-7} \text{ A cm}^{-2}$, respectively in an alkaline medium). The results of linear voltammetry and electrochemical impedance spectroscopy revealed that the electrochemical reduction (i.e. Volmer step) is a rate-determining step of the hydrogen evolution reaction occurring on Cr and Cr-C electrodes aqueous solutions. An enhanced electrocatalytic activity was associated with the introduction of carbon into coatings structure. The changes in electrocatalytic properties may be associated with the changes in the electronic structure.

Thus, coatings electrodeposited from Cr(III)-containing deep eutectic solvent-based electroplating baths seem to be a very promising material to the development of new electrocatalysts for the hydrogen production.

Keywords: Hydrogen Production, Electrocatalysis, Electrodeposition, Trivalent Chromium Plating, Deep Eutectic Solvent



**TÜRKİYE'DE FAİZ ORANI VE ENFLASYONUN ÖZEL TÜKETİM
HARCAMALARI ÜZERİNE ETKİLERİ**

THE EFFECTS OF INTEREST RATE AND INFLATION ON PRIVATE CONSUMPTION
EXPENDITURES IN TURKEY

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ÖZET

Faiz oranı ve enflasyon makroekonomik ve finansal istikrarın en önemli göstergeleridir. Bu iki temel bileşende kalıcı bir istikrar sağlanmadan makroekonomik ve finansal istikrarın da gerçekleşmeyeceği ifade edilmektedir. Faiz oranı ve enflasyon, gelişmekte olan ülkelerin temel makroekonomik sorunlarından biri olup, bu sorunun çözümüne yönelik önemli para ve istikrar programları uygulanmaktadır.

Türkiye'de önemli temel makroekonomik sorunlar arasında yer alan yüksek düzeyde faiz ve enflasyon oranları sürekli tartışılmaktadır. Bu temel makroekonomik sorunların çözümüne yönelik önemli para ve maliye politikaları uygulanmış fakat, farklı nedenlerden dolayı uzun vadede kalıcı bir çözüm sağlanamamıştır. Türkiye'de bu iki temel makroekonomik sorun çözümlenmeden kalıcı bir fiyat istikrarının sağlanamayacağı görülmektedir.

Faiz oranı ve enflasyon, ekonomik birimlerin tüketim, tasarruf ve yatırım kararları gibi pek çok makroekonomik bileşen üzerinde etkili olmaktadır. Yüksek düzeyde faiz oranlarının ve enflasyon oranının gerçekleşmesi durumunda ekonomide tüketim ve yatırım harcamaları olumsuz yönde etkilemektedir.

Bu çalışma, Türkiye'de 2004-2020 döneminde reel faiz oranı ve enflasyonun, özel tüketim harcamaları üzerindeki etkisini incelemeyi amaçlamaktadır. Bu kapsamda çalışmada, üçer aylık veriler kullanılmış olup, hata düzeltme modeli yöntemi uygulanmıştır. Hata düzeltme modeli Granger nedensellik test sonuçları Türkiye'de reel faiz oranı ve enflasyonun özel tüketim harcamaları üzerinde etkili olduğuna işaret etmektedir.

Anahtar Kelimeler: Türkiye, Faiz Oranı, Enflasyon, Özel Tüketim Harcamaları

ABSTRACT

Interest rate and inflation are the most important indicators of macroeconomic and financial stability. It is stated that macroeconomic and financial stability cannot be achieved without a permanent stability in these two main components.

Important macroeconomic issues involved in high-level interest and inflation rates in Turkey are discussed constantly. Important monetary and fiscal policies have been implemented to solve these basic macroeconomic problems, but a permanent solution could not be provided in the long term due to various reasons. It is seen that a permanent price stability cannot be achieved without solving these two basic macroeconomic problems in Turkey.

Interest rate and inflation affect many macroeconomic components such as consumption, saving and investment decisions of economic agents. In case of realization of high levels of



interest rates and inflation rates, consumption and investment expenditures in the economy are affected negatively.

This study aims real interest rates and inflation in Turkey, to examine the impact on private consumption during the period 2004-2020. In this context, quarterly data were used in the study and error correction model method was applied. Error correction model, Granger causality test results in real interest rates and private consumption expenditures inflation in Turkey suggests that to be effective on.

Keywords: Turkey, Interest Rate, Inflation, Private Consumption Expenditures



**PLATON'UN SOFİST DİYALOĞUNDA SOFİST-FİLOZOF TANIMLARININ
İNCELENMESİ VE FİLOZOFUN HAKİKAT İLE OLAN İLİŞKİSİ**
REVIEW OF SOPHIST-PHILOSOPHER DEFINITIONS IN PLATO'S SOPHIST
DIALOGUE AND THE RELATIONSHIP OF THE PHILOSOPHER WITH THE TRUTH

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ÖZET

Platon *Sofist* diyalogunda sofistlerin kim olduğu, ne iş yaptığı ve ne ile uğraştığı üzerinden bir ontoloji tartışması yürütür. Platon kendisinden önce geliştirilen varlık anlayışlarına bu diyalog ile temelden karşı çıkmış ve hocası Parmenides'in temel ontoloji savlarını çürüterek kendisinin "baba katili" olduğunu ifade etmiştir. Dile gelen her şey bir varolana karşılık gelir savı ile birlikte yokluk -varolmayan- da Parmenides'e rağmen dile gelir. Sofistin kimliğinin ve ikametinin araştırılmasıyla başlanan tartışma Platon'un ontolojisinin mihenk taşları olan sükunet, hareket, aynılık, başkalık ve varlık olmak üzere beş kategorinin ortaya çıkıp açıklanmasıyla ve Yokluk'un aslında Varlık'ın uyumsuzluğu olduğu kabulü ile sona erer. Sofist diyalogu karmaşık teorik tartışmalara yönelmiş gibi görünse de yapılan akıl yürütmeler incelikli bir şekilde sofistlerin ikamet ettiği zeminini kaydırmak içindir. Sofist diyalogu varolmayanın varlığı paradoksu üzerinden, filozofun kendisini var olanın ya da başka bir deyişle hakikat alanının içinde, sofistin ise tam aksine varolmayanın alanında konumlandırması filozof ve sofist arasındaki temel ayrımıdır. Yokluk aranırken Varlık'ın ne olduğunun bulunması ile sofist ararken filozofun bulunması benzerdir. Sofist ve filozof birbirlerine kurt ve köpeğin benzediği kadar benzerdir. Bu çalışma çerçevesinde gösterilecek olan *Sofist* diyalogunda, sofistin ve filozofun ne denli birbirine benzer ama aynı zamanda benzemez olduğudur. Bu bağlamda *sofist ve filozof* tanımlarıyla birlikte filozofun hakikat ile olan ilişkisi incelenecektir.

Anahtar Kelimeler: Platon, Sofist, Filozof, Hakikat, Varlık, Yokluk

ABSTRACT

Plato, in the Sophist dialogue, conducts an ontology discussion through who the sophists are, what they do, and what they deal with. With this dialogue, Plato fundamentally opposed the understandings of being developed before him and as debunked the basic ontology arguments of his teacher Parmenides, stating that he was a "father killer". Everything that is speakable corresponds to a being, along with the argument that absence –non-being also speakable despite Parmenides. The debate, which began with the investigation of the identity and residence of the sophist, ends with the emergence and explanation of five great kind: rest, change, sameness, difference, and being, which are the touchstones of Plato's ontology, and the acceptance that Absence is in fact a mismatch of Being. Although the sophist dialogue seems to has been trained in complex theoretical discussions, the arguments shift the ground elegantly on which the sophist reside. In the Sophist is told through the paradox of the being



of non-being the fundamental distinction between philosopher and sophist, that the philosopher positions himself in the field of being, in other words in the field of truth, and the sophist, on the contrary, in the field of non-being. It is similar to finding what being is when searching for absence and finding a philosopher when searching for the sophist. The sophist and the philosopher are as similar to each other as the wolf and the dog. In the Sophist dialogue, which will be shown within the framework of this study, it is how similar but also dissimilar the sophist and the philosopher are. In this context, the relationship of the philosopher with the truth will be examined together with the definitions of sophist and philosopher.

Keywords: Plato, Sophist, Philosopher, Truth, Being, Non-Being



**ELECTROCHEMICAL DEPOSITION OF CDTE THIN FILM
FOR CDS/CDTE X-RAY SENSOR**

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ABSTRACT

Many methods are used to measure X-ray flux generated by modern X-ray machines. The most common method utilized for monitoring X-ray dose is technically complex and expensive. In this work CdTe has been electrodeposited onto CdS/FTO glass substrate to form with previously fabricated CdS layer 4 μm thickness. The optimum potential for CdTe deposition has been studied by potentiostat measurement, it shows that -1.3 is the optimum working potential. The XRD analysis showed that the CdTe films have highly oriented crystallites with the cubic phase zinc blend with preferred orientation (111). The band gap E_g extrapolated to be 1.4 eV. Four stacked sensors were connected in series to measure the device performance. It was observed that amplitude of the pulse formed due to exposed FTO/CdS/CdTe/Mo detector to X-ray of 33 keV and 1mA intensity is 1.03 V.

Keywords: CdTe; Thin film; X-ray; Sensor.



İVESİ IRKI KOYUNDA FETAL ASİTESE BAĞLI GÜÇ DOĞUM
DYSTOCIA DUE TO FETAL ASCITES IN İVESİ SHEEP

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ÖZET

Asites, periton boşluğunda çeşitli etiyolojik faktörlerin neden olduğu seröz sıvı birikimini ifade eder ve periton sıvısının aşırı üretimi veya yetersiz drenajından kaynaklanabilir. Bu olguda doğum yapamama şikâyeti ile kliniğimize getirilen 3 yaşında, 40 kg ağırlığında İvesi ırkı dişi bir koyun sunulmuştur. Hastanın anamnezinde daha önce iki kez doğum yaptığı, 12 saat önce yavru sularının geldiği, sürekli ıkındığı ancak yavruya ait herhangi bir oluşum görülmediği kaydedildi. İştahta azalma ve genel durumunda hafif bozulma olduğu bilgisi alındı. Vücut ısısı 39,5°C, nabız ve solunum normaldi. Mukoz membranlar pembe ve kapiller dolun zamanı 2 sn'den azdı. Fiziki muayenede meme bezlerinin dolu olduğu ve süt sekresyonu geldiği tespit edildi. Transvaginal muayenede serviksin tamamen açılmadığı, iki parmak genişlikte olduğu belirlendi ve anormal bir kokuya rastlanmadı. Tedavi amacıyla sol fossa paralumbal bölgeden ters "L" blok anestezisiyle sezaryen operasyonu uygulandı. Uterus ensizyonu sonrası doğum kanalına yakın yavru çıkarıldı, yavruda belirgin derecede asites belirlendi ve ölüydü. Daha sonra uterusun kranialinde bir yavru daha belirlendi, yavru çıkarıldı, herhangi bir anomali oluşumu yoktu ve canlıydı. Uterus ve karın duvarları uygun şekilde kapatıldı. Operasyon sonrası 5 gün süreyle 4 ml kas içi amoksisilin-klavulanik asit enjeksiyonu (Synulox, Zoetis®) uygulandı. Operasyondan bir hafta sonra yapılan kontrolde herhangi bir komplikasyona rastlanmadı ve canlı olarak çıkarılan yavrunun sağlıklı olduğu bilgisi alındı. Sonuç olarak, kliniğimize güç doğum şikayetiyle gelen ikiz gebe bir koyunda ölü (asites) yavru ve canlı yavru yapılan sezaryen operasyonu ile başarılı bir şekilde sağaltıldı. Erken müdahale ve uygun cerrahi yaklaşım ile yüksek mortalite riski bulunan gebelik patolojisi olgusunun komplikasyon şekillenmeksizin müdahalesi gerçekleştirilmiştir.

Anahtar sözcükler: Asites, ikizlik, koyun.



ABSTRACT

Asites refers to the accumulation of serous fluid in the peritoneal cavity caused by various etiological factors and may result from overproduction or inadequate drainage of peritoneal fluid. In this case, a 3-year-old, 40 kg, Ivesi-breed female sheep brought to our clinic with the complaint of inability to give birth is presented. It was noted that the patient's history had given birth twice previously, fetal fluids were ruptured 12 hours ago, and that there was no appearance of the offspring despite efforts of the mother. It was learned that there was a decrease in appetite and a slight deterioration in general condition. Body temperature was 39,5 °C, pulse and breathing were normal. The mucous membranes were pink and the capillary refill time was less than 2 seconds. On physical examination, it was found that the mammary glands were full and milk secretion was present. In transvaginal examination, it was determined that the cervix was not fully opened and was two fingers wide, and no abnormal odor was found. Cesarean operation was performed with reverse "L" block anesthesia from the paralumbal area of the left fossa for treatment. After uterine incision, the fetus close to the birth canal was removed, a noticeable ascites was seen and the fetus was dead. Later, another fetus was identified in the cranial cavity of the uterus. The fetus was delivered, there was no anomaly formation, and it was alive. Uterus and abdominal walls were closed properly. Postoperatively was administered 4 ml of intramuscular injection of amoxicillin-clavulanic acid (Synulox, Zoetis®) for 5 days. No complications were observed in the follow up performed one week after the operation, and it was told that the live fetus was healthy. As a result, we successfully performed a treatment with a cesarean operation in a twin-pregnant ewe that was brought to our clinic due to difficult birth. Early intervention and appropriate surgical approach have been performed without any complication in a case with pregnancy pathology that had a high risk of mortality.

Keywords: Ascites, twin pregnancy, sheep.



**NATURAL CONVECTION HEAT TRANSFER OF MAXWELL FLUID IN AN
OSCILLATING CYLINDER**

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ABSTRACT

This work focused on the natural convection heat transfer of Maxwell fluid flow in an oscillating cylinder. With the help of integral transformation exact solutions for cosine and sine oscillations of velocity field and temperature distribution are obtained. Moreover, velocity field is introduced in the types of transient and post-transient arrangements. In order to check the impact of dimensionless numbers (Grashof and Prandtl numbers) at different values of time graphical illustrations are used. Furthermore there is a special case for Newtonian fluid.

Keywords: Exact Solutions; Heat and Mass Transfer; Oscillatory flow, Maxwell Fluid, Cylindrical Domains



ON FUZZY PARAMETERIZED FUZZY SOFT TOPOLOGICAL SPACES AND IT'S APPLICATION**Asst. Prof. Dr. Adem YOLCU**

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ABSTRACT

Many real-world problems in engineering, social and medical sciences, economics, and other fields include imprecise data, and their solution necessitates the application of mathematical concepts based on uncertainty and imprecision. Some of these issues are basically humanistic in nature and therefore subjective (e.g., human understanding and vision systems), while others are objective but strongly embedded in an imprecise environment. In recent years, a number of theories have been suggested for dealing effectively with such systems. Some of these are theory of probability, fuzzy set theory, soft set theory, intuitionistic fuzzy sets, vague sets, rough set theory. Recently, researchers have been working on the fuzzification of many different set structures. Fuzzy soft set structure is a combination of fuzzy set theory and soft set theory. Fuzzy soft set theory has been applied in several directions, such as topology, various algebraic structures and especially decision making problems. Another combination of these set structures are soft sets with fuzzy parameters (FPS). Çağman et. al. introduced some operations on PFS sets and investigate several results. After that, The fuzzy parameterized fuzzy soft set (FPFS) theory was introduced by Çağman et. al. The topological concept of this set structure has been studied by many different researchers. In this paper, we define the notion of FPFS-base, FPFS-subbase and investigated basic properties. Also, we present decision-making problem for FPFS topological spaces.

Keywords: fuzzy soft set, FPFS sets, FPFS topology, FPFS base, FPFS subbase

SÜRDÜRÜLEBİLİR YAŞAM KAYNAĞI: MİKROALGLER**SUSTAINABLE SOURCE OF LIFE: MICROALGAE****Latife Ceyda İRKİN**

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ÖZET

Mikroalgler denizlerde ve tatlı sularda yaşayan ve fotosentez yapabilen tek hücreli canlılardır. Atmosferdeki oksijenin yaklaşık yarısını mikroalgler üretir. Yüz binlerce farklı mikroalg türü var. En yaygın mikroalg türleri diatomlar (Bacillariophyceae), yeşil algler (Chlorophyceae) ve altın rengi alglerdir (Chrysophyceae). Mikroalgler güneş ışığını ve inorganik maddeleri (örneğin karbondioksit, su, azot, fosfor) kullanarak farklı organik maddeler (örneğin karbonhidrat, protein, yağ asitleri) üretebilir.

A, B1, B2, B6, B12, C, E, folik asit gibi insan sağlığı için önemli vitaminleri içerir. Biyoteknolojik çalışmalarda küf ve mantarların yanı sıra algler de kullanılır. Alglerin bu konuda tercih edilme nedenleri ise; günde ağırlıklarının yaklaşık iki katına çıkartabilmeleri, biyoteknolojik işlemlerden geçirilme kolaylıkları, maliyetlerinin düşük olması, çok sayıda yararlı madde içermeleri ve çevresel faktörlere direnç göstermeleri olarak özetlenebilir.

Algler, fotosentetik (fotosentez yapan) ya da heterotrofik (dış beslek) yöntemlerle geliştirilir. Okyanus çevresindeki denizlerde, besin yoğunluğunun düşük olduğu sularda, gün ışığının girebileceği en derin bölgelerde, 100 m yüzey sularına kadar yayılım gösterdiklerinden, onların en pratik endüstriyel üretimi, çok güneş alan göl ve havuzlarda gerçekleştirilir. Algler üzerinde pek çok proje bulunmaktadır. Bunlardan en önemlisi, büyüme hormonlarıyla (oksin, giberellin, sitokinin) ilgili olanıdır. Alglerden elde edilen bu ürünler, bitki gelişimini %23 arttırır.

Mikroalglerin hayatta kalması gezegenimizdeki bildiğimiz anlamdaki yaşamın devamı için son derece önemlidir. İnsan da dahil olmak üzere en gelişmiş organizmaların hayatı, iklim döngülerinden beslenme zincirlerine kadar her şeyin temelinde yer alan bu tek hücreli mikroorganizmaya bağlıdır.

Anahtar kelimeler: Mikroalg, yaşam, enerji, sucul ekosistem.

ABSTRACT

Microalgae are single-celled creatures that live in seas and fresh waters and can perform photosynthesis. Microalgae produce about half of the oxygen in the atmosphere. There are hundreds of thousands of different types of microalgae. The most common types of microalgae are diatoms (Bacillariophyceae), green algae (Chlorophyceae) and golden algae (Chrysophyceae). Microalgae can produce different organic substances (eg carbohydrate, protein, fatty acids) using sunlight and inorganic substances (eg carbon dioxide, water, nitrogen, phosphorus).

It contains important vitamins for human health such as A, B1, B2, B6, B12, C, E, folic acid. In addition to molds and fungi, algae are also used in biotechnological studies. The reasons why



algae are preferred in this regard; They can be summarized as their ability to double their weight per day, ease of biotechnological processes, low cost, contain a large number of useful substances and resist environmental factors.

Algae are developed by photosynthetic (photosynthetic) or heterotrophic (outer food) methods. Since they spread up to 100 m surface waters in the seas around the ocean, in waters with low nutrient density, in the deepest areas where daylight can enter, their most practical industrial production is carried out in lakes and pools with lots of sun. There are many projects on algae. The most important of these is the one related to growth hormones (auxin, gibberellin, cytokinin). These products obtained from algae increase plant growth by 23%.

The survival of microalgae is extremely important for the survival of life as we know it on our planet. The life of the most advanced organisms, including humans, depends on this single-celled microorganism, which is at the heart of everything from climate cycles to food chains.

Keywords: Microalgae, life, energy, aquatic ecosystem.



**EXTRACTING SIGNAL CONVERSATION FROM ANDROID SMART PHONES
USING OXYGEN FORENSICS**

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ABSTRACT

Due to ever-increasing demand for the latest smart phones manufacturers coming up with updated mobile phone features, which include data storage capacity, RAM, security, operating system file structures, and even the cables and pin connectors. With such features, Mobile device forensic has become more challenging than any other device. The encryption techniques used by the messaging services which make all illegal activities by criminal hard to detect. However, some of the popular instant messengers, which claim to be end-to-end encrypted easily, reveal information. The SIGNAL is one such application that is considered the most secure instant messaging service, which makes spoofing useless and which complicates the malware attack and recovery of shreds of evidence from it is quite difficult. This paper mainly aims at analyzing and comparing the security of SIGNAL instant messenger to other communicating services. It also focuses on the challenges faced by forensic examinations during data acquisition and provides the forensic examiners the technique to extract evidence from Signal using Oxygen Forensic tool on the Android platform

Key words: Signal, Security, Android, Forensics, Examiner, Oxygen Forensics.



BRUNCH-CUT FOR UNWRAPPING INTERFEROMETRIC PHASE

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ABSTRACT

Earth observation and environmental control are becoming more important where the realization of DEM by the technique of interferometry of RSO images facilitates the control of terrestrial deformations, which is the subject of this paper. The unwrapping phase is a very important step in the interferometry process, especially to treat it carefully in steep degraded and mountainous ground. We have focused on the reduction and sometimes the elimination of the residues in flat terrains and otherwise to keep the maximum of the residues in the very steep sites. For this purpose, the methods developed and proposed are based on a transformation by the ISODATA which is based on KMEANS and the double passage of the median filter, and this in order to limit the creation of the brunch-Cut for the progress of the filtered interferogram (elimination of large black spot on The Brunch-Cut image). The tests of this method were carried out on several sites, and showed good results.

Keyword: SAR Interferometry, Unwrapping phase, ISODATA, residues, brunch-cut;



**A SIMULATION MODELLING FRAMEWORK OF MULTI CRANE DUAL
CYCLING STRATEGY FOR CONTAINER TERMINALS**

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ABSTRACT

Port container terminals are international distribution systems which play an important role in international supply chains. With the rapid increase in container volume at ports, the improvement in operational efficiency has become one of the most important issues for container terminals. Quay cranes (QCs) are one of the main bottlenecks in the efficient operation of container terminals. Dual cycling is a strategy which can improve the efficiency of a QC and the land side operations of container ports by loading and unloading containers in the same crane cycle. There are two types of models with respect to the scope of dual cycling: single QC dual cycling and multi QC dual cycling. Multi QC dual cycling is a QC operation strategy that minimizes the operation time of a vessel involved in an operation. Most of the research carried out on the crane dual cycling strategy in port container terminals have focused on the modelling of single crane operations. The aim of this study is to show how the multi QC dual cycling strategy can be modelled and analyzed by simulation. Two simulation models are developed for a port container terminal to analyze the application results of single and dual cycling strategies used for vessel loading and unloading operations. The method is illustrated by a real-life case study. The findings of the simulation results shows that the system performance can be improved using dual cycling strategy and the overall system costs can be reduced by the multi QC dual cycling strategy.

Keywords: Terminal Operations, Quay Crane, Dual Cycling, Simulation



KENTSEL MEKÂNDAN ÖTEKİ OLARAK SURIYELİLER VE MEKÂNSAL AYRIŞMANIN, İSTANBUL ÜZERİNDEN İNCELENMESİ

INVESTIGATION OF URBAN SPATIAL SEGREGATION AND SYRIANS AS OTHER
IN URBAN AREA: ISTANBUL CASE

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ÖZET

İstanbul, Avrupa ile Asya kıtalarının birleşiminde yer almasının yanında tarihi süreç içerisinde Roma, Bizans ve Osmanlı İmparatorluğu egemenliğinde farklı millet ve kültürlerle ev sahipliği yapmış ve her dönem çok kültürlü ve katmanlı bir kent olmuştur. Kent, tarihsel süreç içinde gayrimüslim nüfusun yoğun olarak yaşadığı yer olmasının yanı sıra kitlesel olarak uluslararası göçü ilk kez “nüfus mübadelesi”nin gerçekleştiği 1923 yılında, Yunanistan’dan aldığı göçlerle, daha sonra 1989 yılında Bulgaristan’dan Müslümanların kitlesel göçü ve ardından 2011 yılının Nisan ayında başlayan, hızı azalsa dahi devam eden Suriye’den gelen kitlesel göç dalgasıyla farklı bir tecrübe yaşamaktadır. Kitlesel göç hareketinin ilk dönemlerinde Türkiye Cumhuriyeti hükümeti tarafından belirlenen ve özellikle sınır kapılarına yakın kamplarda ve çevre illerde geçici koruma statüsünde yaşayan Suriyeli vatandaşlar, daha sonra kampların kapasitesinin yetersizliği, önce Doğu ve İç Anadolu’da yer alan kentlere ve daha sonra Ankara, İzmir ve İstanbul gibi büyük kentlere hareketliliğe yol açmıştır.

Suriyeli geçici misafirlerin, yaşanan iç savaş nedeni ile başta Türkiye olmak üzere birçok ülkeye göç etmeleri, küresel bağlamda makro ölçekli bir kriz haline gelmiştir ve halen de bu süreç devam etmektedir. Suriyeliler, toplumun tüm kesimleri tarafından her yerde görünür bir hale geldiklerinden, özellikle pandemi süreciyle güçleşen yaşam koşullarının da olumsuz etkileriyle, gelenlerin toplumsal, çevresel ve ekonomik etkileri toplumda giderek artan olumsuzlukların Suriyeli vatandaşlara atfedilmesi, hâkim toplum tarafından ötekileştirilmelerine neden olmuştur.

İnsanlık tarihinin önemli bir parçası haline gelen kitlesel göç hareketleri ile beraber kimlik ve kültürel farklılıklar sebebiyle ötekileştirmenin meydana gelmesi, dolayısıyla sosyal ve kültürel bağlamda sosyal ayrılmaya maruz kalan Suriyeliler, özellikle büyük kentlerde kültür, kimlik, dil, dayanışma gibi sosyal etmenlerin yanında ekonomik sebeplerle mekânsal olarak da ayrılmakta olup, kendi kültür ve kimlik yapıtaşları ile kentsel alanlarda kümelenmektedirler.

Bu çalışmada, kentsel mekânda dil, kültür ve etnisite gibi özgün etmenler dolayısıyla ötekileştirilen Suriyeli vatandaşların, İstanbul Metropolitan Alanı’nda, özellikle kentin geleneksel merkezi olarak tanımlanan Tarihi Yarımada özelinde irdelenmektedir.



Çalışmanın yönetmi, Suriyelilerin kümелendiği Tarihi Yarımada'da yapılan saha çalışmalarına; yapılan tespitler, yerel yönetimden alınan bilgi ve belgeler özelinde İstanbul ve Tarihi Yarımada özelinde yer alan sivil toplum kurum/kuruluşları (STK), Suriyelilerin ağırlıklı olarak yaşadıkları mahallelerin muhtarları ile yapılan mülakatlarla desteklenmektedir. Ayrıca, elde edilen sayısal veriler doğrultusunda sosyal ve mekânsal ayrışmanın, İstanbul bütünü ve Tarihi Yarımada üzerinde yarattığı etkileşim ve dağılım, coğrafi bilgi sistemleri (GIS) yardımıyla incelenmektedir.

Anahtar Kelimeler: İstanbul, Tarihi Yarımada, Göç, Suriyeliler, Öteki, Mekânsal Ayrışma

ABSTRACT

In addition to being located at the union of the European and Asian continents, Istanbul has hosted different nations and cultures under the rule of the Roman, Byzantine and Ottoman Empires, and has always been a multicultural and layered city. Additionally being the place where the non-Muslim population densely lived in the historical process, for the first time, Istanbul had mass migration internationally in 1923, when the "population exchange" took place, with the immigration from Greece. Moreover to migration, and then in 1989, the mass migration of Muslims from Bulgaria. In April 2011, it experiences a different experience with the mass migration wave from Syria that started and continues even if its speed decreases. Mass migration movements determined by the Republic of Turkey and the government in the first period and in particular the border crossing to the nearby campsite and surrounding Syrian citizens living in the temporary protected status in the provinces, then the lack of the capacity of the camp, before the city is located in Eastern and Central Anatolia and then in Ankara, as big as Istanbul and Izmir it has caused dynamism to cities.

Syrian temporary guests, due to the civil war experienced, they migrate to mainly Turkey and also to many countries in the global context has become a crisis and are still continuing this process. As Syrians become visible everywhere by all segments of the society, especially the negative effects of living conditions that have become difficult with the pandemic process, the social, environmental and economic effects of the arrivals have been attributed to Syrian citizens, causing them to be marginalized by the dominant society.

With the mass migration movements that have become an important part of human history, and the emergence of marginalization due to identity and cultural differences, Syrians who are exposed to social segregation in social and cultural contexts, especially in big cities, are spatially and cluster in urban areas with their own cultural and identity building blocks.

In this study, Syrian citizens who are marginalized due to unique factors such as language, culture and ethnicity in the urban space are examined in the Metropolitan Area of Istanbul, especially in the Historical Peninsula, which is defined as the traditional center of the city.



Methodology in this study, executed case study carried out in the Historic Peninsula where Syrians are clustered; the findings are supported by interviews with non-governmental institutions / organizations (NGOs) in Istanbul and the Historic Peninsula, as well as with the local authority of the predominantly Syrian neighborhoods, in particular with the information and documents obtained from the local government. In addition, the interaction and distribution created by social and spatial segregation over the whole of Istanbul and the Historic Peninsula, in line with the numerical data obtained, is analyzed with the help of geographical information systems (GIS).

Keywords: Istanbul, Historical Peninsula, Migration, Syrians, Others, Spatial Segregation



DOĞRUDAN YABANCI SERMAYE YATIRIMLARI VE EKONOMİK BÜYÜME İLİŞKİSİ: OECD ÜLKELERİ PANEL NEDENSELLİK ANALİZİ
RELATIONSHIP BETWEEN FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH: PANEL CAUSALİTY OECD COUNTRY ANALYSIS

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ÖZET

İktisadi, siyasi ve sosyo-kültürel boyutları olan finansal liberalleşmenin yarattığı en önemli gelişmelerden birisi doğrudan yabancı yatırımlar (DYY)'dir. Küreselleşme ile birlikte dünya pazarların serbestleşmesi, dünyada gerçekleştirilen doğrudan yabancı yatırım hacminin artmasına neden olmuştur. 20. yüzyılın ikinci yarısından sonra ivme kazanan doğrudan yabancı yatırım akımları ülke ekonomisi üzerinde birtakım olumlu ve olumsuz etkiler bırakmaktadır. Söz konusu etkiler yapılan yatırımların amacına ve şekline göre değişiklik gösterebileceği gibi, ülkelerin ekonomik yapısı ve uyguladıkları politikalara göre de farklılık göstermektedir. İktisat yazınında doğrudan yabancı yatırım akımları ve ekonomik büyüme ilişkisine dair kesin bir fikir birliği olmamasına rağmen, son yıllarda giderek artan görüş doğrudan yabancı yatırımların ekonomik büyümeye katkısı olduğunu göstermektedir. Dolayısıyla hem gelişmiş hem de gelişmekte olan ülkeler doğrudan yabancı yatırımları kendi ülkelerine çekebilmek için yoğun çaba sarf etmektedirler. Bunun sebebi ise, doğrudan yabancı yatırımların sağladığı sermaye, yeni teknoloji ve istihdam artışından yararlanma isteğidir. Bu çalışmanın amacı, OECD ülkelerinde doğrudan yabancı sermaye yatırımları ile ekonomik büyüme arasındaki ilişkiyi ortaya koymaktır. Çalışmada, 25 OECD ülkesinin, 2000-2019 yılları arasındaki verileri Panel Veri Analizi yöntemi ile incelenmiştir. Uygulamada sırasıyla, Panel Birim Kök Testleri, Panel Eşbütünleşme ve Panel Nedensellik Testi yapılmıştır. Sonuçta, doğrudan yabancı yatırımlar ile ekonomik büyüme arasında uzun dönemli ilişki bulunmuştur. Ayrıca, doğrudan yabancı sermaye yatırımları ile ekonomik büyümeye arasında çift yönlü bir nedensellik ilişkisi tespit edilmiştir.

Anahtar Sözcükler: Doğrudan Yabancı Yatırım, Ekonomik Büyüme, Panel Veri Analizi, OECD.

ABSTRACT

Foreign direct investment (FDI) is one of the most important developments created by financial liberalization, which has economic, political and socio-cultural dimensions. With globalization, the liberalization of world markets has led to an increase in foreign direct investment volume in the world. Movements of foreign direct investments which accelerated after second half of the 20th century have had positive or negative influences on country economy. These impacts can show changes according to the purpose or form of the investments and can be changed in respect of the economic structures or policies of the



countries. Though there is no consensus on the relationship between foreign direct investment flows and economic growth in the literature, a growing view in recent years shows that foreign direct investments have contribution on economic growth. Therefore, both developed and developing countries make great effort to attract foreign direct investments into their countries. The reason for this is the desire to benefit from the capital, new technology and employment increase foreign direct investments provide. The aim of this study is to reveal the relationship between foreign direct investment and economic growth in OECD countries. In the study, the data of 25 OECD countries between 2000 and 2019 were analyzed using Panel Data Analysis method. In practice, Panel Unit Root Tests, Panel Cointegration and Panel Causality Tests were performed, respectively. As a result, a long-term relationship has been found between foreign direct investments and economic growth. In addition, a bidirectional causality relationship between foreign direct investment and economic growth has been determined.

Keywords: Foreign Direct Investment, Economic Growth, , Panel Data Analysis, OECD.



ANALYSIS OF STEER-BY-WIRE VEHICLES VIA T-S FUZZY CONTROL**APPROACH****Dr. Nabil EL FEZAZI**

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ABSTRACT

The problem of robust control for nonlinear systems subject to disturbances is addressed in this talk. A novel scheme is developed here using Takagi-Sugeno fuzzy technique for the steer-by-wire equipped vehicles under varying road conditions. The modern steer-by-wire system that replaces the mechanical steering shaft between the hand-wheel and front wheels with an electric motor and sensors involves various types of nonlinearities and disturbances, such as Coulomb friction, tyre self-aligning torque and so on. Then, the steer-by-wire systems show considerable advantages over conventional steering arrangements; however there are also a number of limitations. For this reason, a new controller design approach is discussed in this talk to ensure the reliability and the robustness of these systems. From the simulation results, the proposed control scheme exhibits excellent steering performance and behaves with strong robustness with respect to parameter variations and external varying road disturbance. Finally, in the implementation of the control system of the steer-by-wire equipped vehicles, due to the fact that the actual steering angle is generated via the front wheel steering motor, the steering controller drive the actual steering angle to exactly track the reference angle provided by the yaw control.

Keywords: Robust Control, Nonlinear Systems, Disturbances, Takagi-Sugeno Fuzzy, Steer-by-wire Vehicles



INTERNAL LENGTH GRADIENT MECHANICS: FROM STRENGTH OF MATERIALS AND ELASTICITY TO PLASTICITY AND FAILURE**VI.G.Dimosthenis, L.A.S.Kouris and E.C.Aifantis***

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ABSTRACT

Various aspects of current technology are based on classical advances by Euler-Bernoulli and Hooke for beams and elasticity as well as von Mises and Mohr-Coulomb for plasticity and failure.

The lecture describes a proposal for modifying these classical ideas/laws by introducing nonlocal/gradient effects, thus providing a new framework for these disciplines. Various examples illustrating the aforementioned modifications are presented.

***Biography**

Elias C. Aifantis is currently an Emeritus Professor of Mechanics at Aristotle University of Thessaloniki/Greece and Michigan Technological University/USA, as well as Mercator fellow at Friedrich-Alexander University/Germany and a Distinguished Professor at Beijing University of Civil Engineering and Architecture/China. Formerly, he has also been a Distinguished Faculty Advisor at King Abdulaziz University/Saudi Arabia, Distinguished Visiting Expert at ITMO University/Russia and Southwest Jiaotong University/China, as well as MegaGrant

Director at Togliatti State University /Russia. He has promoted highly interdisciplinary work in mechanics of materials by bringing into the field of solid mechanics ideas from diffusion theory, chemical reactions, and nonlinear physics. He has coined the terms dislocation patterning, material instabilities, gradient plasticity/elasticity, chemo/nanomechanics, and pioneered internal length gradient (ILG) theories in these fields. Currently, he is extending the ILG framework to revisit electromagnetism and Maxwell's equations, as well as gravitation and Newton's Law. He has published over 350 articles and received about 13,402 citations with 59 h-index (Scopus); 12,450 citations with 55 h-index (Web of Science); 20,580 citations with 70 h-index (Google Scholar). He is included in the ISI Web of knowledge list of the world's most highly cited authors in engineering.



VIETA MATRİSİNİN DETERMİNANTININ HESAPLANMASI
CALCULATING THE DETERMINANT OF VIETA MATRIX

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ÖZET

Biz bu çalışmada, Vieta matrisi olarak adlandırdığımız bir matris tanımladık ve bu matrisin determinantını hesapladık. Bu matris aşağıdaki şekilde tanımlanmaktadır:

$$\begin{pmatrix} 1 & 1 & \cdots & 1 \\ R_{1,1} & R_{1,2} & \cdots & R_{1,n-k} \\ R_{2,1} & R_{2,2} & \cdots & R_{2,n-k} \\ \vdots & \vdots & \ddots & \vdots \\ R_{n-k-1,1} & R_{n-k-1,2} & \cdots & R_{n-k-1,n-k} \end{pmatrix},$$

burada, $n, k \in \mathbb{N}$, $k < n$, $a_1, a_2, \dots, a_n \in \mathbb{C}$ ve

$$R_{1,1} = a_2 + a_3 + \cdots + a_n,$$

$$R_{1,2} = a_1 + a_3 + \cdots + a_n,$$

...

$$R_{1,n-k} = a_1 + a_2 + \cdots + a_{n-k-1} + a_{n-k+1} + \cdots + a_n,$$

$$R_{2,1} = a_2 a_3 + a_2 a_4 + \cdots + a_{n-1} a_n,$$

$$R_{2,2} = a_1 a_3 + a_1 a_4 + \cdots + a_{n-1} a_n,$$

...

$$R_{2,n-k} = a_1 a_2 + a_1 a_3 + \cdots + a_{n-k-1} a_{n-k+1} + \cdots + a_{n-1} a_n,$$

...

$$R_{n-k-1,1} = a_2 a_3 \cdots a_{n-k} + a_2 a_3 \cdots a_{n-k-1} a_{n-k+1} + \cdots + a_{k+2} a_{k+3} \cdots a_n,$$

$$R_{n-k-1,2} = a_1 a_3 \cdots a_{n-k} + a_1 a_3 \cdots a_{n-k-1} a_{n-k+1} + \cdots + a_{k+2} a_{k+3} \cdots a_n,$$

...

$$R_{n-k-1,n-k} =$$

$$\begin{cases} a_1 a_2 \cdots a_{n-k-1} + a_1 a_2 \cdots a_{n-k-2} a_{n-k+1} + \cdots + a_{k+2} a_{k+3} \cdots a_n, & n - k < k + 2 \text{ ise,} \\ a_1 a_2 \cdots a_{n-k-1} + a_1 a_2 \cdots a_{n-k-2} a_{n-k+1} + \cdots + a_{k+1} a_{k+2} \cdots a_{n-k-1} a_{n-k+1} \cdots a_n, & n - k \geq k + 2 \text{ ise,} \end{cases}$$

dir. Bu çalışmada, ayrıca, Vieta matrisinin bazı uygulamaları yapılmıştır.

Anahtar Kelimeler: Vieta formülü, Determinant, Polinom.



ABSTRACT

We define a matrix which we call Vieta matrix and calculate its determinant:

$$\begin{pmatrix} 1 & 1 & \cdots & 1 \\ R_{1,1} & R_{1,2} & \cdots & R_{1,n-k} \\ R_{2,1} & R_{2,2} & \cdots & R_{2,n-k} \\ \vdots & \vdots & \ddots & \vdots \\ R_{n-k-1,1} & R_{n-k-1,2} & \cdots & R_{n-k-1,n-k} \end{pmatrix},$$

where $n, k \in \mathbb{N}, k < n, a_1, a_2, \dots, a_n \in \mathbb{C}$ and

$$R_{1,1} = a_2 + a_3 + \cdots + a_n,$$

$$R_{1,2} = a_1 + a_3 + \cdots + a_n,$$

...

$$R_{1,n-k} = a_1 + a_2 + \cdots + a_{n-k-1} + a_{n-k+1} + \cdots + a_n,$$

$$R_{2,1} = a_2 a_3 + a_2 a_4 + \cdots + a_{n-1} a_n,$$

$$R_{2,2} = a_1 a_3 + a_1 a_4 + \cdots + a_{n-1} a_n,$$

...

$$R_{2,n-k} = a_1 a_2 + a_1 a_3 + \cdots + a_{n-k-1} a_{n-k+1} + \cdots + a_{n-1} a_n,$$

...

$$R_{n-k-1,1} = a_2 a_3 \cdots a_{n-k} + a_2 a_3 \cdots a_{n-k-1} a_{n-k+1} + \cdots + a_{k+2} a_{k+3} \cdots a_n,$$

$$R_{n-k-1,2} = a_1 a_3 \cdots a_{n-k} + a_1 a_3 \cdots a_{n-k-1} a_{n-k+1} + \cdots + a_{k+2} a_{k+3} \cdots a_n,$$

...

$$R_{n-k-1,n-k} =$$

$$\begin{cases} a_1 a_2 \cdots a_{n-k-1} + a_1 a_2 \cdots a_{n-k-2} a_{n-k+1} + \cdots + a_{k+2} a_{k+3} \cdots a_n, & \text{if } n - k < k + 2, \\ a_1 a_2 \cdots a_{n-k-1} + a_1 a_2 \cdots a_{n-k-2} a_{n-k+1} + \cdots + a_{k+1} a_{k+2} \cdots a_{n-k-1} a_{n-k+1} \cdots a_n, & \text{if } n - k \geq k + 2. \end{cases}$$

In addition, some applications of the Vieta matrix are given in this work.

Keywords: Vieta's formula, Determinant, Polynomial.



A STUDY ON A CLASS OF NUMERICAL SEMIGROUPS

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ABSTRACT

let $\mathbb{N} = \{0, 1, 2, \dots, n, \dots\}$ and \emptyset be integer set. S is called a numerical semigroup if

(i) $a_1 + a_2 \in S$, for $a_1, a_2 \in S$, (ii) $\gcd(S) = 1$ and (iii) $0 \in S$

where $S \subseteq \mathbb{N}$ (Here, $\gcd(S) =$ greatest common divisor the elements of S).

A numerical semigroup S can be written that $S = \langle a_1, a_2, \dots, a_n \rangle = \left\{ \sum_{i=1}^n k_i a_i : k_i \in \mathbb{N} \right\}$ and

$m(S) = \min \{x \in S : x > 0\}$ is called as multiplicity of S . Let S be a numerical semigroup, then $F(S) = \max(\emptyset \setminus S)$ and $n(S) = \text{Card}(\{0, 1, 2, \dots, F(S)\} \cap S)$ is called Frobenius number and determine number of S , respectively. If S is a numerical semigroup such that $S = \langle a_1, a_2, \dots, a_n \rangle$, then we observe that

$S = \langle a_1, a_2, \dots, a_n \rangle = \{s_0 = 0, s_1, s_2, \dots, s_{n-1}, s_n = F(S) + 1, \oplus \dots\}$, where $s_i < s_{i+1}$, $n = n(S)$ and the arrow means that every integer greater than $F(S) + 1$ belongs to S for $i = 1, 2, \dots, n = n(S)$. If $b \in \mathbb{N}$ and $b \notin S$, then b is called gap of S . We denote the set of gaps of S , by $H(S)$, i.e, $H(S) = \mathbb{N} \setminus S$. The $G(S) = \#(H(S))$ is called the genus of S . It

known that $G(S) + n(S) = F(S) + 1$. The numerical semigroup S is called symmetric if $F(S) - t$ belongs to S , for $t \in \emptyset \setminus S$. It is known the numerical semigroup $S = \langle a_1, a_2 \rangle$ is symmetric and $F(S) = a_1 a_2 - a_1 - a_2$. In this case, we write $n(S) = \frac{F(S) + 1}{2}$.

A numerical semigroup S is called Arf if $a_1 + a_2 - a_3 \in S$, for all $a_1, a_2, a_3 \in S$ such that $a_1^3 \leq a_2^3 \leq a_3^3$. The smallest Arf numerical semigroup containing a numerical semigroup S is called the Arf closure of S , and it is denoted by $\text{Arf}(S)$.

In this study, we will give some results about the numerical semigroups such that $S_k = \langle 7, 7k + 3 \rangle$ where $k \geq 1, k \in \emptyset$. Also, we will obtain Arf closure of these symmetric numerical semigroups.

Keywords: Symmetric numerical semigroup, Arf closure, genus.



MODEL OF TELEMEDICINE SERVICES ON THE EXAMPLE OF POLAND

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ABSTRACT

Broadly understood telecommunications services are currently replacing the traditionally known communication process. The transformations of social life necessitate computerization in many aspects of everyday life. Information and communication technologies (ICT) have a significant impact on increasing the efficiency, effectiveness, and quality of healthcare services. Moreover, in developed countries, e-Health and m-Health are nowadays perceived as one of the pillars of the healthcare system. The aim of the study is to draw attention to the model of telemedicine services from the perspective of the Polish legal system. While reviewing the legal regulations, the author draws attention to the method of providing medical services with the use of modern technological solutions, with particular emphasis on the situation related to the SARS-CoV-2 coronavirus and its impact on increasing the popularity of telemedicine services in Poland. The aim of the study is to refer to the opportunities and threats posed by broadly understood telemedicine and the effectiveness of telephone consultations provided during the COVID-19 pandemic.

Key words: telemedicine, health law, healthcare



**DOJO AND TRADITIONAL MARTIAL ARTS: A SOCIAL COMMUNITY FOR
PHYSICAL ACTIVITY AND HEALTH PREVENTION IN LATER AGE**

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ABSTRACT

Introduction: The development of ageing and the increasing number of older adults represent a true health and social issue. On the other hand, in the last few years, the popularity of traditional Martial Arts, between elderly populations, has increased a lot. This pushed the authors to investigate the role of Martial Arts in the community and the role of the Dojo as a possible way to improve quality of life, physical activity and social involvement in later life.

Methods: This is a qualitative study. The research team has developed and submitted semi-structured interviews to participants aged over 60 that have been practicing Martial Arts for more than 2 years. Interviews have been conducted by phone/Skype. Participants have been informed about the purpose of the interview but not about the goal of the study, to not affect the validity of the answers. All participants have been asked permission and confirmation of their answers before transcribing the interviews.

Results: Participants show that practicing traditional Martial Arts has improved their quality of life, physical activity and social involvement. The findings underline that this is not related to general physical activity, but mostly to the structure and values of traditional Martial Arts and to the supporting community they find in the Dojo.

Discussion: The research has underlined a strong need of belonging and stability in the later years of life, that seems to be well satisfied by the practice of traditional Martial Arts. Most of older athletes seem to train not only for the fitness but for the social context that they can find in the Dojo. Moreover, It is not to be underestimated the interaction, while training, between older and younger athletes, as a stimulating comparison. The challenging interaction with young people looks to be positive, and motivating, in the participants, an intra or extra personal processes to improve themselves. Therefore, it's possible to consider the Dojo not only a place where practicing traditional Martial Arts, but a micro-community, where older adults feel active, alive and socially engaged. This needs to be highly considered when trying to involve older adults in active lifestyle.



THE SHOCK OF COVID-19 ON THE FOOD AND MARINE INDUSTRIES

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ABSTRACT

In this paper, we estimate the average prices of the major Food futures in the stock market, and also the average prices of the biggest Marine companies' stocks, testing the effect of Covid-19 on these stocks, through a vector error correction model (VECM). More analytically, we set a model with endogenous variables the average prices of the marine and food industry, and declare COVID-19 confirmed cases being exogenous. We compute the orthogonal impulse-response functions between these two industries, and the variance decomposition of forecast errors. The rationale of the case study is that the Covid-19 pandemic (fear of spread, economic instability, and lockdown measures) hindered the performance of marine companies, and affected the food prices, with those two affecting one another. Based on the findings, a shock is apparent from Food futures to the Marine companies' stocks, and the food sector predicts a portion of the marine industry's performance.

Keywords: COVID-19; Marine stocks; Food prices; OIRFS; FEVD



**MACHINING PARAMETERS OPTIMIZATION OF ALLOY STEEL AISI 4140
USING TOPSIS COMBINED WITH AHP****PHD. Student: Hadjela Salah**

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ABSTRACT

In this work, we propose a multi-objective optimization technique to determine the turning parameters of AISI 4140 alloy steel using the Technique of Order Preference by Similarity to Ideal Solution (TOPSIS), which is a Multi Criteria Decision Method (MCDM) combined with the Analytic Hierarchy Process (AHP) technique. The machining parameters considered are the cutting speed (V_c), the feed rate (f) and the depth of cut (a_p). The optimization criteria chosen allow us to make a compromise between quality and quantity, in fact we have set as an objective on the one hand, to minimize the criterion of surface roughness (R_a) and the tangential cutting force (F_c), and on the other hand, to maximize the material removal rate (MRR). For this purpose, an experimental design according to Taguchi L16 (4^3) was performed. The maximum RPIS value (Relative Proximity to the Ideal Solution) corresponds to the optimal level of the corresponding input parameter. In our case study the best combination of input parameters is given by a cutting speed ($V_{c1} = 250$ m/min), a feed rate per revolution ($f_1 = 0.11$ mm/rev) and the depth of cut ($a_{p1} = 0.5$ mm). This allows to reach $R_a = 0.616$ μm , $F_c = 88.40$ N and $MRR = 13.613$ cm^3/min . The results obtained show that the feed rate per revolution (f), has the largest contribution on the RPIS with 58%, followed by the depth of cut (a_p), and the cutting speed (V_c), with 25.83% and 2.46% respectively.

Keywords: AISI 4140, Taguchi, TOPSIS, AHP, turning, Optimization.



ON THE EIGENGRAPH FOR p -BIHARMONIC EQUATIONS WITH RELlich POTENTIALS AND WEIGHT

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ABSTRACT

Using a variational technique and inequality of Hardy-Rellich, we prove the existence of infinitely many eigencurve sequences of the p -biharmonic operator involving a Rellich potentials. A variational formulation of the first curve (eigengraph) is given. research will be documented with photographs and information about their technical properties will be given.

Keywords: p -biharmonic operator, variational methods, Ljusternik-Schnirelman theory, Rellich potential.



MODELING AND OPTIMIZATION OF SURFACE ROUGHNESS AND CUTTING FORCE WHEN MACHINING INCONEL 718 USING THE RSM AND DF METHODS**PhD, student Kouahla Ilyas**

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ABSTRACT

Inconel 718 is a nickel-based superalloy, It is used in several applications and mainly in structural components subjected to high temperatures. This material is difficult to machine because of its physico-mechanical characteristics. In this work, we present an experimental investigation on the effects of cutting parameters such as cutting speed (V_c), feed rate (f), depth of cut (a_p) and tool nose radius (r), on the surface roughness (R_a) and cutting force (F_z), during dry turning of Inconel 718. The machining tests were carried out with a coated carbide tool (GC1105 with PVD TiAlN coating), according to the Taguchi L27 experimental design. Response surface methodology (RSM) and analysis of variance (ANOVA) were used to quantify the effect of input factors on output parameters and to propose mathematical models for prediction. The desirability function (DF) was used to determine the optimal cutting conditions that ensure the minimization of surface roughness (R_a) and cutting force (F_z). The results found the show in the analysis of variance (ANOVA) that the feed rate (f) has a great influence on the surface roughness (R_a) with a contribution of 23.39%. As for the analysis of variance (ANOVA) of the cutting force (F_z), the results showed that the depth of cut (a_p) has a great safe influence (F_z) with a contribution of 64.11%. The models found in this study are reliable and accurate, the coefficients of determination for surface roughness (R_a) and cutting force (F_z) are $R^2 = 0.92$ and $R^2 = 0.98$ successively.

Keywords: machining, Inconel 718, modelling, ANOVA, desirability function.



**AZƏRBAYCAN FOLKLORUNDA YANILTMACLARIN JANRDAXİLİ
DƏYİŞMƏLƏRİ**

INTRA-GENRE CHANGES OF TONGUE-TWISTERS IN AZERBAIJANI FOLKLORE

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ÖZƏT

Azərbaycan folklorunda yaniltmaclar şəkli xüsusiyyətlərinə görə yetərinə araşdırılmamışdır. Yaniltmacların struktural janr təyinatı da mübahisəlidir. Folklorşünaslıq elmi bu problemlərə aydınlıq gətirmədən yaniltmacı uşaq folklor örnəyi sayır, əksər vəsaitlərdə və toplularda bu janrı uşaqların nitqinin inkişafı, düzgün danışıq və tələffüz vərdişlərinə yiyələnməsi ilə bağlayır. Buna görə də yaniltmaclar uşaq folklorunun janrları sırasına daxil edilir. Dildə olan çətin sözləri yaxşı tələffüz etməyi bacarmaq, tez-tez danışmaq vərdişlərinə yiyələnmək yaniltmacların əsas məqsədi sayılır.

Yaniltmac poetik strukturuna və tematik tərkibinə görə həm nəsr, həm də nəzm şəklində olur. Yaniltmaclar iki yerə bölünür. Bunun da birincisi danışıq dili ilə əlaqədar olan yaniltmac, yəni nitq, dil yaniltmacıdır. İkincisini isə fikir yaniltmacları təşkil edir. Bu bölgü altında təqdim olunan yaniltmacların məzmunu, strukturu və məqsədi fərqlidir. Dil yaniltmaclarının məqsədi çaşdırmaq, dili dolaşdırmaqdır. Dil yaniltmacları körpə yaşlı uşaqlar üçün nəzərdə tutulur. İkinci qrupa daxil edilən fikir yaniltmacları isə nisbətən böyük yaşlı uşaqlara aiddir və əsas məqsədi uşaqları düşündürmək, hadisələrin mahiyyətini dərk etməyə alışıdırmaqdır.

Yaniltmaclar bir vaxtlar qüsurlu nitqi olanların dilinin rəvanlaşmasında vasitə olmuşdur. Folklorşünaslar yaniltmacları sözlərin iştirakına görə iki qrupa ayırırlar:

-azsözlü, və ya sadə yaniltmaclar;

-çoxsözlü, yaxud mürəkkəb yaniltmaclar.

Yaniltmaclar tiplərinə görə də qruplaşdırılır. Birinci tip yaniltmaclar sözlərin yerini yanlış demək yoluyla yaranır. İkinci tip yaniltmaclar dialoq və mükəlimə formasında olan çaşdırmalardan ibarətdir. Yeri gəlmişkən, çaşdırmalar həm də tapmacanın bir növü kimi öyrənilir, bu da həmin folklor nümunələrinin janr imkanlarının genişliyi ilə bağlıdır. Sadə və mürəkkəb ifadəli yaniltmaclardan ibarət olan üçüncü tipə iki şəxs bir-birini çaşdırmaq üçün söylədikləri nümunələr daxildir.

Yaniltmaclar *çaşdırmacalar, dildolaşdırmalar, yaniltmacalar, şaşırtmacalar, yahlıtmalar, yaniltmalar, çaşlar, yanlışlıqlar* kimi janrdaxili dəyişmələrə məruz qalır.

Zehni inkişaf etdirməklə yanaşı, uşaqlarda təmiz danışıq vərdişi yaradan, nitqi aydınlaşdıran yaniltmacların janrdaxili dəyişmələri tematik və struktural xarakter daşıyır. Bəzi oxşar yaniltmacların müxtəlif adlar daşması onların müxtəlif regionlardan toplanması ilə bağlıdır. Dialektlərdən gələn adlar da yaniltmacların janrdaxili dəyişmələrini mükəmməl şəkildə araşdırmağı tələb edir.



Xarakterizə edilən folklor nümunələri yanılmacların janr özəlliklərinə qismən də olsa, aydınlıq gətirir.

Açar sözlər: Azərbaycan folkloru, yanılmac janrı, yanılmacların janrdaxili dəyişmələri.

ABSTRACT

In Azerbaijani folklore, illusions have not been sufficiently studied due to their pictorial features. The structural genre definition of delusions is also controversial. Without clarifying these problems, the science of folklore considers delusions as an example of children's folklore, and in most materials and collections it connects this genre with the development of children's speech, correct speech and pronunciation skills. Therefore, delusions are included in the genres of children's folklore. The main goal of tongue-twisters is to be able to pronounce difficult words well and to speak fast. The illusion is in the form of both prose and verse due to its poetic structure and thematic composition. Illusions are divided into two parts. The first of these is the delusion associated with spoken language, that is, speech, language delusion. The second is misconceptions.

The content, structure and purpose of the illusions presented under this division are different. The purpose of language delusions is to confuse, to confuse the language. Language delusions are intended for infants. The misconceptions included in the second group apply to relatively older children, and their main purpose is to make children think and get used to understanding the essence of events. Misconceptions were once a means of smoothing out the language of those with speech impediments. Folklorists divide misconceptions into two groups according to the presence of words:

-with fewer words, or simple misconceptions;

-multi-word or complex misconceptions.

Illusions are also grouped by type. The first type of misconceptions is created by mispronouncing words. The second type of delusion consists of confusion in the form of dialogue and dialogue. By the way, confusions are also studied as a kind of riddle, which is due to the wide range of genre possibilities of these examples of folklore. The third type, which consists of simple and complex expressive delusions, includes examples that two people use to confuse each other.

Misconceptions are subject to changes within the genre, such as *chashdirmajalar*, *dildolashdirmalar*, *yaniltmajalar*, *shashirtmajalar*, *yahaltmalar*, *yaniltmalar*, *chashlar*, *yanlishliqlar*.

In addition to the development of the mind, the internal changes in the illusions that create the habit of pure speech in children and clarify speech are thematic and structural. Some similar misconceptions have different names because they are collected from different regions. Names from dialects also require a thorough study of the intra-genre variations of misconceptions.

The examples of folklore that are characterized bring clarity, albeit partially, to the genre features of delusions.

Keywords: Azerbaijani folklore, genre of tongue-twisters, genre-changes of tongue-twisters.



**SINIF ÖĞRETMENLERİNİN 2023 EĞİTİM VİZYONU TEMEL EĞİTİM
HEDEFLERİNE YÖNELİK GÖRÜŞLERİNİN İNCELENMESİ**

THE INVESTIGATION OF CLASSROOM TEACHERS' VIEWS TOWARDS PRIMARY
EDUCATION GOALS OF 2023 EDUCATION VISION

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ÖZET

Bu araştırmanın amacı; sınıf öğretmenlerinin Milli Eğitim Bakanlığı tarafından 23 Ekim 2018 tarihinde yayımlanan 2023 Eğitim Vizyonu Belgesi Temel Eğitim Alanı hakkındaki görüşlerini incelemektir. Araştırma; 2019-2020 eğitim-öğretim yılında Malatya ilinde Millî Eğitim Bakanlığı'na bağlı bulunan okullarda görevli, farklı sosyo-ekonomik düzeye sahip eğitim bölgelerinden on beş sınıf öğretmeni ile gerçekleştirilmiştir. Araştırmada nitel araştırma yöntemlerinden olan durum çalışması kullanılmıştır. Verilerin analiz edilmesinde ise betimsel analiz kullanılmıştır. Veri toplama aracı olarak yarı yapılandırılmış görüşme formu kullanılmıştır. Yarı yapılandırılmış görüşme formunda sınıf öğretmenlerinden 2023 Eğitim Vizyonu Temel Eğitim Alanı ile ilgili hedeflerin; gerekliliği ve uygulanabilirliği açısından değerlendirmeleri istenmiştir. Vizyon Belgesinde temel eğitim alanında bulunan üç ana hedef tema olarak kabul edilmiştir. Bunlar; 'çok yönlü gelişim ve değerlendirme', 'yenilikçi uygulamalar ve 'başarı farklarının azaltılması ve niteliğin artırılması'dır. Sınıf öğretmenlerinin 2023 Eğitim Vizyonu Temel Eğitim Alanı hedeflerini değerlendirmeleri ile ilgili olarak her bir alt hedef için 'gerekli ve uygulanabilir', 'gerekli fakat uygulamasında çeşitli sorunlar yaşanabilir' ve 'diğer' olmak üzere üç kategori oluşturulmuştur. Her tema ve kategori, kod ve öğretmen görüşleri ile desteklenmiştir. Araştırmada elde edilen bulgulara göre 2023 Eğitim Vizyonu Temel Eğitim Alanına yönelik sınıf öğretmen görüşlerinin çoğunluğu hedeflerin 'gerekli ve uygulanabilir' olduğuna yöneliktir.

Anahtar Kelimeler: Eğitim, Vizyon, 2023 Eğitim Vizyonu, Sınıf Öğretmeni

ABSTRACT

The aim of this study is to examine classroom teachers' views about the department of primary education in 2023 Education Vision promulgated by the Ministry of Education on 23rd of October 2018. The study group consisted of 15 classroom teachers attendant at the schools affiliated with Ministry of Education in Malatya, from educational regions which have different socio-economic developments, in 2019-2020 academic year. In this study, the



case study from the qualitative research designs was used. Descriptive analysis was used to analyze the data. A semi-structured interview form, which was designed by the researcher by receiving expert opinion was used for data collection. The classroom teachers were asked to examine the necessity and practicality of targets related to 2023 Education Vision department of primary education by semi-structured interview form. Main targets were considered as theme. These are “multiple development and evaluation”, “innovative practices” and “decreasing of achievement gaps and increasing the quality”. Three categories were constituted as “necessary and practicable”, “necessary but several problems may be cause in practice”, and “other” about the classroom teachers’ examination of the bottom targets of 2023 Education Vision department of primary education. Each theme category was supported by codes and teachers’ views. According to the study findings, most of the classroom teachers’ views about the 2023 Education Vision department of primary education are towards to that the targets are “necessary and practicable”.

Key words: Education, Vision, 2023 Education Vision, Classroom Teacher.



GROWTH AND CHARACTERISATION OF IN $Zn_{0.97}Co_{0.03}S$ AND $Zn_{0.97}Mn_{0.03}S$ THIN FILMS: STRUCRAL AND OPTICAL CONSTANTS**Abdullah GÖKTAŞ**Department of Physics, Faculty of Art and Science, Harran University, 63300, Sanliurfa,
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ABSTRACT

In this study, the structural and optical properties of sol-gel derived $Zn_{0.97}Co_{0.03}S$ ve $Zn_{0.97}Fe_{0.03}S$ thin films have been investigated. The films have polycrystalline nature with hexagonal crystal structure according to the XRD analysis. Comparatively, $Zn_{0.97}Co_{0.03}S$ thin film has higher crystalline quality than that of the $Zn_{0.97}Fe_{0.03}S$. The film surface of the both film samples are nearly homogeneous and smooth as observed in SEM investigations. The optical results showed that the absorption intensity of the $Zn_{0.97}Fe_{0.03}S$ is comparativley higher than that of the $Zn_{0.97}Co_{0.03}S$, whereas the $Zn_{0.97}Co_{0.03}S$ film has higher transmittance in UV-Vis region. The calculated dielectric constant(ϵ) and refractive index (n) of the $Zn_{0.97}Co_{0.03}S$ film have higher than that of the $Zn_{0.97}Fe_{0.03}S$ film. Moreover, the $Zn_{0.97}Fe_{0.03}S$ film has higher extinction coefficient (k) as compared to the $Zn_{0.97}Co_{0.03}S$ film. It is expected that the observed results and obtained films will find wide applications in electronic and optoelectronic areas.

Keywords: Thin film, $Zn_{0.97}Co_{0.03}S$, $Zn_{0.97}Fe_{0.03}S$, refractive index, extinction coefficient, dielectric constant.



**SELF PERFECTION IN PRESCHOOL IMMIGRANT CHILDREN: THE EFFECT
OF SOCIAL ADAPTION AND SKILLS EDUCATION**

OKUL ÖNCESİ DÖNEMDEKİ GÖÇMEN ÇOCUKLARDA BENLİK ALGISI: SOSYAL
UYUM VE BECERİ EĞİTİMİNİN ETKİSİ

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ABSTRACT

In the study, it was aimed to examine the effect of Social Skills Training Program applied to 60-72 months old immigrant Afghan children on children's self-perception. In the research, an pre-test -post-test experimental design without control group was used. The study group of the research consists of 17 immigrant children of ,60-72 months, attending to Ankara Keçiören Youth Center, which was selected with purposeful sampling method. "DeMoulin Self-Perception Scale" was used as a data collection tool to measure children's self-perception levels. In the study, the Social Cohesion and Skills Training Program was applied to Afghan children 2 days a week and for 12 weeks. The self-perception levels of the children were measured before and after the program. As a result of the analysis, it was determined that there is a significant difference between the scores of the children before and after the Social Adaptation and Skills Training Program in favor of the post test ($p < 0.05$). However, a significant difference was found in favor of the pre-test ($p < 0.05$). This situation was interpreted as the applied program had a positive and significant effect on the self-perception scores of the children, but this effect continued, although it decreased over time. In addition, it was pointed out that the self-perception of the child is significantly affected by the family, and it was suggested that the education of parents on child education would make a significant contribution to the children's gaining a positive self-perception.

Keywords: Self Perfection, Social Adaption, Social Skill, Preschool Education

ÖZET

Araştırma Ankara Keçiören Gençlik Merkezi'ne devam eden 60-72 aylık 17 Afgan çocuğa uygulanan Sosyal Uyum ve Beceri Eğitim Programının çocukların benlik algıları üzerine etkisini incelemek amacıyla yapılmıştır. Araştırmada öntest-sontest kontrol grupsuz deneysel



desen kullanılmıştır. Araştırmanın çalışma grubunu amaçlı örnekleme yöntemi ile seçilen Keçiören Gençlik Merkezi' ne devam eden 60-72 aylık 17 göçmen çocuk oluşturmaktadır. Araştırmada veri toplama aracı olarak çocukların benlik algısı düzeylerini ölçmek amacıyla "DeMoulin Benlik Algısı Ölçeği" kullanılmıştır. Çalışmada Sosyal Uyum ve Beceri Eğitim Programı haftada 2 gün ve 12 hafta süreyle Afgan çocuklara uygulanmıştır. Program öncesinde ve sonrasında çocukların benlik algılarının düzeyleri ölçülmüştür. Yapılan analizler sonucunda çocukların Sosyal Uyum ve Beceri Eğitim Programı öncesinde ve sonrasında aldıkları puanlar arasında son test lehine anlamlı farklılık olduğu saptanmıştır ($p<0.05$). Programın kalıcılığını saptamak amacıyla yapılan sontest ve kalıcılık testi puanları arasında son test lehine ve öntest-kalıcılık testi puanları arasında ise ön test lehine anlamlı farklılık saptanmıştır ($p<0.05$). Bu durum uygulanan programın çocukların benlik algısı puanları üzerinde olumlu ve anlamlı etki sağladığı ancak zaman içerisinde bu etkinin azalmakla birlikte devam ettiği şeklinde yorumlanmıştır. Bununla birlikte benlik algısının çocuğun içinde bulunduğu aileden önemli ölçüde etkilendiğine dikkat çekilerek ebeveynlerin çocuk eğitimi konusunda eğitim almaları sağlanarak çocukların olumlu benlik algısı kazanmalarında önemli katkı sağlayacağı şeklinde öneride bulunulmuştur.

Anahtar Kelimeler: Benlik Algısı, Sosyal Uyum, Sosyal Beceri, Okul öncesi Eğitimi.



SOCIAL VALUES EDUCATION PROGRAM IN PRESCHOOL CHILDREN: THE EFFECT ON SELF-REGULATION, SOCIAL SKILLS AND PROBLEM BEHAVIOR

OKUL ÖNCESİNDE SOSYAL DEĞERLER EĞİTİMİ PROGRAMI: ÖZ DÜZENLEME, SOSYAL BECERİ VE PROBLEM DAVRANIŞLAR ÜZERİNDEKİ ETKİSİ

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ABSTRACT

The study aims to examine the effect of the Social Value Education Program applied to children's self-regulation, social skills and problem behavior levels. For this purpose, a pretest-posttest semi-experimental design without control group was used in the study. The study group of the research consists of 13 children, 54% male and 46% female, 54-60 months old, attending to Gazi Application Kindergarten affiliated with Gazi University Child Development Research and Application Center selected by purposeful sampling method. "Self-regulation Scale" was used to in the study, as the measurement tool to measure children's self-regulation skill levels, "Social Skills Scale" was used to measure social skill levels, and "Problem Behavior Scale" was to measure problem behaviors. The teachers of the class applied the Social Values Education Program developed by Sapsağlam (2015) for 12 weeks, 3 days a week. In the training program created by Sapsağlam (2015), the values of "Helpfulness, Honesty, Love, Respect, Cooperation, Self-Control, Responsibility, Kindness, Tolerance, Friendship" are included. Before the application of the program, preliminary measurements, after the application, final measurements and permanence measurements were performed. The data were transferred to computer environment and analyzed with SPSS 22 program. As a result of the analysis, Social Values Education Program given to the children is effective on children's self-regulation, social skills and problematic behaviors. It was determined that children's self-regulation and social skills increased, problematic behaviors of children decreased and continued the effect of the value behaviors used on self-regulation, social skills and problematic behaviors in the next time period.

Key Words: Social Values Education, Self-regulation, Social Skills, Problem Behaviors, Preschool Education.

ÖZET

Araştırmada sosyal değerler eğitimi programının, çocukların öz düzenleme, sosyal beceri ve problem davranış düzeyleri üzerindeki etkisinin incelenmesi amaçlanmaktadır. Bu amaçla çalışmada öntest-sontest kontrol grupsuz yarı deneysel desen kullanılmıştır. Araştırmanın çalışma grubunu Gazi Üniversitesi Çocuk Gelişimi Araştırma ve Uygulama Merkezi'ne bağlı Gazi Uygulama Anaokulu' na kayıtlı 54-60 aylık % 54'ü erkek %46'sı kız olmak üzere 13



çocuk oluşturmaktadır. Çalışma grubu amaçlı örnekleme yöntemi ile seçilmiştir. Araştırmada çocukların öz düzenleme beceri düzeylerini ölçmek amacıyla “Öz Düzenleme Ölçeği”, sosyal beceri düzeylerini ölçmek için “Sosyal Beceri Ölçeği” ve problem davranışlarını ölçmek amacıyla “Problem Davranış Ölçeği” kullanılmıştır. Çocuklara haftada 3 gün ve 12 hafta süre ile Sapsağlam (2015) tarafından geliştirilen Sosyal Değerler Eğitim Programı’nı uygulanmıştır. Sapsağlam (2015) tarafından hazırlanan eğitim programında “Yardımsızlık, Dürüstlük, Sevgi, Saygı, İşbirliği, Kendini Kontrol Etme, Sorumluluk, Nezaket, Hoşgörülü Olma, Arkadaşlık” değerlerine yer verilmiştir. Program uygulanmadan önce ön ölçümler, uygulandıktan sonra son ölçümler ve kalıcılık ölçümleri yapılmıştır. Veriler bilgisayar ortamına aktarılmış ve SPSS 22 programı ile analiz edilmiştir. Çalışma sonucunda değerler eğitimi programının çocukların öz düzenleme becerileri ve sosyal becerilerinde pozitif yönde anlamlı farklılık sağladığı sonucuna ulaşılmıştır. Bunun yanı sıra araştırmada çocuklara uygulanan Değerler Eğitimi Programının çocukların problemleri davranışlarını anlamlı ölçüde azalttığı ve kullanılan değer davranışlarının öz düzenleme, sosyal beceriler ve problemleri davranışlar üzerindeki etkisini sonraki zaman diliminde de devam ettirdiği sonucuna ulaşılmıştır.

Anahtar Kelimeler: Sosyal Değerler Eğitimi, Öz düzenleme, Sosyal Beceri, Problem Davranışlar, Okul Öncesi Eğitim.



THE PELL FIBONACCI- p SEQUENCES MODULO m **Assistant Prof. Dr. Yeşim AKÜZÜM**

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ABSTRACT

In this work, we study the Pell Fibonacci- p matrix defined as the generating matrix of the Pell Fibonacci- p sequence. Many studies in the literature obtained the rules for the orders of the cyclic groups generated by reducing the generating matrix of the sequence modulo m . Given an integer matrix $A = [a_{ij}]$, $A(\text{mod } m)$ means that all entries of A are modulo m , that is $A(\text{mod } m) = (a_{ij}(\text{mod } m))$. Since consider the set $\langle A \rangle_m = \{A^i(\text{mod } m) \mid i \geq 0\}$, if $\gcd(m, \det A) = 1$, then the set $\langle A \rangle_m$ is a cyclic group. Firstly, in this work, we consider the multiplicative orders of the Pell Fibonacci- p matrix when read modulo m and then we obtain the cyclic groups. Also, we study the Pell Fibonacci- p sequence when read modulo m and examine the periods of the Pell p -Fibonacci sequence according to modulo m . Finally, we derive the relationship between the order the cyclic groups obtained and the periods of the Pell Fibonacci- p sequence according to modulo m .

Keywords: The the Pell Fibonacci- p Sequence, Modulo, Group

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ABSTRACT

Number theoretic properties such as these obtained from homogeneous linear recurrence relations relevant to this paper have been studied by many authors. It is defined some linear recurrence sequences and gave their various properties by matrix methods in many works. In this work, we define the Pell Fibonacci- p sequence by using the product of characteristic polynomials of the Pell p sequence and the Fibonacci sequence. Also, we derive the generating matrices for these sequences, and then we obtain relationships between the Pell Fibonacci- p sequences and these generating matrices. Furthermore, we give the determinantal and the permanental representations of the Pell Fibonacci- p numbers by using certain matrices which are obtained from the generating matrix of the Pell Fibonacci- p sequence. Finally, we obtain the combinatorial representation, the exponential representation and the sums of the Pell Fibonacci- p numbers by the aid of the generating function and the generating matrix of the Pell Fibonacci- p sequence.

Keywords: The Pell Fibonacci- p Sequence, Matrix, Representation

THE HADAMARD-TYPE ORDER- k JACOBSTHAL SEQUENCES MODULO m **Assistant Prof. Dr. Üyesi Yeşim AKÜZÜM,**

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ABSTRACT

In this work, we examine the Hadamard-type order- k Jacobsthal sequence defined by the following homogeneous linear recurrence relation for any given $k \geq 4$ and $n \geq 0$

$$HJ_{n+k}^k = HJ_{n+k-1}^k + 2HJ_{n+k-2}^k + HJ_{n+k-3}^k + \dots + HJ_{n+2}^k - HJ_{n+1}^k - 2HJ_n^k$$

in which integer constants $HJ_0^k = \dots = HJ_{k-2}^k = 0$ and $HJ_{k-1}^k = 1$. The study of recurrence sequences in groups first began with Fibonacci sequences and the ordinary Fibonacci sequences in cyclic groups were investigated. Then, the concept extended to some special linear recurrence sequences by many studies. In this work, we study the Hadamard-type order- k Jacobsthal sequence when read modulo m and obtain the periods of the Hadamard type order- k Jacobsthal sequence according to modulo m . Also, we consider the multiplicative orders of the matrix called the Hadamard-type order- k Jacobsthal matrix which is the generating matrix of the Hadamard-type order- k Jacobsthal sequence. Furthermore, we obtain the cyclic groups and semigroups by recurring the this generating matrix according to modulo m . We derive the connections between the order the these groups obtained and the periods of the Hadamard-type order- k Jacobsthal sequence according to modulo m .

Keywords: The Hadamard- type order- k Jacobsthal Sequence, Modulo, Group



TRAVMA DIŐI ORTOPEDİ KONSÜLTASYONLARININ İNCELENMESİ
ANALYSIS OF NON-TRAUMA RELATED ORTHOPEDICS CONSULTATIONS**Uzman Dr. Batuhan Gencer**

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ÖZET

Günümüzde bir vakaya bütüncül yaklaşabilmek için, birden fazla branŐın konsültasyon sistemi üzerinden birlikte çalışması kaçınılmaz hale gelmiştir. Ortopedi cerrahları olarak, tarafımıza konsülte edilen vakaların çođu acil servislerden olmakla birlikte, diđer yataklı kliniklerden de branŐımıza sık sık konsültasyonlar gönderilmektedir. Bu çalışmanın amacı, diđer servislerden ortopediye konsülte edilen vakaların tanı ve uygulanan tedavilerinin analiz edilmesidir.

Eylül 2019 – Őubat 2020 tarihleri arasında, kliniđimize yönlendirilen konsültasyonlar incelendi. Acil servislerden atılan konsültasyonlar ve opere edilen hastaların takip konsültasyonları çalışma dışında bırakıldıktan sonra, konsültasyonların atıldıkları klinikler, konsültasyon tanıları ve uygulanan tedavi protokolleri analiz edildi.

Yapılan incelemelerde, en sık konsültasyon sebebinin 220 hasta (%44.9) ile eklem ağrısı olduđu görülürken, bunu sırası ile septik artrit (%13.9), osteomyelit (%8.6), diyabetik ayak (%7.3) ve iskemi (%5.7) tanıları takip etmekteydi. 380 hasta (%77.6) servislerden konsülte edilirken, 110 hastanın (%22.4) ise yoğun bakım birimlerinden konsülte edildiđi görüldü. En sık ortopedi konsültasyonu isteyen bölüm, 54 hasta (%11) ile Enfeksiyon Hastalıkları servisiydi. 82 hasta (%16.7) servis konsültasyonu sonucunda opere edilirken, 330 hastaya (%67.3) konservatif tedavi uygulandı ve 78 hasta (%15.9) ise ileri tetkik ve tedavi planlanması için takibe alındı. Opere edilen hastaların tanıları incelendiđinde en sık operasyon sebebinin 26 hasta (%31.7) ile iskemi olduđu görülürken, bunu diyabetik ayak (%24.4) ve osteomyelit (%17.1) tanıları izlemekteydi. Opere edilen 22 hastanın (%26.8) yoğun bakım birimleri tarafından, 20 hastanın (%24.4) Enfeksiyon Hastalıkları bölümü tarafından ve 14 hastanın (%17.1) Çocuk Sađlığı ve Hastalıkları bölümü ve yan dalları tarafından konsülte edildiđi görüldü.

Her ne kadar travma hastaları, ortopedinin çalışma alanının büyük bir kısmını kaplıyor olsada, ortopedi cerrahları travma dıŐı sebeplerle de pek çok hasta ile karşılaşmaktadır. Özellikle Enfeksiyon Hastalıkları bölümü ve yoğun bakımlardan gelen konsültasyonlarda dikkatli olunmalı, hızlı müdahale ve operasyon ihtiyacı olabileceđi unutulmamalıdır. İskemi sebebi ile konsülte edilen vakaların cerrahiye ihtiyaç duyma ihtimallerinin yüksek olduđu akılda tutulmalıdır.

Anahtar Kelimeler: Ortopedi, Konsültasyon, Travma dıŐı konsültasyonlar, iskemi, eklem ağrısı, enfeksiyon hastalıkları



ABSTRACT

It has become inevitable for more than one department to work together over the consultation system in order to approach a case in a holistic way. Although most of the cases consulted by orthopedic surgeons come from the emergency services, consultations are sent from other departments as well. The aim of this study was to analyze the diagnosis and treatment of cases consulted from other departments to orthopedics and traumatology department.

Consultations directed to our clinic between September 2019 and February 2020 were examined. Consultations sent from the emergency department and follow-up consultations of the operated patients were excluded from the study, and the departments requesting consultation, diagnoses and treatment protocols were analyzed.

The most common reason for consultation was joint pain with 220 patients (44.9%), followed by the diagnosis of septic arthritis (13.9%), osteomyelitis (8.6%), diabetic foot (7.3%) and ischemia (5.7%), respectively. While 380 patients (77.6%) were consulted from inpatient services, 110 patients (22.4%) were consulted from intensive care units. The Department of Infectious Diseases was the clinic that most frequently requested consultation from Orthopedics and Traumatology with 54 patients (11%). While 82 patients (16.7%) were operated as a result of the consultation, 330 (67.3%) patients received conservative treatment, and 78 (15.9%) patients were followed up for further examination and treatment planning. When the diagnoses of the operated patients were examined, it was seen that the most common cause of operation was ischemia (26 patients, 31.7%), followed by diabetic foot (20 patients, 24.4%) and osteomyelitis (14 patients, 17.1%). Among the operated patients, 22 (26.8%) were consulted from the intensive care units, 20 (24.4%) were consulted from the department of infectious Diseases and 14 (17.1%) were consulted from Pediatrics and its subspecialties.

Although trauma patients occupy a large part of orthopedics' field of study, orthopedic surgeons may encounter many patients for reasons other than trauma. Particular attention should be paid to consultations from the Department of Infectious Diseases and intensive care units, and it should not be forgotten that rapid intervention and operation may be required. It should be kept in mind that cases consulted for ischemia are likely to require surgery.

Keywords: Orthopedics, Consultation, Non-traumatic consultations, ischemia, joint pain, infectious diseases



EXPRESSION of the ANGIOTENSIN CONVERTING ENZYME 2 (ACE-2) GENE in BLOOD of BREAST CANCER PATIENTS

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ABSTRACT

Breast cancer (BCa) is the most frequently diagnosed malignancy and the second leading reason of cancer deaths in womens. The ACE-2 gene is also expressed in many different human tissues. ACE-2 is prognostic markers for overall and disease free survival in BCa.

The goal of the present study was to explore ACE-2 gene expression level in 56 blood of BCa patients and healty samples. ACE-2 gene expression was assessed using qPCR.

The results of the qPCR demonstrated that ACE-2 gene expression level was significantly lower in BCa samples with compared healty group ($p=0.0386$). The increase in ACE-2 gene expression was associated with samples of tumour stage 2 (T2), PR (+) and ER (+) (respectively $p=0.0226$, $p=0.0202$ and $p=0.0487$). But, the decrease in ACE-2 expression was associated with samples of HER2(+) and younger than 50 (respectively $p=0.0362$ and $p=0.0377$).

In conclusion that ACE-2 gene should be considered as an important diagnostic or prognostic marker for BCa. Moreover, it may have important function in BCa progression. Therefore, more studies are needed to reveal the importance of ACE-2 gene in BCa.

Keywords: ACE-2, qPCR, breast cancer, PR, ER, HER2



SUPPORTING TOOL FOR THE ON-SCENE COMMANDERS IN STRUCTURAL INTERVENTIONS BY THE FIREFIGHTING TEAMS: VALIDATION OF NEED AND PROPOSAL

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Resumo

No âmbito das intervenções estruturais, os 1.º Comandantes das Operações de Socorro (COS) apenas têm à sua disposição os dados facultados pelo alertante, como a sua identificação, a localização e a indicação do que está a acontecer (incêndio em habitação, incêndio em edifício escolar, etc.). No entanto, existe um conjunto de informações sobre o edifício nos projetos de segurança contra incêndio e nas medidas de autoproteção (MAP), mas essa documentação configura-se pouco operacional e de consulta morosa e complexa.

De acordo com os resultados do inquérito que dirigimos a operacionais que desempenham a função de COS em intervenções estruturais, na prática das operações de socorro, o propósito de conhecer atempadamente os riscos, quer internos quer externos, e de delineamento de uma estratégia de combate mais efetiva, mais rápida e também mais segura para os operacionais envolvidos, está comprometido pela limitação da informação disponível, havendo necessidade de um documento específico para esse fim.

Para colmatar esta lacuna de informação propomos uma ferramenta original designada Plano de Intervenção Inicial (PII) cujo conteúdo integra informações recolhida nos documentos formais já existentes. É um documento de estrutura homogénea, de consulta rápida e intuitiva que contribui para uma tomada de decisão mais informada.

Palavras-Chave: Bombeiros, Comandante das Operações de Socorro, Intervenções Estruturais, Tomada de Decisão, Segurança Contra Incêndio em Edifícios..

ABSTRACT

In a scenario of structural intervention situation, the on-scene Commanders (OSC) only have at their disposal the data provided by the person who gave the alert such as their identification, the location and type of situation in progress (housing fire, fire in a school building, etc.).



However, there is a set of information about such type of buildings documented on their fire safety projects and their self-protection measures, but this documentation is found not being very operational as it is time-consuming and complex to consult.

According to the results of the survey directed to operational personnel who performs the role of OSC in structural interventions, during relief operations, the purpose of knowing the risks both internal and external, and outlining a more effective rescue strategy, faster, but also safer for the operational staff involved. This situation it's compromised due to the limitation of the available information, requiring then the need for a specific document that full fills this purpose. To fill this information gap, we propose an original tool called the Initial Intervention Plan (IIP), whose content integrates information collected in the already existing formal documents. It is a document with a homogeneous structure, quick and intuitive to consult, that promotes a more informed and effective decision making.

Keywords: Firefighters, On-Scene Commander, Structural Interventions, Decision Making, Fire Safety in Buildings.



**BİYOSENSÖR YAPIMINDA KULLANILMAK ÜZERE HİDROJEN PEROKSİDE
DUYARLI PLATİN/POLİANİLİN ELEKTROT HAZIRLANMASI**
SENSITIVE TO HYDROGEN PEROXIDE FOR BIOSENSOR CONSTRUCTION
PLATINUM / POLYANILINE ELECTRODE PREPARATION

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ÖZET

Bu çalışmada, polianilin (pani) elektrot hazırlandı ve elektrotun en iyi potansiyel ve hidrojen peroksida duyarlılığı incelendi. Bunun için 0,5 cm² platin levha yüzeyinde dönüşümlü voltametri ile 0,0 ile +0,7 V arasında 50mV/s tarama hızında anilin elektropolimerizasyonu ile polianilin biriktirildi. Kaplama ortamına 0.1 M H₂SO₄ konarak platin/polianilin elektrot hazırlandı. Bu elektrodun hidrojen peroksida duyarlılığı 0,025 M pH'sı 7,0 fosfat tamponu kullanılarak incelendi ve optimum koşullar araştırıldı. Çalışma potansiyeli 0,7 V, anilin konsantrasyonu 0,2 M, polianilin olarak tespit edildi.

Anahtar Kelimeler: Polianilin, Hidrojen Peroksit, Sülfürik Asit, Fosfat Tamponu

ABSTRACT

In this study, the polyaniline (pani) electrode was prepared and the best potential and sensitivity of the electrode to hydrogen peroxide were examined. For this, polyaniline was deposited by electropolymerization of aniline at a scanning speed of 50 mV / s between 0.0 and +0.7 V with alternating voltammetry on the surface of a 0.5 cm² platinum plate. Platinum / polyaniline electrode was prepared by adding 0.1 M H₂SO₄ to the coating medium. The sensitivity of this electrode to hydrogen peroxide was examined using 0.025 M pH 7.0 phosphate buffer and optimum conditions were investigated. Working potential was determined as 0.7 V, aniline concentration 0.2 M, polyaniline.

Keywords: Polyaniline, Hydrogen Peroxide, Sulfuric Acid, Phosphate Buffer



**BİYOSENSÖR YAPIMINDA KULLANILMAK ÜZERE HİDROJEN
PEROKSİDE DUYARLI PLATİN/POLİPİROL ELEKTROT HAZIRLANMASI**
SENSITIVE TO HYDROGEN PEROXIDE FOR BIOSENSOR CONSTRUCTION
PLATINUM / POLYPYRROLE ELECTRODE PREPARATION

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ÖZET

Bu çalışmada, polipirol (ppy) elektrot hazırlandı ve elektrotun en iyi potansiyel ve hidrojen peroksida duyarlılığı incelendi. Bunun için 0,5 cm² platin levha yüzeyinde dönüşümlü voltametri ile 0.0 - +0.7 V arasında 50mV/s tarama hızında pirolün elektropolimerizasyonu ile polipirol biriktirildi. Kaplama ortamına 0.1 M H₂SO₄ konarak platin/polipirol elektrot hazırlandı. Bu elektrodun hidrojen peroksida duyarlılığı 0,025M pH'sı 7,0 fosfat tamponu kullanılarak incelendi ve optimum koşullar araştırıldı. Çalışma potansiyeli 0,7 V, pirol konsantrasyonu 0,2 M, ppy olarak tespit edildi.

Anahtar Kelimeler: Polipirol, Hidrojen Peroksit, Sülfürik Asit, Fosfat Tamponu

ABSTRACT

In this study, a polypyrrole (ppy) electrode was prepared and the best potential and sensitivity of the electrode to hydrogen peroxide were examined. For this, polypyrrole was deposited by electropolymerization of pyrrole at a scanning speed of 50 mV / s between 0.0 and +0.7 V with alternating voltammetry on the surface of a 0.5 cm² platinum plate. Platinum / polypyrrole electrode was prepared by adding 0.1 M H₂SO₄ to the coating medium. The sensitivity of this electrode to hydrogen peroxide was examined using 0.025 M pH 7.0 phosphate buffer and optimum conditions were investigated. Working potential was determined as 0.7 V, pyrrole concentration 0.2 M, ppy.

Keywords: Polypyrrole, Hydrogen Peroxide, Sulfuric Acid, Phosphate Buffer



NON-ENZYMATIC AND SUPER POROUS HYBRID CUO/PT NPS PLATFORM WITH THE IMPROVED PERFORMANCE FOR THE HYDROGEN PEROXIDE DETECTION

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ABSTRACT

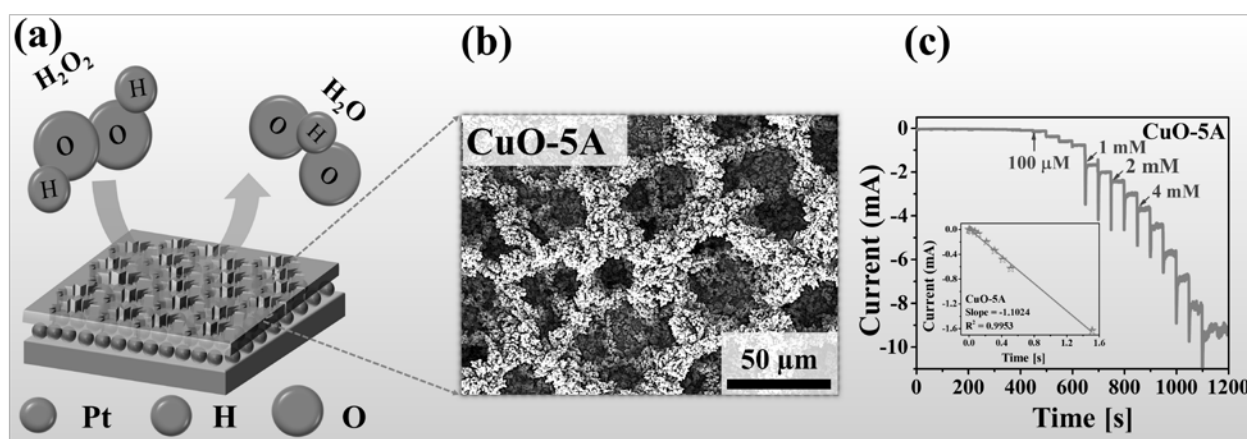


Fig 1: (a) Schematic representation of H₂O₂ probe molecule detection by a super porous hybrid platform CuO/Pt. (b) SEM image of typical porous CuO-5A nanostructure. (c) Amperometric response of CuO-5A sample upon dropwise addition of H₂O₂ concentration from 1 μM – 4 mM in a 0.1 M PBS solution of a pH 7.4 at -0.4 V potential, inset shows the linear calibration curve based on current versus H₂O₂ concentration [5].

Rapid and accurate detection of H₂O₂ plays a significant role in the field of sensors, electrochemistry, and industrial analysis [1]. The development of efficient and non-enzymatic sensors can offer an efficient platform for the electrochemical detection towards hydrogen peroxide (H₂O₂). In particular, the electrochemical technique using an enzyme modified electrodes has been extensively studied due to its simple, fast and analytical process [2]. However, the performance of enzymatic sensor is hindered due to the immobilized enzymes that affects the measurement accuracy.

Recently the development of non-enzymatic electrochemical sensors has been gaining a great interest in order to improve the measurement accuracy. The non-enzymatic electrochemical sensors can offer the fast response time, long term stability and high sensitivity. Metals (Au, Pt and Pd), metal alloys (Pt-Pd, Cu-Ag, Pt-Au) and metal oxides (NiO, Co₃O₄, CuO) have been extensively studied for the non-enzymatic electrochemical sensing electrodes [3]. Among these catalysts, the copper oxide (CuO) of various nanostructures is one of the most promising materials due to its narrow band gap (1.2 eV) with the low toxicity and low cost [4]. Whereas the Pt NPs are excellent candidate known for high stability and catalytic activity.

In this work, a unique configuration of highly porous CuO on the Pt nanoparticles (NPs), namely super porous CuO/Pt platform, is demonstrated on Si substrate. The super porous CuO/Pt platform provides large electrochemically active surface and thus can thus demonstrate the high sensitivity, stability, and accuracy. This hybrid super porous platform is fabricated in two steps with physiochemical approach, (i) physical vapor deposition of Pt NPs, (ii) electrochemical deposition of porous CuO by a dynamic hydrogen bubbling technique as shown in Fig 1. The hybrid CuO/Pt platform demonstrates high sensitivity up to 2,205 $\mu\text{A}/\text{mM}\cdot\text{cm}^2$ and limit of detection (LOD) 140 nM with a wide detection range under an optimized condition. The improved sensitivity and low detection limit can be due to synergetic effect of highly porous CuO structure and underlying Pt NPs [5].

Acknowledgement

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Author Contributions

Author Contributions: R.K., S.K., R.M., J.-H.J. and J.L. participated in the experiment design and carried out the experiments. R.K., S.K., R.M., J.-H.J. and J.L. participated in the characterizations and analysis of data. J.-H.J. and J.L. designed the experiments and testing methods. R.K., S.K. and J.L. carried out the writing. All authors helped in drafting and read and approved the final manuscript.

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**DÜZENLİ SPOR YAPAN VE YAPMAYAN BİREYLERİN VÜCUT FARKINDALIĞI
VE POSTÜR DÜZEYLERİNİN DEĞERLENDİRİLMESİ**

EVALUATION OF BODY AWARENESS OF INDIVIDUALS WHO DO REGULAR
SPORTS AND THOSE WHO DO NOT DO AND THEIR POSTURE LEVELS

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ÖZET

Çalışmamızın amacı kronik düzeyde spor geçmişli olup, düzenli spor yapan bireyler ile spor yapmayan (sedanter) bireylerin vücut farkındalığı ve postür düzeylerinin değerlendirilmesidir. Çalışmaya Bitlis ve Muş illerinden farklı spor branşlarından yaşları 18-30 arası 117 sporcu ve yaşları 18-30 arası 117 sedanter birey olmak üzere toplam 234 kişi gönüllü olarak katılmışlardır. Çalışmaya katılanların kilo ölçümü, boy uzunluğu, bel çevresi ölçümü ve bel açısı ölçüldü. Vücut farkındalığı için vücut farkındalık anketi ve ağrı skalası (VAS) kullanılmış olup, postür ölçümü ve omurga eğriliklerini ölçmek için dedijital spinal mouse aleti kullanılmıştır. Araştırmada elde edilen veriler SPSS, for Windows 22.0 programı kullanılarak analiz edilmiştir. Verilerin değerlendirilmesinde tanımlayıcı istatistiksel yöntemleri olarak sayı, yüzde, ortalama, standart sapma kullanılmıştır. Gruplu değişkenlerin dağılımı ki-kare analizi ile test edilmiştir. İki bağımsız grup arasında niceliksel sürekli verilerin karşılaştırılmasında t-testi kullanılarak anlamlılık düzeyi $p < 0.05$ olarak değerlendirilmiştir. Çalışmaya katılan sporcu ve sedanterlerin torakal kifoz, lomber lordoz, lomber mobilite, fleksiyon torakal omurga açısı ve fleksiyon lomber omurga açısı değerleri arasında anlamlı farklılık bulunmamıştır ($p > 0,05$). Sporcuların vücut farkındalığı değerleri sedanterlerden fazla bulunmuştur ($p < 0,05$). Sedanterlerin torakal mobilite değerleri ve ağrı düzeyi değerleri sporcuların torakal mobilite ve ağrı düzeyi değerlerinden yüksek bulunmuştur ($p < 0,05$). Araştırma sonucunda, uzun süreli spor yapmanın torakal kifoz, lomber lordoz, lomber mobilite, fleksiyon torakal omurga açısı ve fleksiyon lomber omurga açısı değerleri üzerine bir etkisinin olmadığı belirlenmiş olup, sedanterlerin omurga torakal mobilitelerinin spor yapanlardan fazla olduğu, spor yapanların vücut farkındalıklarının daha yüksek olduğu, bel ve omurga bölgesindeki ağrıların spor yapanlarda sedanterlerden daha az olduğu tespit edilmiştir.

Anahtar Kelimeler: Postür, Omurga eğrilikleri, Spor, Vücut farkındalığı

ABSTRACT

The aim of this study is to evaluate the body awareness and posture levels of individuals who have a chronic level of sports history, and individuals who do regular sports and those who do



not do sports (sedentary). A total of 234 people voluntarily participated in this study, including athletes aged 18-30 and 117 sedentary individuals aged 18-30 from different sports branches, from the provinces of Bitlis and Muş. Weight measurement, height, waist circumference and waist angle of the participants was measured. Body awareness survey and pain scale (VAS) were used for body awareness, and a digital spinal mouse device was used to measure posture and spine curvatures. The data obtained in the study were analyzed using SPSS, for Windows 22.0 program. Number, percentage, average and standard deviation were used as descriptive statistical methods in the evaluation of the data. The distribution of grouped variables was tested by chi-square analysis. In the comparison of quantitative continuous data between two independent groups, the significance level was evaluated as $p < 0.05$ using t-test. No significant difference was found between the values of thoracic kyphosis, lumbar lordosis, lumbar mobility, flexion thoracic spine angle and flexion lumbar spine angle of the athletes and sedentary participants ($p > 0.05$). Body awareness values of athletes were found higher than sedentaries ($p < 0.05$). Thoracic mobility and pain level values of sedentaries were higher than the thoracic mobility and pain levels of athletes ($p < 0.05$). As a result of the research, it was determined that long-term sports had no effect on the values of thoracic kyphosis, lumbar lordosis, lumbar mobility, flexion thoracic spine angle and flexion lumbar spine angle, and the body awareness of the spine is higher than those who do sports, pain in the lower back and spine area was found to be less than those in sports.

Keywords: Posture, Spinal curvatures, Sport, Body awareness



**A NUMERICAL STUDY OF RHEOLOGY OF BOUNDARY LAYER
AXISYMMTRIC FLOW OF AN OLDROYD-B FLUID IN THE REGION OF
STAGNATION POINT OVER A STRETCHING SHEET: FINITE DIFFERENCE
ANALYSIS**

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ABSTRACT

The axisymmetric stagnation-point flow for a non-Newtonian Oldroyd-B fluid is considered. The equations are developed by eliminating stresses between Cauchy's equations of motion and constitutive relationship of an Oldroyd-B fluid. A stretching boundary condition is imposed to discuss the boundary value problem. The similarity solution is obtained numerically using finite difference method. The results are presented in graphs and discussed under the influence of pertinent parameters appearing in the problem. The results of the Maxwell and viscous fluids can be obtained as special cases of the present study.

Keywords: Oldroyd-B fluid, axisymmetric stagnation-point flow, stretching sheet, finite difference method



IN BIG DATA SEMI-STRUCTURED DATA TYPES AND ANALYTICAL STANDARDS OF TRANSFORMING SEMI-STRUCTURED DATA TO STRUCTURED DATA FOR DATA MINING

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ABSTRACT

When defining Big Data, it can be characterized by 7V: volume, variety, velocity, veracity, visualization and value. By variety characteristic, there are three types of Big Data from different sources. These are structured, semi-structured and unstructured data.

Semi-structured data is a combination of both structured and unstructured data and includes characteristics of both. A simple definition of semi-structured data is data that can't be organized in Relational Database Management System (RDBMS) or doesn't have a strict structural framework, yet does have some structural properties or loose organizational framework. HTML, SGML, XML, CSV, RDF, RSS, OWL, RDFS, DC, Avro, etc. are example of semi-structured data types.

There is a great need to apply data mining techniques to large amounts of semi-structured data to get information. However, many data mining technologies today are not designed to work with such documents. Therefore, data extraction technologies need to be adapted to work with this type of data. The possibility of different semi-structured data types and their "flexible" nature make it important to consider both the content and the structured data of semi-structured data when applying these technologies. In data processing, the methods of direct mining this type data are very rare. Most data processing methods are converting semi-structured data into structured data and then use mining technology. In this work researched analytical standards especially for Xml and Json data transformation methods. Used parser methods to convert to structured data. And in RDBMS it has shown how some "data clouds" will work with converted structured data.

Keywords: Big Data, Semi-structured data, DOM, SAX, Data Cloud



**ENTREPRENEURSHIP EDUCATION IN MALAYSIAN UNIVERSITIES FROM
THE LENS OF NON-BUSINESS ACADEMIC STAFF**

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Kerry Lee

Deborah Shepherd

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ABSTRACT

Despite the increasing promotion of entrepreneurship education in higher education institutions, the lack of conceptual clarity of entrepreneurship education has imposed a great challenge upon its implementation. As academic staff are expected to be able to integrate the entrepreneurial element in their teaching in order to develop the entrepreneurial mind-set among students regardless of their academic background, this study explores the academic staff's perception on the purpose of entrepreneurship education and what entrepreneurship education practices are used in their teaching. Data was collected through an online survey from 133 academic staff who are not teaching entrepreneurship courses in 18 Malaysian public universities. The findings present that there was no significant consensus on what should be the purpose of entrepreneurship education as perceived by academic staff and that the training in entrepreneurship education seems to be the main factor determining the observable entrepreneurial approach used by the academic staff. It is anticipated that these findings will add to the emerging body of literature in Malaysian context that is placing importance on the need of integrating entrepreneurship education across the university curriculum.

Keywords: entrepreneurship education, teaching practice, higher education.



EPIGALLOCATECHIN-3-GALLATE-LOADED PLGA-PEG NANOPARTICLES AS A PROMISING ANTI-SEIZURE STRATEGY AGAINST EPILEPSY DISORDERS

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ABSTRACT

Background: Temporal lobe epilepsy (TLE) is the most common type of pharmaco-resistant epilepsy in adults. Many studies are focused on finding new treatments for those forms of epilepsy, which do not respond to the available drugs. In that sense, Epigallocatechin-3-gallate (EGCG) has aroused much interest because of its multiple therapeutic effects, but its instability compromises the potential effectiveness. In the last decades, controlled drug delivery systems, such as polymeric nanoparticles (NPs), have been increasingly studied due to their potential for protecting drug integrity and performing a specific targeted drug delivery.

Objective: To design PEGylated-PLGA NPs of EGCG in order to improve drug stability, increase its brain delivery, and evaluate its effectiveness in an animal model of TLE.

Methods: EGCG NPs were prepared by the double emulsion method and cytotoxicity, behavioral, Fluoro-Jade C, Iba1 and GFAP immunohistochemistry studies were carried out to determine their effectiveness.

Results: EGCG NPs showed an average size of 169 nm, monodisperse population, negative surface charge, encapsulation efficiency of 95% and sustained release profile. Cytotoxicity assays exhibited that these nanocarriers were non-toxic. Behavioral test showed that nanoparticles reduced more than free drug the number of epileptic episodes and their intensity. Neurotoxicity and immunohistochemistry studies confirmed a decrease in neuronal death and neuroinflammation.

Conclusion: Epigallocatechin-3-gallate PEGylated-PLGA nanoparticles could be a promising, innovative and suitable strategy for the treatment of Temporal Lobe Epilepsy.



SERS ENHANCEMENT OF RHODAMINE 6G BY A MIXTURE APPROACH WITH GRAPHENE QUANTUM DOTS ON HYBRID CORE-SHELL Pd@Ag NPs

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Abstract

The bimetallic or core-shell nanoparticles (NPs) can find applications as a surface-enhanced Raman spectroscopy (SERS) substrate due to their large surface area and strong localized surface plasmon resonance (LSPR) [1]. Among the various plasmonic metallic NPs, the palladium (Pd) and silver (Ag) have been widely proposed for the SERS substrates due to better stability and biocompatibility. The solid-state dewetting (SSD) [2] can offer a promising route to fabricate the dynamic morphology of bimetallic NPs like the hybrid core-shell Pd@Ag NPs with the secondary background Ag NPs as showed in Fig. 1(b). The hybrid core-shell Pd@Ag NPs exhibit the improved LSPR properties as compared to the pure Ag or Pd NPs such as a narrowing of LSPR peaks with the blue-shift as shown in Fig. 1(b-1). This is due to the unique configuration of core-shell Pd@Ag NPs and a log of background Ag NPs.

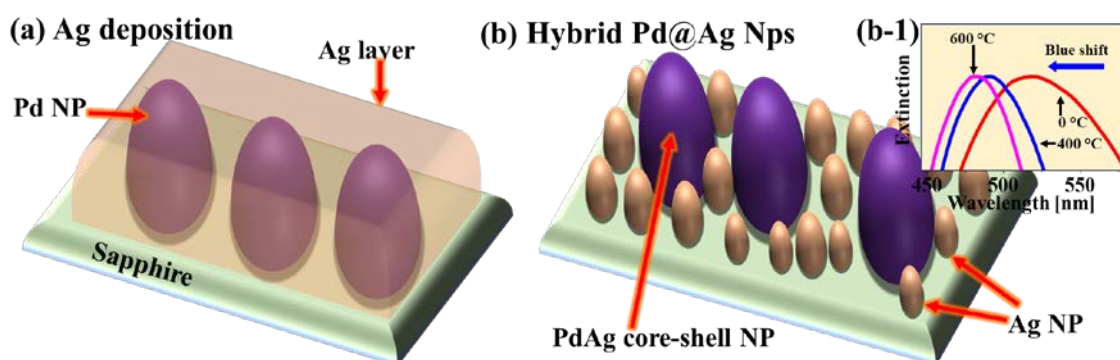


Figure 1. Fabrication Pd@Ag hybrid core-shell NP by the solid-state dewetting method [3].

Further, the SERS signal enhancement with the incorporation of graphene quantum dots (GQDs) on the hybrid core-shell Pd@Ag NPs has been investigated in this work for the ultrasensitive surface-enhanced Raman scattering (SERS) substrate [3] as shown in Fig. 2(a). The hybrid nano-construction of NPs along with the GQD provides a greater number of hotspots in between the highly-dense background NPs and in small spacing between particles [4]. The dangling bonds on the edge of the GQDs [5] effectively adsorb the probe molecules R6G and demonstrated a strong enhancement with lower molarity of R6G. The enhanced SERS signal is attributed to the synergistic effect of chemical enhancement from the GQDs and electromagnetic enhancement from the hybrid core-shell Pd@Ag NPs as displayed in Fig. 2(b).



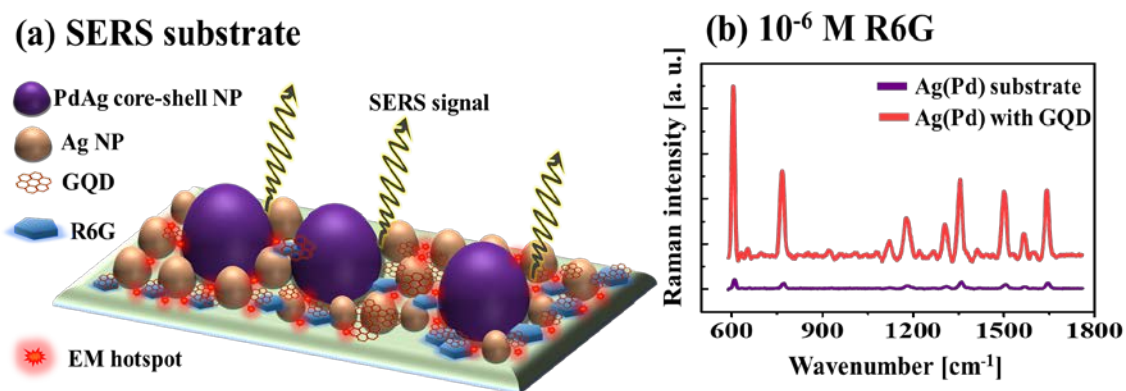


Figure 2. (a) Schematic of surface-enhanced Raman spectroscopy (SERS) substrate constructed on the Pd@Ag core-shell NPs and GQDs. (b) SERS signal enhancement for R6G with the incorporation of GQD and Pd@Ag core-shell NPs [3].

Acknowledgments

Financial support from the National Research Foundation of Korea (NRF) Grant funded by the Korean Government (MSIP) (No. NRF-2019R1A2C4069438 and NRF-2018R1A6A1A03025242) and in part by the research grant of Kwangwoon University in 2021 is gratefully acknowledged. Special appreciation to Ms. So Hee Kim from the Korea Institute of Science and Technology (KIST) for the SEM-EDX characterizations.

Author Contributions

Sanchaya Pandit: Conceptualization, Methodology, Writing - review & editing. Sundar Kunwar: Methodology, Writing - review & editing. Rakesh Kulkarni: Data curation. Rutuja Mandavka: Data curation. Shusen Lin: Data curation. Jihoon Lee: Conceptualization, Methodology, Writing - review & editing.

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MRAC ADAPTIVE CONTROL DESIGN FOR AN f15 AIRCRAFT PITCH ANGULAR MOTION USING dYNAMICS iNVERSION AND FRACTIONAL ORDER FILTERING

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ABSTRACT

Model reference adaptive control (MRAC) schemes are proving to be efficient with nonlinear control problems, as they allow us to deal with uncertainties in the model and unknown or slowly varying parameters. An adaptive learning algorithm makes it possible to track the modifications in the plant dynamics [1-2]. This is a major advantage of such adaptive controllers, as the majority of practical plants' models are nonlinear, with unknown parameters and unconsidered nonlinear dynamics [3]. Besides, there are multiple possible actuator failures and an infinite variety of possible surface damages for the military aircraft and, any discrepancy between the model and reality can lead to false detection [4]. Many different approaches have been successfully flown on manned aircraft [5], like the retrospective cost adaptive control (RCAC) to a linearized aircraft dynamics with an unknown transition to nonminimum-phase dynamics [6], adaptive control of aircraft lateral movement in landing mode [7]...etc.

Based on a chosen reference model that produces reference signals, an active identification algorithm and an adaptive control law, MRAC controllers are more efficient within linear feedback control loops, and lose their performance or even stability with nonlinear systems. Usually, one has to suppose that the plant model is linearizable [8]. MRAC adaptive control is particularly efficient for accommodating unknown changes in the aircraft structure and parameters, as demonstrated by many works in the literature [9] even in presence of asymmetric damages.

**Figure 1:** F15 Eagle aircraft.

Recently, a great focus of scientific research community was directed to fractional order systems and their applications [10-12]. These models containing fractional order operators have proven to be more able for a wide range of physical systems modelization than the ordinary integer order



ones [13]. Particularly for their interesting characteristics that are extensively used in feedback control loops in order to improve their performance and robustness [14-15].

In this work, the proposed control strategy is to implement a nonlinear Dynamic Inversion control loop in addition to the MRAC control outer loop for an F15 aircraft pitch angular motion. This inner loop controller has been used by several authors in literature [16-18]. The aim of this control action is decoupling the system axes in order to deal with uncertainties and actuator failures and help the pilot. With this control configuration, the choice of the reference model is able to impose desired flying performances.

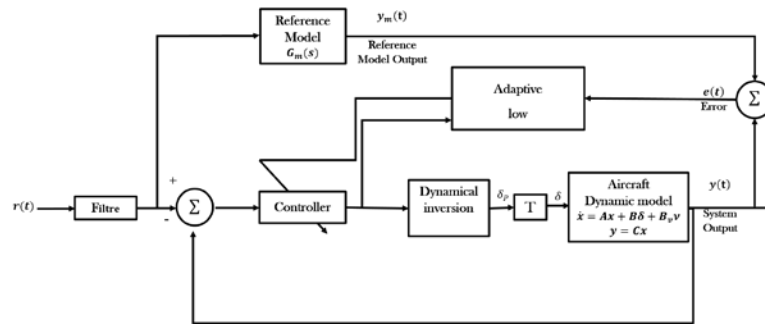


Figure 1. Adaptive MRAC control of F15 aircraft pitch angular motion using dynamic inversion and dynamical compensation.

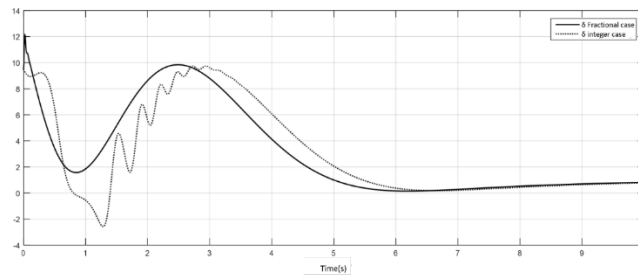


Figure 2: Comparative Pitch angle output.

Keywords: Model reference adaptive control—F15 aircraft—Pitch angle—Fractional order system—Shaping filter—Dynamics Inversion.

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**ADVANCEMENT OF STATISTICAL COMPUTING IN NORTH CENTRAL NIGERIA:
WAY FORWARD**

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ABSTRACT

Statistical computing sometimes refers to as computational statistics which is the interface between statistics and computer science. Without doubt the advent of statistical computing had help in teaching and learning statistics in Africa and in Nigeria, although the use of statistical computing in teaching, learning and doing project is still low in the North central Nigeria. To solve this problem, the Laboratory for Interdisciplinary Statistical Analysis (LISA) 2020 networks, University of Colorado Boulder, USA created the vision to establish 20 stat labs in developing countries by the end of 2020 with the following mission: teach statistics to staff and students of statistics, organized short courses and collaborate in interdisciplinary research with non-statisticians. In January 2018, the LISA 2020 network gave birth to Nasarawa State University, Keffi (NSUK)-LISA stat lab located in the North Central Nigeria which have trained over 200 students in the use of statistical computing such as in R, STATA, MINITAB and EViews with application in the real world. In other to geared toward the advancement of statistical computing in north central Nigeria, that gave birth to the creation of International Association of Statistical Computing (IASC) African Members Group to complement the LISA 2020 networks in the development and advancement of statistical capacity building in the North central Nigeria region.

Keywords: Advancement, Statistical, Computing, NSUK-LISA, IASC



***Azadirachta indica* ASSISTED GREEN SYNTHESIS OF Ag-NiO AND INVESTIGATION OF ITS CATALYTIC ACTIVITY TOWARDS THE DEGRADATION OF RHODAMINE B DYE IN AQUEOUS MEDIUM**

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ABSTRACT

The plants assisted green synthesis of nanoparticles has drawn a momentous importance worldwide. NiO is one the metal oxides researched comprehensively for decades and still has dominance in the field of photo-catalysis. In present study NiO and Ag-NiO were successfully prepared by a simple and environmentally friendly method using nickel nitrate, silver nitrate and leaves extract of *Azadirachta indica* L. plant as precursor materials. The prepared materials were characterized by XRD, SEM and TGA. Then the photo-catalytic efficiency of NiO and Ag-NiO were evaluated by aqueous phase photo-degradation of rhodamine B as a model pollutant under ultraviolet irradiations. About 40% and 96% of 200 mg/L (50 mL) degraded in 120 min at 40 °C over NiO and Ag-NiO as photo-catalyst respectively. The apparent rate constants were determined as 0.0109, 0.0165, 0.0175 and 0.0190 per min at 30, 40, 50 and 60 °C respectively. 14.6 kJ/mol was calculated as activation energy of reaction.

Key Words: Ag-NiO; *Azadirachta indica* L.; Elay-Rideal mechanism; kinetics analysis; NiO; rhodamine B



MULTI-OBJECTIVE OPTIMIZATION OF PERFORMANCE PARAMETERS IN MACHINING AISI D3 INTENDED TOOL STEEL FOR COLD WORKING

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ABSTRACT

One of the main objectives of manufacturers lies in reducing the costs of machining operations to a minimum. This is achieved through a minimization of the cutting forces that leads to a reduction of the power consumed during machining along with an improvement of the quality of the machined product in an economical way. The present study carries out an experimental investigation aiming at evaluating the effect of the cutting parameters represented by the tool nose radius, the cutting speed, the feed ate and the depth of cut on the tool performance parameters expressed through the surface roughness (Ra), the cutting force (Fz) and the power consumed (Pc). Machining is performed on AISI D3 cold-work tool steel specimens using a CVD triple-cured carbide cutting tool (GC4215) (Al₂O₃+TiC+TiCN). The response Surface Method (RSM) and the analysis of variance (ANOVA) have been applied on a Taguchi L16 experiment scheme (4³ 2¹) to compute the effect of the cutting parameters on the output ones and hence derive mathematical models for Ra, Fz and Pc. The models developed were further applied to carry out an optimization using the desirability function (DF) with the three desired



objectives illustrated by the minimum roughness, the cutting force and the minimum power consumed. Finally, a compromise was finally achieved between the parameters represented by the roughness, effort and power.

Keywords: AISI D3, turning, RSM, Modeling, Optimization



PREDICTIVE DATA MINING FOR HEART DISEASE PREDICTION**A. Logeswari¹, A. Ameer Suhail², K. Ajeeth², N. Dhinesh²**

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ABSTRACT

Cardiovascular diseases are the leading cause of death worldwide in the last few decades in both developed and developing countries. Early detection of heart disease and continued monitoring by nurses can reduce mortality. However, it is not possible to monitor patients daily in all cases accurately and 24-hour consultation with a patient is not available because it requires stupidity, time and expertise. In this project, we developed and researched cardiovascular prediction models using a variety of patient cardiovascular features and identified heart disease using machine learning techniques such as Support Vector Machine, Random Forest, Ada Boost, Gradient Boosting on the UCI. An early forecast for cardiovascular disease can help make decisions about lifestyle changes in high-risk patients and reduce complications, which can be a major milestone in the medical field. The database contains 303 events with 14 attributes that help train the predictive model to be distributed in the forecast web application. The main objective of this project is to create an effective guessing model for disease prediction. The healthcare industry collects a large amount of information that contains hidden information, which is helpful in making effective decisions. By providing relevant results and making effective data decisions, specific data development strategies are used. Enables important information. Eg. Relationships between cardiovascular factors and patterns, to be developed. Findings have shown that a system designed to diagnose can effectively predict the level of risk of heart disease.

Keywords: SVM, Random Forest, Ada Boost, Gradient Boosting, Flask, HTML, CSS.



SYNTHESIS, QUANTUM CHEMICAL CALCULATION AND BIOLOGICAL ACTIVITY OF 4-PHENYL-5-(THIOPHEN-2-YL)-4H-1,2,4-TRIAZOLE-3-THIOL

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ABSTRACT

This article has synthesized and identified both theoretically and experimentally of 4-phenyl-5-(thiophene-2-yl)-4H-1,2,4-triazole-3-thiol compound. Experimentally, Fourier transforms infrared (FT-IR), nuclear magnetic resonance (NMR), and ultraviolet (UV) spectroscopic techniques used for characterized the synthesized compound. The density functional theory with the basis set cc-pVDZ was measured the molecular geometry, vibrational frequencies, and guage including atomic orbital (GIAO) ¹H and ¹³C NMR chemical shifts of the title compound into the ground state. The measured results showed that the optimized geometry replicate the theoretical vibrations, and the calculated chemical shift in line with the experimental values was in good harmony. The calculations of molecular electrostatic potential and corrosion inhibitors were performed on the theoretical level B3LYP/cc-pVDZ, which were determined by HOMO and LUMO energy levels with some different parameters. The title compound demonstrated antibacterial, antifungal, and antioxidant activities.

NOTE: This work is my part of Ph.D. in organic synthesis at Firat University in Turkey



THE PHYSICAL LIMITS OF COMPUTATION INSPIRE AN OPEN PROBLEM THAT CONCERNS DECIDABLE SETS $X \subseteq \mathbb{N}$ AND CANNOT BE FORMALIZED IN ZFC AS IT REFERS TO THE CURRENT KNOWLEDGE ON X

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ABSTRACT

We summarize the article available at <https://arxiv.org/abs/1506.08655> Let $f(1)=2$, $f(2)=4$, and let $f(n+1)=f(n)!$ for every integer $n \geq 2$. Edmund Landau's conjecture states that the set $P(n^2+1)$ of primes of the form n^2+1 is infinite. Landau's conjecture implies the following unproven statement Φ : $\text{card}(P(n^2+1)) < \omega \Rightarrow P(n^2+1) \subseteq [2, f(7)]$. Let B denote the system of equations: $\{x(i)! = x(k): i, k \in \{1, \dots, 9\}\} \cup \{x(i) \cdot x(j) = x(k): i, j, k \in \{1, \dots, 9\}\}$. We write some system $U \subseteq B$ of 9 equations which has exactly two solutions in positive integers $x(1), \dots, x(9)$, namely $(1, \dots, 1)$ and $(f(1), \dots, f(9))$. No known system $S \subseteq B$ with a finite number of solutions in positive integers $x(1), \dots, x(9)$ has a solution $(x(1), \dots, x(9)) \in (\mathbb{N} \setminus \{0\})^9$ satisfying $\max(x(1), \dots, x(9)) > f(9)$. We write some system A of 8 equations. Let Λ denote the statement: if the system A has at most finitely many solutions in positive integers $x(1), \dots, x(9)$, then each such solution $(x(1), \dots, x(9))$ satisfies $x(1), \dots, x(9) \leq f(9)$. The statement Λ is equivalent to the statement Φ . This heuristically proves the statement Φ . This proof does not yield that $\text{card}(P(n^2+1)) = \omega$. Conditions (1)-(5) concern sets $X \subseteq \mathbb{N}$. (1) A known algorithm with no input returns an integer n satisfying $\text{card}(X) < \omega \Rightarrow X \subseteq (-\infty, n]$. (2) A known algorithm for every $k \in \mathbb{N}$ decides whether or not $k \in X$. (3) No known algorithm with no input returns the logical value of the statement $\text{card}(X) = \omega$. (4) There are many elements of X and it is conjectured that X is infinite. (5) X has the simplest definition among known sets $Y \subseteq \mathbb{N}$ with the same set of known elements. It seems that conditions (1)-(5) imply that the set X is naturally defined, where this term has only informal meaning. The set $X = P(n^2+1)$ satisfies conditions (2)-(5). The statement Φ implies condition (1) for $X = P(n^2+1)$. No known set $X \subseteq \mathbb{N}$ satisfies conditions (1)-(4) and is naturally defined or widely known in number theory. Algorithms always terminate. The next examples explain the distinction between *existing algorithms* (i.e. algorithms whose existence is provable in ZFC) and *known algorithms* (i.e. algorithms whose definition is constructive and currently known to us). Let $[\cdot]$ denote the integer part function. The set

$$X = \begin{cases} \mathbb{N}, & \text{if } \left[\frac{f(7)}{\pi} \right] \text{ is odd} \\ \emptyset, & \text{otherwise} \end{cases}$$

does not satisfy condition (3) because we know an algorithm with no input that computes $[f(7)/\pi]$. The function

$$\mathbb{N} \ni n \xrightarrow{h} \begin{cases} 1, & \text{if the decimal expansion of } \pi \text{ contains } n \text{ consecutive zeros} \\ 0, & \text{otherwise} \end{cases}$$



is computable because $h = \mathbb{N} \times \{1\}$ or there exists $k \in \mathbb{N}$ such that

$$h = (\{0, \dots, k\} \times \{1\}) \cup (\{k+1, k+2, k+3, \dots\} \times \{0\})$$

No known algorithm computes the function h . The set

$$X = \begin{cases} \mathbb{N}, & \text{if the continuum hypothesis holds} \\ \emptyset, & \text{otherwise} \end{cases}$$

is decidable. This X satisfies conditions (1) and (3) and does not satisfy conditions (2), (4), and (5). These facts will hold forever. The set

$$X = \{k \in \mathbb{N} : (f(7) < k) \Rightarrow (f(7), f(k)) \cap P(n^2+1) \neq \emptyset\}$$

satisfies conditions (1)-(4) and does not satisfy condition (5) as the set of known elements of X equals $\{0, \dots, f(7)\}$. No set $X \subseteq \mathbb{N}$ will satisfy conditions (1)-(4) forever, if for every algorithm with no input, at some future day, a computer will be able to execute this algorithm in 1 second or less. The physical limits of computation disprove this assumption.



FOOD CONSERVATION MANAGEMENT SYSTEM

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ABSTRACT

At one extreme people throwing away uneaten and leftover food in masses while on the other end “helpless children are suffering from malnutrition.”

Food wastage is a serious concern around the entire globe. The design of this research paper is aimed to present a developed solution to assist in reducing food wastage through proper food conservation management based on some aspects of food classifications and expiry dates.

The core of the proposed methodology is based on the fact that most of the products have expiry dates, thereby, after scanning the reading "food tagging" which is based on product code technology will be added in the inventory of food items. This will keep track of inventory of food items in the food storage container / box / bay / refrigerator etc. Further, implementation of a color or any of designed coding schemes will be used to arrange food items in food storing locations / compartments that store a specific category of food.

Keywords: Food Wastage; Food Tagging; Food Classification; Expiry Date; Scan; Coding Scheme



DESIGNING OF CRC POLYNOMIALS FOR 5G-NR**Prof. Afaq Ahmad¹, Dr. Sayyid Samir Al-Busaidi¹ Dr. Medhat Awadalla¹, Dr. Sabir Hussain² and Shaik Mazhar Hussain³**¹Electrical and Computer Engineering Department, Sultan Qaboos University, Muscat, Oman²Department of Electronics and Communication Engineering, Osmania University, Hyderabad, India³Department of Electronics and Communication, Middle East College, Muscat, Sultanate of Oman**ABSTRACT**

In 5G New Radio (NR) and beyond (future networks), improved and more stringent reliability requirements are essential part in achieving the enhanced performance of the channel codes. In the channel coding process, first, a Cyclic Redundancy Check (CRC) value is attached to the Transport Block (TB) to comply the process of error detection followed by Code Block (CB) segmentation. In 5G-NR, the medium access control (MAC) layer organizes the data into the TB to transmit it to the physical layer. The TB may contain up to million data bits. When the TB data capacity exceeds to a threshold, the TB is divided into multiple equal size CBs whereas, a CB consists of up to 8448 bits of data. Now in turn, each of the CBs are bound to enforce the error detection scheme to append the CRC bits.

Thus, in 5G-NR due to the different data capacity sizes of the TB and the CB, the CRC implemented scheme suitable and effective for the TB and that suitable and effective for the CB are different. The length of the CRC bits depends on the TB size. To reduce overhead, for TBs of length lesser than 3824 bits, a 16-bit CRC is used, otherwise a 24-bit CRC is used. Whereas, CB segmentation also implies that an additional CRC of length 24 bits but different compared to the TB CRC. In the case of a single CB transmission no additional CB CRC is applied.

Through this research paper we will propose the effective and efficient CRC polynomials of 16 and 24 bit lengths. The proposed polynomials will be searched out from the total possible polynomials of 8388608 and 32768 of lengths of 24 and 16 bits respectively. After the search of all primitive polynomials of order 24 and 16, we get 276480 and 2048 primitive polynomials. Our search will further probe to get set of effective and efficient primitive polynomials on the basis of some constraints such as error detection capability, sparsity, power dissipation and area.

Keywords: 5G; NR; CRC; Polynomial, Primitive; Transport Block; Code Block

ULTRAVIOLET PHOTODETECTOR USING HYBRID PdAg PLASMONIC NANOPARTICLES, GRAPHENE QUANTUM DOTS AND TITANIUM DIOXIDE

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ABSTRACT

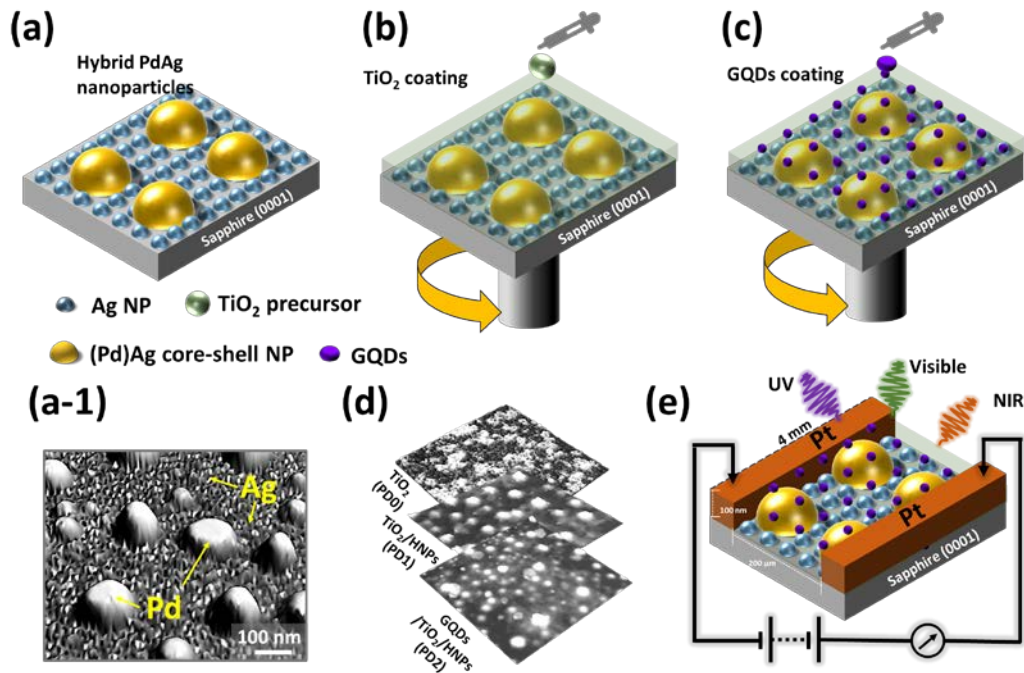


Figure 1: Fabrication process of GQDs/TiO₂/hybrid PdAg photodetector. [6]

Ultraviolet (UV) photodetectors have gained tremendous attention due to its wide applications such as the flame sensors, imaging, optical communication and so forth. Titanium dioxide (TiO₂) as a wide bandgap semiconductor has demonstrated the usefulness for the design of UV photodetectors due to its outstanding physical, chemical and optical properties [1]. At the same time, noble metallic nanoparticles (NPs) can also be another great applicant for the design of UV photodetectors. Metallic NPs demonstrate the intense localized surface plasmonic resonance (LSPR) and the optical performance could be altered by the modification of physical structure and chemical elements [2, 3]. Especially, the hybrid nanostructure composed more than one element in various configurations can demonstrate superior properties as compared to the pure and alloy NPs. In this work, a nanoscale architecture of hybrid GQDs/TiO₂/HNPs is demonstrated for the improved UV detection on sapphire (0001). The device architecture is consisted of the graphene quantum dots (GQDs), TiO₂ QD layer and PdAg hybrid nanoparticles in Fig. 1. Initially, the solid-state dewetting (SSD) process is utilized to fabricate the PtAg hybrid NPs and the solution process of spin-coating is adapted to synthesize the TiO₂ QD layer. Finally, the GQDs is decorated on it as presented in Fig. 1

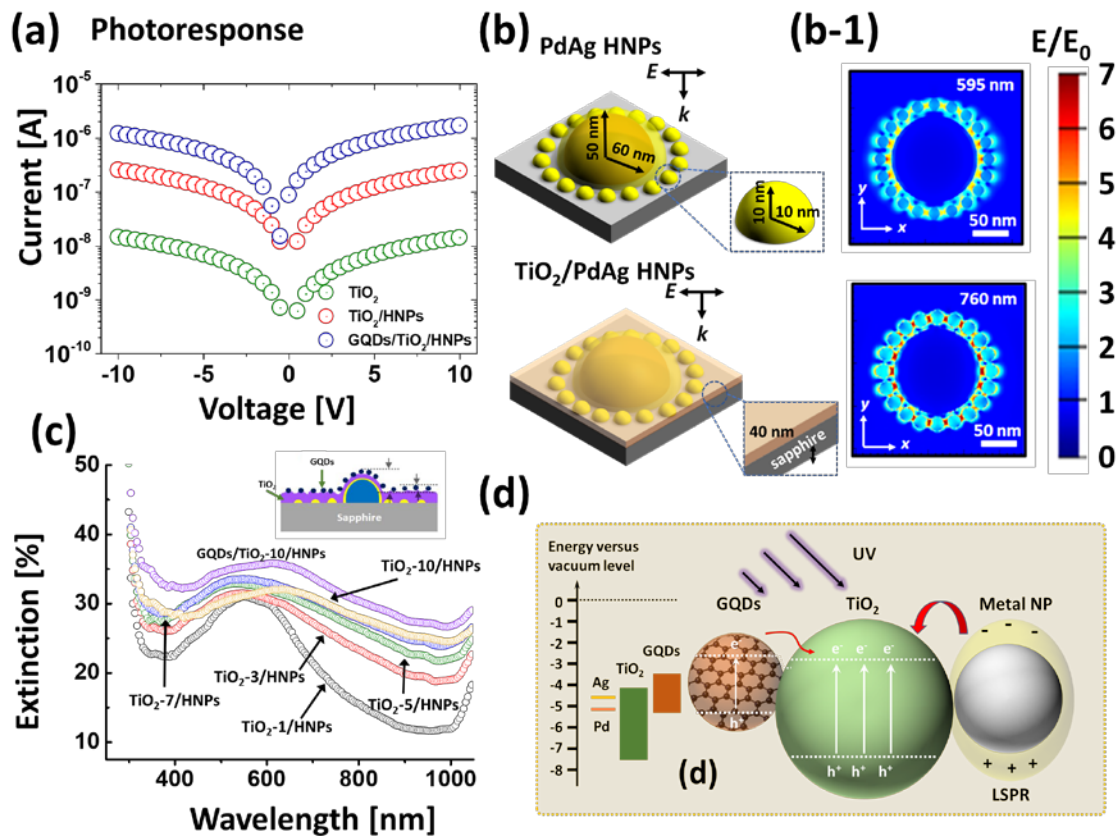


Figure 2: Photoresponse, finite difference time domain simulation, extinction spectra and working function diagram of TiO_2 , TiO_2 /hybrid PdAg, GQDs/ TiO_2 /hybrid PdAg photodetector. [6]

The hybrid GQDs/ TiO_2 /PtAg nanostructure exhibits the photoresponse from UV-visible-NIR as presented in this work [6]. Solution-processed TiO_2 film generated separated electron-hole pairs under the UV irradiation, which showed the thickness-dependent absorption efficiency. The existence of hybrid NPs provides additional photogenerated carriers resulting from the lower potential barrier. High-energy hot electrons induced by the coherent oscillation of hybrid PdAg metallic NPs can flow into the TiO_2 layer.[4] The injection that occurs in the GQDs alters the channel conductivity as the energy diagram displayed in Fig.2. Dipolar resonance mode depending upon the size, composition and surface configurations of the NPs and defects level play a key part in the longer wavelength detection.[5] The local e-field distribution of hybrid PdAg NPs and TiO_2 /PdAg NPs were theoretically estimated by the finite difference time domain (FDTD) simulations in Fig. 2(b). Finally, the photoresponse is related to the separation of the electron-hole pairs in the TiO_2 modulated by the various thickness, hot electrons generation through the LSPR and additional photon absorption by the GQDs.

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Author Contributions

Shusen Lin, Rutuja Mandavkar, Rakesh Kulkarni, Sanchaya Pandit, Sundar Kunwar, Ming-Yu Li and Jihoon Lee participated in the experiment design and carried out the experiments. Rutuja Mandavkar, Rakesh Kulkarni, Sanchaya Pandit, Sundar Kunwar, Ming-Yu Li participated in the characterizations and analysis of data. Sundar Kunwar, Ming-Yu Li and Jihoon Lee carried out the writing. All authors helped in drafting and read and approved the final manuscript.

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ON THE CONNECTIONS BETWEEN JACOBSTHAL NUMBERS AND PELL p -NUMBERS**Dr. Özgür ERDAĞ**

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ABSTRACT

Several authors have used homogeneous linear recurrence relations to deduce miscellaneous properties for a plethora of sequences. Many authors also defined some linear recurrence sequences and gave their various properties by matrix methods. In this paper, we define a new sequence called the Pell-Jacobsthal p -sequence by using the characteristic polynomials of the Pell- p and Jacobsthal sequences. Also, we obtain the generating matrix of the Pell-Jacobsthal p -sequence by the aid of the elements of the Jacobsthal, Pell p -sequence, and defined sequence. Then we provide a new Binet formula and a new combinatorial representation of the Pell-Jacobsthal p -numbers by the aid of the n th power of the generating matrix of the Pell-Jacobsthal p -sequence. In addition, we give the permanental and the determinantal representations of the Pell-Jacobsthal p -numbers. Finally, we derive the exponential representations and the sums of the Pell-Jacobsthal p -numbers by the aid of the generating function and the generating matrix of the Pell-Jacobsthal p -sequence.

Keywords: The Pell-Jacobsthal p -sequence, Matrix, Representation

THE FIBONACCI-PADOVAN p -SEQUENCES MODULO m **Prof. Dr. Ömür DEVECİ**

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ABSTRACT

Many authors have studied some special linear recurrence sequences in algebraic structures. Some of these proved that the lengths of the periods of the recurrence sequences obtained by the reducing sequences by a modulo m are equal to the lengths of the ordinary recurrences in cyclic groups. Again in this sense, many studies in the literature obtained the rules for the orders of the cyclic groups generated by reducing the generating matrix of the sequence according to modulo m . In this work, we consider the sequence called the Fibonacci-Padovan p -sequence $\{F_n^{Pa,p}\}$ and defined by the following homogeneous linear recurrence relation for any given $p(4,5,6,\dots)$ and $n \geq 0$

$$F_{n+p+4}^{Pa,p} = F_{n+p+3}^{Pa,p} + F_{n+p+2}^{Pa,p} - F_{n+p}^{Pa,p} + F_{n+3}^{Pa,p} - F_{n+1}^{Pa,p} - F_n^{Pa,p}$$

in which $F_0^{Pa,p} = \dots = F_{p+2}^{Pa,p} = 0$ and $F_{p+3}^{Pa,p} = 1$. We study the Fibonacci-Padovan p -sequence modulo m and the Fibonacci-Padovan p -matrix, which is the generating matrix of this sequence. Furthermore, we obtained the cyclic groups which are generated by the multiplicative orders of the Fibonacci-Padovan p -matrix when read modulo m . Finally, we derive the relationship between the order the cyclic groups obtained and the periods of the Fibonacci-Padovan p -sequence modulo m .

Keywords: The Fibonacci-Padovan p -sequence, Modulo, Group



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ABSTRACT

Several authors obtained the cyclic groups via some special matrices. Many studies proved that the lengths of the periods of the recurrence sequences obtained by the reducing sequences by a modulo m are equal to the lengths of the ordinary recurrences in cyclic groups and then, many studies in the literature obtained the rules for the orders of the cyclic groups generated by reducing the generating matrix of the sequence modulo m . In this work, we consider the Pell-Jacosthal p -sequence $\{P_n^{J,p}\}$ defined by the following homogeneous linear recurrence relation for any given $p(3, 4, 5, \dots)$ and $n \geq 0$

$$P_{n+p+3}^{J,p} = 3P_{n+p+2}^{J,p} - 4P_{n+p}^{J,p} + P_{n+2}^{J,p} - P_{n+1}^{J,p} - 2P_n^{J,p}$$

in which $P_0^{J,p} = \dots = P_{p+1}^{J,p} = 0$ and $P_{p+2}^{J,p} = 1$. In this sense, we examine the Pell-Jacosthal p -sequence modulo m . Also, we consider the generating matrix of the Jacosthal-Jacosthal p -sequence called the Pell-Jacosthal p -matrix. In addition, we produce the semigroups and cyclic groups which are generated by the multiplicative orders of the Pell-Jacosthal p -matrix when rad modulo m . Finally, we derive the relationship between the order the cyclic groups obtained and the periods of the Pell-Jacosthal p -sequence modulo m .

Keywords: The Pell-Jacosthal p -sequence, Modulo, Group



FEN EĞİTİMİNDE GENIUS HOUR
GENIUS HOUR IN SCIENCE EDUCATION

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ÖZET

Genius hour, öğrencilerin kendi ilgi alanlarını keşfetmelerini sağlayan ve sınıf ortamında yaratıcılığın gelişmesini teşvik eden bir harekettir. Genius hour' un kökleri uluslar arası teknoloji şirketlerinin çalışanlarının yaratıcılıklarını arttırmak amacıyla çalışma sürelerinin yüzde 20' lik kısımlarını kendi ilgi alanlarında çalışmalar yapmaları için özgür bırakmasına dayanmaktadır. Çalışanlar kendi ilgi alanları ve merak duydukları konularda çeşitli projeler geliştirmektedirler. Daha sonra A.J. Juliani tarafından sorgulamaya dayalı ve proje tabanlı öğrenme olarak sınıf ortamına adapte edilmiştir. Proje tabanlı öğrenmeden farklı olarak akademik kazançtan ziyade öğrencilerin kendi içsel dünyasını ve ilgi alanlarını keşfetmesi önemlidir. İlgi alanlarını keşfeden öğrenciler aynı zamanda kendi öğrenme stillerini de keşfetme imkânı bulmaktadırlar. Bilimsel anlamda düşünme ve proje hazırlama gibi becerin yanı sıra diğer bir çok becerinin gelişmesine katkı sağlamaktadır.

Süreç içerisinde öğrencilerin ne çalıştıklarını, nasıl çalıştıkları ve sonuç olarak ne ürettikleri veya neler oluşturdukları öğretmen tarafından kontrol edilmektedir. Rehber konumda olan öğretmenler, öğrencilerin kendi ilgi alanları çerçevesinde yapacakları çalışmalarda yaratıcılığın ve kendi kendine öğrenmenin gelişmesini teşvik ederler. Burada öğretmenlerin yapacakları yönlendirmeler ağırlıklı olarak öğrenci ilgi alanları, arka plan bilgilerine ve öğrenme merakları doğrultusunda gerçekleşmektedir.

Uygulama süreci incelendiğinde ise, öğretmenler haftada bir ders veya bir saat ayırmaları şeklinde gerçekleştirilmektedir. Diğer yandan ise, zamanın yüzde 80'inin geleneksel standartlara dayalı öğretim ve öğrenim yüzde 20'sinin öğrenci odaklı olduğu bir dağılım ile derslerini gerçekleştirmektedirler. Her iki uygulama biçiminde de öğrenciler ilgi ve merak duydukları alanlarda araştırma yapma fırsatı yakalamaktadırlar.

Fen eğitiminde öğrencilerin ilgilerini çeken konuların kendi öğrenme stillerine göre araştırarak öğrenmesi önemlidir. Özellikle ders içerisinde öğrencilerin zihinlerinde oluşan her bir sorular fen eğitimi derslerinin daha başarılı ilerlemesi adına bir Genius hour projesi olabilir. Örneğin bir güneş sistemi ve ötesi ünitesi düşünüldüğünde öğrencilerden farklı ilgi alanları oluşması ve farklı projelerin oluşması beklenebilir.

Anahtar Kelimeler: İlgi, Merak, Tutku



ABSTRACT

Genius hour is a movement that allows students to discover their interests and encourages creativity in the classroom environment. The roots of the genius hour are based on the fact that international technology companies leave 20 percent of their working time free to work in their areas of interest to increase the creativity of their employees.

Employees develop various projects in their areas of interest and interests. Later, it was adapted to the classroom environment by Juliani as inquiry-based and project-based learning. Unlike project-based learning, students need to discover their inner world and interests rather than academic gain. Students who discover their interests also have the opportunity to discover their learning styles. It contributes to the development of many other skills as well as the ability to think scientifically and prepare projects.

In the process, what students work, how they work, and what they produce or create as a result is controlled by the teacher. Teachers, who are in a guiding position, encourage the development of creativity and self-learning in the work that students will do within their interests. Here, the guidance of the teachers is mainly based on student interests, background information, and learning interests. When the implementation process is examined, teachers allocate one lesson or one hour per week.

On the other hand, they teach with a distribution where 80 percent of the time is based on traditional standards and 20 percent is student-focused. In both forms of practice, students have the opportunity to research areas of interest and curiosity. In science education, students must learn by researching the topics that are of interest to them according to their learning style. Especially, each of the questions that occur in the minds of the students during the lesson can be a Genius hour project to improve the science education lessons. For example, considering a solar system and beyond unit, students can be expected to develop different interests and different projects.

Keywords: Interest, Curiosity, Passion



KAVRAM KARİKATÜRLERİ VE KAVRAMSAL DEĞİŞİM METİNLERİNİN 6. SINIF ÖĞRENCİLERİNİN AKADEMİK BAŞARISINA VE KALICILIKLARINA ETKİSİ

THE EFFECT OF WEB AIDED CONCEPT CARTOONS AND CONCEPTUAL CHANGE TEXTS ON THE ACADEMIC SUCCESS AND PERMANENCE OF 6th GRADE STUDENTS

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ÖZET

Fen derslerinde öğrencilerin başarısını etkileyen birçok unsur mevcuttur. Öğretmenin mesleki bilgi ve becerisi, okulun fiziki imkânları, çocukların yetiştikleri ortamdaki sosyo-ekonomik koşullar, anne ve babalarının eğitim durumları, ülkelerin Milli Eğitim Bakanlığı'na aktardıkları bütçe miktarları, sınıf içerisinde kullanılan ve ana yazılı kaynak materyal olan müfredatın nitelikleri ve birçok faktör öğrenci başarılarını önemli ölçüde etkilemektedir (Deniş Çeliker, 2015).

Bu çalışmada 6. Sınıf “Bitki ve Hayvanlarda Üreme, Büyüme ve Gelişme” ünitesi konularına için geliştirilen kavram karikatürü ile kavramsal değişim metinlerinin öğrencilerin akademik başarısına olan etkisi araştırılmıştır. Çalışma 2015-2016 eğitim-öğretim yılında Ordu ilinde 30 deney ve 30 kontrol grubu öğrencisiyle yürütülmüştür (N=60). Yarı deneysel bir araştırma yöntemi olan “ön test- son test kontrol gruplu araştırma modeli çalışmada kullanılmıştır. Kontrol grubunda dersler çalışma yaprağı şeklinde hazırlanan kavram karikatürleri ile kavramsal değişim metinleri kullanılarak işlenmiş, deney grubunda ise web destekli kavram karikatürleri ile kavramsal değişim metinleri kullanılmıştır. Çalışmada veri toplama araçları olarak hazırlanan başarı testi deney ve kontrol grubuna ön test- son test olarak uygulanmıştır. Kalıcılık testi ise uygulamadan iki ay sonra yapılarak öğrencilerin kalıcılık puanlarına ilişkin veriler elde edilmiştir. Araştırmanın sonucunda deney ve kontrol grubunun başarı ön test puanları arasında anlamlı bir farklılık görülmemiş, başarı son test ortalama puanları arasında deney grubu lehine anlamlı bir farklılık görülmüştür. Kalıcılık yönünden son-test ve kalıcılık testi puanları açısından iki grup arasında anlamlı bir fark bulunmamıştır. Deney grubundaki



öğretim materyalinin, kontrol grubundaki öğretim materyalinden daha etkili olduğu görülmüştür.

Anahtar Kelimeler: Başarı, Kavram karikatürü, Kavramsal değişim metni, Kalıcılık

ABSTRACT

There are many factors that affect students' success in science classes. The professional knowledge and skills of the teacher, the physical facilities of the school, the socio-economic conditions in the environment in which children are raised, the educational status of their parents, the number of budgets transferred by the countries to the Ministry of National Education, the quality of the curriculum, which is the main written source material used in the classroom, and many factors significantly affect (Deniş Çeliker, 2015). In this study, the effect of concept cartoons and conceptual change texts developed for the 6th grade "Reproduction, Growth and Development in Plants and Animals" unit on the academic achievement, retention and cognitive load of the students were investigated. The pre-test and post-test control group research model, which is a quasi-experimental research method, was used in the study. In the study, achievement test, which was prepared as data collection tools, was applied to the experimental and control groups as pre-test and post-test. The retention test was conducted two months after the application and the data on the retention scores of the students were obtained. As a result of the study, no significant difference was found between the pretest scores of the experimental and control groups, and a significant difference was found between the post-achievement mean scores in favor of the experimental group. There was no significant difference between the two groups in terms of post-test and retention test scores. The teaching material in the experimental group was found to be more effective than the teaching material in the control group.

Keywords: Success, Retention, Concept Cartoons, Conceptual Texts, Permanence



**D-GALAKTOZAMİNİN NEDEN OLDUĞU BEYİN HASARINA KARŞI U
VİTAMİNİNİN ROLÜ**

**THE ROLE OF VITAMIN U AGAINST BRAIN DAMAGE INDUCED BY D-
GALACTOSAMINE**

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ÖZET

Hücrelerde fazla miktarda sentezlendiğinde toksik etkili olan galaktozamin (D-GalN), D-galaktozun önemli bir amino türevidir. D-GalN, karaciğere etki ederek hepatoselüler hücre hasarının artmasını ve inflamasyonu tetikler. Karaciğerdeki fonksiyon bozukluğu, diğer major organlarda hasara neden olabilir.

U vitamini (S-metil metiyonin sülfonyum klorür, U vit) esansiyel amino asit olan L-metiyoninin bir türevidir. U vitamininin gastrit, peptik ülser ve ülseratif kolit hastaları için sitoprotektif etkilere sahip olduğu hem *in vivo* hem de *in vitro* deneysel çalışmalarla kanıtlanmıştır. Gıda takviyesi olarak kullanıldığında kolesterol düşürücü etki gösterdiği bildirilmiştir. Buna ilave olarak, karaciğer, böbrek ve lens gibi bazı doku hasarlarında, ciltteki yaraların hızlı bir şekilde iyileşmesinde de etkili olduğu gösterilmiştir. Ayrıca anti-fibrotik, anti-inflamatuar ve antioksidan özelliğe de sahiptir.

Bu çalışmanın amacı, sıçanlarda D-GalN kaynaklı beyin hasarına karşı U vit 'nin potansiyel koruyucu özelliklerini bazı biyokimyasal parametreler kullanarak değerlendirmektir. Çalışmamızda, 6-6.5 aylık Sprague-Dawley cinsi dişi sıçanlar rastgele 4 gruba ayrıldı. I. Grup kontrol; II. Grup üç gün boyunca gavaj yolu ile 50 mg/kg/gün olacak şekilde U vit verilenler; III. Grup tek doz intraperitoneal olarak 500 mg/kg D-GalN enjekte edilenler; IV. Grup ise D-GalN verilmesinden 1 saat önce U vit verilen sıçanlar. 3. günün sonunda, D-GalN verilmesinden 6 saat sonra anestezi altında sıçanlar sakrifiye edildi. Beyin dokuları alındı ve homojenize edildi. Elde edilen sonuçlara göre, kontrol grubuna kıyasla D-GalN verilen sıçanlarda, lipid peroksidasyon, reaktif oksijen türleri, toplam oksidan durum seviyeleri ve



asetilkolinesteraz aktivitesinde istatistiksel olarak anlamlı bir yükselme tespit edildi. Öte yandan, D-GalN verilen sıçanların toplam antioksidan durum seviyelerinde dikkate değer bir azalma tespit edildi. Hasarlı gruba U vit verilmesi ile bu değişiklikler tersine döndü. Sonuç olarak, U vit'nin D-GalN uygulanan sıçanlarda nörotoksisiteye karşı tedavi edici etkiye sahip olduğu düşünülebilir.

Anahtar Kelimeler: U Vitamini, D-Galaktozamin, Beyin Hasarı, Oksidatif Stres

ABSTRACT

D-galactosamine (D-GalN), an important amino derivative of D-galactose, is highly toxic effect when excessively synthesized in cells. D-GalN triggers inflammation, and enhances hepatocellular damage. Therefore, liver dysfunction may result in the damage of other major organs. Vitamin U (S-methyl methionine sulfonium chloride, vit U) is a derivative of the essential amino acid L-methionine. It has been proven both *in vivo* and *in vitro* experimental studies to have cytoprotective effects in patients with gastritis, peptic ulcer, and ulcerative colitis. When used as a food supplement, vit U has been shown to exhibit cholesterol-lowering effect. Besides, it is effective against tissue damages of the liver, kidney, lens, and promotes rapid healing of skin wounds. Also, it has anti-fibrotic, anti-inflammatory, and antioxidant properties. The objective of the present study was to assess the protective properties of vit U against brain damage induced by D-GalN in rats by evaluating some biochemical parameters. Female Sprague-Dawley rats of 6.0-6.5 months, were randomly divided into four groups. Group I were control; Group II were given vit U (50 mg/kg/day) by gavage for three days. Group III were administered a single dose of GalN (500 mg/kg) intraperitoneally. Group IV were given vit U one hour prior to treatment with GalN. At the end of the third day, all the animals were sacrificed under anesthesia, 6 hours after GalN administration. Brain tissues were dissected out and then homogenized. When compared to the control group, a statistically significant increase in lipid peroxidation, reactive oxygen species, total oxidant state levels and acetylcholinesterase activity was observed in the D-GalN given rats. On the other hand, D-GalN-administered rats showed a notable decrease in total antioxidant status levels. These alterations were reversed when vit U was administered. In conclusion, it may be considered that vit U has therapeutic effects against D-GalN-induced neurotoxicity in rats.

Keywords: Vitamin U, D-Galactosamine, Brain Damage, Oxidative Stress



GENÇ ERKEK BASKETBOLCULARDA FONKSİYONEL SPOR EKİPMANLARI İLE YAPILAN KUVVET ANTRENMANLARININ PERFORMANSA ETKİSİ
THE EFFECT OF STRENGTH TRAINING WITH FUNCTIONAL SPORT EQUIPMENTS ON YOUNG MALE BASKETBALL PLAYERS' PERFORMANCE

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ÖZET

Bu çalışmanın amacı, fonksiyonel spor ekipmanları ile yapılan kuvvet antrenmanlarının performans üzerine etkilerini araştırmaktır. Çalışmaya Gaziantep'te çeşitli takımlarda basketbol oynayan 14-16 yaş grubu 32 erkek gönüllü olarak katılmıştır. Basketbol antrenmanına ek olarak, fonksiyonel spor ekipmanları ile kuvvet antrenmanı grubuna (FSEKAG) 10 hafta ve haftada 3 gün kuvvet antrenmanları uygulandı. Kontrol grubuna (KG) sadece basketbol antrenmanı yaptırıldı ve ekstra herhangi bir antrenman programı uygulanmadı. Gruplara dinamik denge ve wingate alt ekstremite ve üst ekstremite anaerobik performans testleri uygulandı. FSEKAG ön test, son testleri arasında genel denge, üst ekstremite anaerobik güç ve alt ekstremite anaerobik güç değerlerinin ortalamalarının son test lehine istatistiksel farklılık gösterdiği tespit edilmiştir ($p<0.05$). Üst ekstremite anaerobik güç grup*zaman etkileşimi istatistiksel olarak anlamlı bulunmuştur ($p<0.05$). Sonuç olarak basketbol antrenmanına ek olarak, fonksiyonel spor ekipmanları ile yapılan kuvvet antrenmanlarının anaerobik güç ve denge değerlerini pozitif yönde etkilediği söylenebilir.

Anahtar Kelimeler: Antrenman, Basketbol, Fonksiyonel, Kuvvet, Performans.

ABSTRACT

The purpose of this study is to investigate the effects of strength training with functional sport equipments on performance. 32 men, aged between 14-16, playing basketball in various teams in Gaziantep voluntarily participated in the study. In addition to basketball training, strength training was applied to the strength training group with functional sport equipments (FSEKAG) for 10 weeks and 3 days a week. The control group (CG) was only trained for basketball and no extra training program was applied. Dynamic balance, wingate lower extremity and upper extremity anaerobic performance tests were applied to the groups. It was determined that the mean values of general balance, upper extremity anaerobic power and lower extremity anaerobic power values between the FSEKAG pretest and posttests showed statistical difference in favor of the posttest ($p<0.05$). The group*time interaction of upper extremity



anaerobic power was meaningfully found as statistical ($p < 0.05$). As a result, it can be said that in addition to basketball training, strength training with functional sport equipments has positive effects in terms of anaerobic power and balance values.

Keywords: Training, Basketball, Functional, Strength, Performance.



SWARA VE GRİ İLİŞKİSEL ANALİZ YÖNTEMLERİ İLE KARGO FİRMASI SEÇİMİ

SELECTING A CARGO COMPANY WITH SWARA AND GRAY RELATIVE ANALYSIS METHODS

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ÖZET

Kargo taşımacılığı hizmetleri lojistik anlamda önemli faaliyetlerden biridir. Firmaların müşteriye karşı sundukları taşımacılık hizmeti farklılık göstermektedir. Bazen müşteriler bir ürünü kargoya verdikten sonra adrese ulaşamaması, teslim süresinde oluşan hasarlar, yanlış adrese teslim, kargolarını takip edememe, kargoya verdikleri ürünün kaybolması gibi birtakım sorunlar yaşayabilmektedir. Bu gibi karşılaşılan sorunlardan dolayı bireyler sıkıntı yaşamayacağı kargo firmaları ile çalışmak istemektedir. Bu yüzden müşteriler aldıkları hizmete karşılık kendilerinde oluşan olumlu ya da olumsuz düşüncelere göre firmaları yorumlamakta ve kargo firması seçimlerini bu yorumlara göre yapmaktadır.

Son zamanlarda içerisinde bulunmuş olduğumuz pandemi sürecinde bireylerin her türlü ihtiyaçlarını karşılamak için internet aracılığıyla e-ticaret sitelerini kullanarak alışverişlerini yapmasıyla birlikte kargo firmalarında bir yoğunluk oluşmuş ve işlemlerde aksamalar meydana gelmiştir. Birçok kargo firmasında kargonun zamanında teslim edilememesi, kargonun kaybolması, teslim edilmeden iade sürecine girmesi gibi sorunlar oluşmuştur. Bu kargo işlemlerinde yaşanan aksamalar sonucunda müşterilerde kargo firmalarına karşı bir ön yargı oluşmuştur. Literatüre bakıldığında Çok Kriterli Karar Verme (ÇKKV) yöntemleri ile kargo seçimi konulu çok sayıda araştırma yapılmadığı gözlemlenmiştir. Bunlara dayanarak kargo firması seçimlerinde gönderi ücreti, zamanında teslim, gönderi takip sistemleri, güvenilirlik gibi birçok faktörün incelenmesi gerekir. Açıklanan nedenlerden dolayı en iyi kargo firmasını seçerken Çok Kriterli Karar Verme Yöntemleri (ÇKKV)'nden yararlanılabilir. Yapacağımız çalışmada da ÇKKV yöntemlerinden olan SWARA yöntemi kullanılarak seçilen kriterlerin önem dereceleri belirlenmiş ve daha sonrasında da GİA (Gri İlişkisel Analiz) yöntemi kullanılarak en iyi kargo firması seçimi yapılmıştır.

Anahtar Kelimeler: Kargo Firmaları, SWARA Yöntemi, Gri İlişkisel Analiz”

ABSTRACT

Shipping freight services are one of the important activities in terms of logistics. The transportation services offered by the companies to the customers differ. On occasion, customers may experience some problems such as not being able to reach the address after shipping a product, damage during delivery, delivery to the wrong address, not being able to



track their cargo and the loss of the product they have given to the cargo. Due to such problems, individuals want to work with cargo companies where they will not have any problems. Consequently, customers make positive or negative comments according to the service they have previously received and make their cargo company choices according to these comments. During the pandemic we have been in recently, individuals use e-commerce sites via the internet to meet all their needs therefore there has been a density in cargo companies and there have been delays in transactions. Many cargo companies have experienced problems such as not delivering the cargo on time, losing the cargo, entering the return process without being delivered. As a result of the failures in these cargo transactions, there is a prejudice among customers against cargo companies. When the literature is examined, it has been observed that there are not many studies on multi-criteria decision making (MCDM) model and cargo selection. To this respect, selection of cargo companies many factors such as shipment fee, on-time delivery, shipment tracking systems, reliability should be examined. For these reasons, Multi Criteria Decision Making Methods (MCDM) can be used when choosing the best cargo company. In our study, the importance levels of the selected criteria were determined by using the SWARA method, one of the MCDM methods. In our study, the importance levels of the selected criteria were determined by using the SWARA method, one of the MCDM methods and afterwards, the best cargo company was selected by using the GRA (Grey Relational Analysis) method.

Keywords: Cargo Companies, SWARA Method, Grey Relational Analysis



TURNING WASTES TO WEALTH

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ABSTRACT

Converting wastes to energy and materials is affecting economic, environmental, and social issues to achieve sustainable development. Sustainability has been considered vital for both immediate and long-term benefits for people, the planet, and prosperity. Considering the huge waste dumping on the planet every year, the importance of more attention of researchers, policymakers, and citizens to this issue reveals.

Developing sustainable and green design and procedures for converting wastes to materials and energy need huge involvement of materials scientists and chemists. It involves completely oriented more sustainable synthesis and treatment methods as alternatives to conventional methods. Obtaining comprehensive data on the chemical and physical structure and properties of wastes is indispensable for evaluating their capability for specified application and also for finding proper treatment and potential application.

In this communication, the attempt has been made to provide a prospect of converting wastes to energy and materials for achieving sustainable development. Some selected researches in this field discussed to provide a better understanding for planning and tailoring best treatment and preparation methods for various wastes.

Keywords: Wastes; Energy; Resources; Materials Science; Sustainability



EXERGETIC ANALYSIS OF MICROCHANNEL WITH SINUSOIDAL CORRUGATIONS

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ABSTRACT

In electronics applications, the requirement for efficient cooling systems is increasing exponentially to achieve excellent performance. The microchannel heat sinks (MCHS) are used to dissipate heat from the electronic devices to the working fluid. The present numerical study focuses on the enhancement of the performance of microchannel heat sinks using corrugated channels. The total heat flow rate and total mass flow rate are kept constant for the study. Furthermore, this study also analyzes the exergy of smooth and sinusoidal microchannels to optimize the microchannel geometry. The effect of the inward start and outward start of the sinusoidal corrugation has also been assessed. The results show that the entropy generation due to heat transfer reduces with the reduction in channel diameter while frictional entropy generation enhances. The entropy generation for corrugated microchannels with inward start and outward start has been compared with the smooth microchannels.

Keywords: entropy generation; sinusoidal; corrugated microchannel.



ORTHOGONALITY IN BOOLEAN CUBE**Dr. Yavuz CAN**

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ABSTRACT

In this thesis, the result of the investigation regarding to the representation of orthogonality in Boolean Cube is given. To support an analysis of Boolean functions, some visualization tools can be used, such as K-map, Binary Decision Diagrams, Boolean Cube, etc. The property of the orthogonality of a Sum of Products is of enormous importance in some cases. This article answers the question by which form of representation an orthogonal SOP is characterized in a Boolean cube.

Keywords: Product Terms, Orthogonality, Sum of Products, Disjoint Sum of Products Orthogonality, Karnaugh Map, Boolean Cube

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**PHOTOVOLTAIC ELECTROOXIDATION FOR PHENOL REMOVAL AND
SIMULTANEOUS ENERGY HARVESTING VIA HYDROGEN PRODUCTION****Konstantinos Dermentzis**

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ABSTRACT

Various industrial activities, such as in petroleum, petrochemicals, pharmaceuticals, paper mill, plastics and food processing units, release recalcitrant phenol and phenolic derivatives to the environment.

In this work a photovoltaic driven electrochemical process is presented for treatment of aqueous phenol solutions using the electrochemical anodic oxidation process with the dimensionally stable boron doped diamond (BDD) electrodes. The photovoltaic module used was SUNPOWER (Maxeon Cell Technology) SPR-327NE-WHT-D made from monocrystalline silicon with a surface area of 1.63 m² and a peak power of 327 W. The experiments were conducted in International Hellenic University (latitude 40° 55', longitude 24° 22' and altitude 138 m above the sea level), situated in Kavala, Northern Greece.

The reduction of phenol concentration is followed by measurements of UV-Vis spectrophotometry and chemical oxygen demand (COD). Parameters affecting the efficiency of the electrooxidation process, such as solution pH, applied current density, initial phenol concentration, flow rate, conductivity, time of electroprocessing and solar irradiance are investigated.

Experimental results showed that the quality of the treated wastewater was very satisfactory. Both, the batch wise and the continuously operated electrooxidation processes at various controlled current densities, flow rates and solution conductivities led to efficient phenol removal of >90 %. The hydrogen yield based on COD removal amounted to 2.40 L H₂/g COD of the treated wastewater.

In recent years, a major concern is to obtain hydrogen and energy from waste and industrial effluents by using them as an energy source. The proposed electrochemical process powered by the abundant and environmentally friendly photovoltaic solar energy could be an effective approach for a double useful objective, namely environmental cleanup and energy harvesting especially in remote and isolated locations without connection to the public electric grid [1-3].

Keywords: electrooxidation hydrogen production, phenol, photovoltaic energy.

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**TESTING THE ENVIRONMENTAL KUZNETS CURVE HYPOTHESIS IN
CENTRAL EUROPEAN COUNTRIES: EMPIRICAL EVIDENCE FROM THE ARDL
BOUNDS TEST**

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ABSTRACT

The rapid economic growth observed in Central European countries in the last thirty years has been the result of profound political changes and economic liberalization. This growth is partly connected with reducing CO₂ emissions. However, the problem of CO₂ emissions seems to remain unresolved. The aim of this research is to test whether the Environmental Kuznets Curve hypothesis holds true for Central European countries in an annual sample data that covers 1995–2016 in most countries. We examine cointegration by applying an ARDL bound testing. This is the first research which examines the relationship between CO₂ emissions and economic growth in individual Central European countries from a long-run perspective, and which allows the results to be compared. We confirmed the cointegration, but our estimates confirmed the EKC hypothesis only in Poland. Our findings suggest that to solve the problem of environmental degradation in Central Europe, it is necessary to individualize the policies that are implemented in the European Union.

Keywords: Environmental Kuznets curve, ARDL bounds test, Central Europe



REDUCED BEAM SECTIONS WITH AND WITHOUT RIB

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ABSTRACT

Reduced beam sections were developed in order to mitigate the drawbacks of welded beam to column connections in the moment resisting frames. Brittle and sudden failures occurred at welded beam to column connections at 1994 Kobe and 1995 Northridge earthquakes. These failure leads to an interest of developing a beam to column connection which exhibits better seismic performance. Reduced beam sections are one of the beam to column connection which is obtained by trimming the flanges of the beam so that the plastic hinge occurs away from the welded region. In this study, rib members were introduced to reduced beam sections in order to further distract the damages away from the welded region. Pursuant to this goal, numerical analyses were performed using ABAQUS, finite element tool. Trimmed area, distance from column face to reduced section, presence of rib and the number of rib are selected as the variables of the parametric study. A total of 26 numerical models were developed and the models were exposed to cyclic loading mandated by AISC. The results were compared utilizing PEEQ and Rupture Index distributions. The results revealed that higher PEEQ and Rupture index values were observed at the models with rib and rib further eliminates the damage at between distance from column face to reduced section.

Keywords: Reduced Beam Sections, Cyclic Performance, Beam to column connections



**HEAVY METAL STATUS IN DRINKING WATER AND FARMLAND SOIL
WITHIN NIGERIA POLICE ACADEMY, WUDIL –KANO STATE****¹Sholadoye.Q.Oyeniya, ²Lawal Tajudeen Afolayan and ³Zakari Abdullahi**¹Chemistry Department, Nigeria Police Academy, Wudil-kano State, Nigeria²Biochemistry and Forensic Department, Nigeria Police Academy, Wudil-kano State, Nigeria³Department of Pure and Industrial Chemistry, Bayero University Kano, Nigeria**ABSTRACT**

Water and soil samples were collected in farmland areas of Nigeria Police Academy, Wudil – Kano State and analyzed for heavy metals (Cd, Fe, Cu, Pb and Zn) and some physical parameters (pH, Temperature, Conductivity and Turbidity) using standard methods and Atomic Absorption Spectroscopy (AAS). The pH results for water samples ranges from 6.6 ± 0.36 - 7.5 ± 0.32 , Temperature ranges from 23.5 ± 0.44 - $27\pm 1.16^{\circ}\text{C}$, Conductivity ranges from 63.47 ± 1.32 - $227.34\pm 3.31\mu\text{S/cm}$ and Turbidity ranges from 1.5 ± 0.22 - 3.0 ± 0.92 NTU. The results for all the physical parameters were within the limits of WHO limits. While the results for metals concentration in water samples ranges from 0.002 ± 0.001 - $0.022\pm 0.001\text{mg/L}$ for Cd, 1.30 ± 0.002 - $3.25\pm 0.001\text{mg/L}$ for Fe, 0.014 ± 0.002 - $2.088\pm 0.002\text{mg/L}$ for Cu, 0.006 ± 0.001 - $0.033\pm 0.001\text{mg/L}$ for Pb and 0.17 ± 0.001 - $3.34\pm 0.001\text{mg/L}$ for Zn. Most of these concentrations values were within WHO limits with exception in few samples i.e Sample A for Zn, Sample C for Fe and Samples D and E for Pb. The results for geochemical distribution of the metals in the soil revealed by sequential extractions show that 90% of the metals concentrations were found in the residual fraction. Also, the results for geo-accumulation index (I_{geo}) ranges from unpolluted to low pollution.

Keywords: Atomic Absorption Spectroscopy, Farmland, Geo-accumulation Index and Heavy metals



G-JITTER EFFECT ON CHAOTIC CONVECTIVE FLOW THROUGH AN ANISOTROPIC POROUS MEDIUM**R. Surendar^a, M. Muthamilselvan^{a,*}**^aDepartment of Mathematics, Bharathiar University, Coimbatore 641 046,
Tamil Nadu, India**ABSTRACT**

Using the Darcy-Brinkman model, the combined effect of gravity modulation and different parameters on the formation of thermal convection in a horizontal fluid layer and a fluid-saturated permeable anisotropic surface will be numerically explored. In accordance with the stabilization of convection with distinct parameters, a three-dimensional non-linear system derived from Galerkin's truncated transformation of conservation and fundamental equations are defined. It is based on the small frequency of amplification and the homotopy perturbation method is used to measure the significance level of the Rayleigh number. With both the effects of Darcy number and anisotropic parameters on the turbulent system, the conversion from steady convection due to the chaos is inspected, which means resisting the chaotic action. The system was evaluated for acceptable parametric values using the trajectory projections and time domain amplitude diagrammatic of the non-linear system. Consequently, we affirm that the system relies primarily on the parameter values for either a chaotic or a periodic solution.

Keywords: Anisotropic parameters; Perturbation method; Darcy Rayleigh number; Chaotic behaviour; Darcy - Brinkman model.



MICROPOLAR NANOFLUID FLOW OVER A STRETCHING SHEET UNDER THE EFFECTS OF THERMAL RADIATION AND MAGNETIC FIELD**Abid Hussanan**Department of Mathematics, Division of Science and Technology, University of Education,
Lahore, 54000, Pakistan**ABSTRACT**

Nanofluid is the most promising gift of modern science to improve the heat transfer capabilities of conventional heat transfer fluids. However, one of the most crucial drawbacks for classical nanofluid models is that they cannot describe a class of fluids that have certain microscopic characters arising from micro-rotation and local structure of the fluid elements. Therefore, the present study discusses the effect of such types of characteristics on heat transfer flow of nanofluids. Carbon nanotubes (CNTs) are one of the most valuable materials with very high thermal conductivity as compare to the other nanoparticles. Two types of CNTs are well known for the researchers, the single wall CNT (SWCNTs) and the multi wall CNTs (MWCNTs). Nanofluids containing CNTs are likely to be the future heat transfer media because of their significantly higher thermal conductivities. The objective of the present research is twofold. At the first stage, mathematical formulation will develop for nanofluids containing CNTs based on single-phase model with realistic physical boundary conditions. At the second stage of the research a series of CFD simulations will be carried out with the purpose to study nanofluids. To complete this task, we will use Runge Kutta Fehlberg fourth-fifth order (RKF45) method.

Keywords: Micropolar Nanofluids; Carbon Nanotubes; Convection flow.

**STABILITY ANALYSIS OF YIELD OF COMMON WHEAT (*Triticum aestivum L.*)
GENOTYPES**

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ABSTRACT

Wheat-derived foods are part of the base of the food pyramid, which are sources of fiber, vitamins, proteins and carbohydrates. In this work we pretend compare the amount of genotype-environment (GE) interaction described by using the additive main effects and multiplicative interaction (AMMI) model and the analysis of linear regression (LR) and compare the yield stability of common wheat (*Triticum aestivum L.*) genotypes. Fourteen genotypes were evaluated in different environments (combinations of location and year), based on the analysis of data obtained in field trials that took place in the period from 2015 and 2016, using a randomized complete block design with two replications.

Combined analysis of variance showed highly significant differences for the GE (genotype-environment) interaction indicating the possibility of selection for stable entries. The sum of squares (SS) of the regressions only explained 23.4% of the SS of the GE interaction, while the first component (CP 1) of the analysis of the main components explained 47.2%. The SS of CP1 was tree times higher than the SS of all combined regressions (joint, genotypic and environmental). The results of AMMI (additive main effect and multiplicative interaction) analysis indicated that the first four AMMI were highly significant ($P < 0.01$).

The yield stability index and new rank-sum indicated that the most stable genotypes with high production grain yield were 6, 9,13 and 10. Another conclusion of this study showed that sustainability index and stability index are not the most suitable stability indices for discriminating stable genotypes with high yield.

Keywords: AMMI model, Linear regression, *Triticum aestivum L.*, Yield stability index



ANALYSING THE COVID-19 SITUATION FROM EMPLOYEES' LENS: A CASE OF INDIA'S TOURISM SECTOR**Pinaz Tiwari**

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ABSTRACT

Purpose: The pre-existent economic slowdown along the recent global health issue created unprecedented chaos in the world. Declared as a pandemic by the World Health Organisation, COVID-19 or Coronavirus disease first emerged from Wuhan city in China. The government of several countries restricted travel movement within and across the countries. Amongst different sectors, tourism and hospitality observed a huge setback. Consequently, uncertainty among the stakeholders involved in the industry prevailed in the initial few months. As business zeroed down, people started facing financial, psychological, and social pressures. People working in the industry were at a greater risk of these challenges, and even reports by WTTC indicated a worse phase for the global tourism industry. However, the majority of the tourism studies didn't acknowledge the employees' perspective at large. Accordingly, this study aims to analyse the impact of COVID-19 on employees working in the tourism sector in India.

Research Objectives: The study focuses to analyse the impact of the pandemic on employees by analysing their working patterns, and steps undertaken by their employers.

Methodology: An instrumental semi-structured questionnaire was used, inclusive of both open and closed-ended questions. The data was collected from March 2020 to June 2020 through an online medium. Employees working in 43 different tourism organisations in India filled the questionnaire. Tests were conducted, and interpretive analysis was carried out.

Findings: The findings indicated that employees in the tourism sector were not affected severely in the initial phase of the pandemic. Moreover, the responses signified the positive psychological capital amongst the respondents as they felt that the sector will rebound soon. Due to timely intervention by the government, employees working in the tourism industry showed satisfaction with the response of their respective organisations. However, they look forward to financial support either from the tourism organisations or government during such a crisis.

Implication: In India, tourism organisations do not comply with labour laws in general. This study amplified the conceded situation of the employees working in the sector, and how COVID-19 brought the underlying loopholes to the limelight. The study will be useful for human resource managers, government, and industry professionals to understand the significance of strategic human resource planning amidst a crisis. It is also suggested that organisations should start planning, and strategizing new policies which could be implemented in a crisis.



Value: The research adds value to the existing literature on human resource management in the tourism industry during a crisis. In case of any crisis (man-made or natural), the tourism sector gets affected. However, there is a dearth of studies that discusses the employees' perspectives, and concerns they face.

Keywords: COVID-19, Human Resource Management, Tourism, Employees, Crisis management, Psychological capital.



**KENTSEL YAŞAM KALİTESİ BAĞLAMINDA GELENEKSEL DOKUNUN
DEĞERLENDİRİLMESİ**

EVALUATION OF TRADITIONAL TEXTURE IN THE CONTEXT OF URBAN LIFE
QUALITY

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ÖZET

Sanayi Devrimi ile kentlerde yaşanan nüfus artışı ile kapasitelerinin üzerine çıkan kentlerde altyapı, çevre, ulaşım, ekonomi, sağlık hizmetleri vb. sorunlar söz konusu olmuştur. Kentlerde yaşanan ve kentlinin yaşam koşullarını azaltan bu sorunlar “kentsel yaşam kalitesi” kavramını gündeme getirmiştir. Kentsel yaşam kalitesi kavramı, sadece kentte yaşamış olmak dışında yaşanan çevrenin eleştirilmesi, sorunların ele alınması, içinde bulunulan mekânın kalitesinin tartışılması gibi yeni kentsel konuları ortaya çıkarmıştır. Reklamalarının yapılması ve özellikle prestij kazanmak için birbiri ile yarışa giren kentler, kentsel yaşam kalitesinin önemine vurgu yaparak bu kavramın önemini artmasına neden olmuşlardır. Önemi artan kentsel yaşam kalitesinin ölçülmesi ise tartışma konusu olmuştur. Yaşam kalitesi değerlendirmelerine yönelik ölçek, erişilen verilerin durumu, kültürel değerler ve toplumsal algılar vb. birçok etkene bağlı çeşitli göstergeler ortaya konmuştur.

Özgün yapı özellikleri (uygun ölçek ve kullanıcı taleplerini karşılayan özellikler vb.), iklime ve mahremiyete uyumlu bina dizilimleri, açık alanları, peyzaj özellikleri, topografyaya uyumlu organik yol tasarımı, sosyal yaşam ve toplumsal bağlılık anlamında elverişli kentsel alanları ile geleneksel kent dokuları yaşam kalitesi yüksek kentlerde aranan göstergelerin birçoğuna sahip kentsel alanlardır. Geleneksel dokular sadece günümüz modern kentlerine kimlik kazandıran kentsel alanlar olmayıp, hem buldukları kente, hem de içerisinde yaşayan insanlara kentsel kalite olgusunu açıklamada yararlı olabilecek kentsel alanlardır. Bu saptamalardan hareketle çalışmada kentsel yaşam kalitesi ve geleneksel doku ilişkisi Bonaiuto (2003)’nin mahalle ölçeğinde kentsel yaşam kalitesi göstergelerinden yararlanılarak konut, ulaşım, yeşil alanlar, sosyal ilişkiler, ticari faaliyet ve çevresel sağlık başlıkları çerçevesinde kapsamlı bir literatür taraması ile değerlendirilmiştir. Konu ile ilgili literatür geleneksel dokunun kentsel yaşam kalitesini dikkate alan ve arttıran bir unsur olduğunu açıkça göstermektedir. Bu bağlamda kentsel yaşam kalitesi ve geleneksel doku arasındaki doğrusal ilişkiyi destekleyen örneklere yer verilmiş; günümüz kentlerinde yaşam kalitesini iyileştirmede benimsenecek stratejiler geliştirilmiştir.

Anahtar Kelimeler: Geleneksel doku, gösterge, kentsel yaşam kalitesi, yaşanabilirlik.



ABSTRACT

With the industrial revolution, the population growth in the cities has brought about some problems such as infrastructure, environment, transportation, economy, health services. These problems, which exist in cities and reduce the quality of living conditions of the citizens, have made the concept of "urban quality of life" a current issue. The concept of urban life quality has brought out new urban issues such as living only in the city, criticizing the environment we live in, dealing with problems, and discussing the quality of the place where we are. The cities competing with each other have led to an increase in the importance of this concept to advertise themselves and specially to establish a reputation by emphasizing the importance of urban life quality. In this sense, cities competing with each other have led to an increase in the importance of this concept to advertise themselves and specially to establish a reputation by emphasizing the importance of urban life quality. Various indicators have been put forward towards evaluations of life quality depending on many factors such as scale, status of accessed data, cultural values, social perceptions etc.

Features of unique building (features that meet user demands and suitable scale etc.), building sequences compatible with climate and privacy, open areas, landscape features, organic road design compatible with topography, convenient urban areas in terms of social life and social connectedness, and traditional urban textures are the urban areas which have the majority of indicators which are sought in high qualified cities. Traditional textures are not only urban areas that develop identity for today's modern cities, but also, they are urban areas that may be helpful in explaining the concept of urban quality to the people who live in that city and contribute to the quality of city. Based on these results, the relationship between urban life quality and traditional texture is examined within the frame of housing, transportation, green spaces, social relations, commercial activities and environmental health by taking into consideration urban life quality indicators by Bonaiuto (2003). The relevant literature obviously shows that the traditional texture is an element that increases and takes into consideration the quality of life. In this sense, examples supporting the linear relationship between urban life quality and traditional texture are included and strategies are developed to improve the quality of life for today's cities.

Keywords: Traditional texture, indicator, urban life quality, livability



**A NOTE ON BEST LINEAR UNBIASED ESTIMATORS IN MODELS WITH
ORTHOGONAL BLOCK STRUCTURE**

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ABSTRACT

A linear mixed model has orthogonal block structure, OBS, when the covariance matrices are the positive definite linear combinations of known pairwise orthogonal orthogonal projection matrices that add up to the identity matrix. Despite the good properties of the estimators for estimable vectors and variance components, we may be interested in achieving best linear unbiased estimators for estimable vectors, which can be obtained by considering a commutative orthogonal block structure, COBS. The specificity of this class of OBS lies in the commutativity between the orthogonal projection matrix, on the space spanned by the mean vector, and the pairwise orthogonal orthogonal projection matrices, belonging to the principal basis of the commutative Jordan algebra of symmetric matrices, associated to the model. This commutativity condition, that is a necessary and sufficient condition for least squares estimators to be best linear unbiased estimators, can be ensured resorting to U-matrices and using the fundamental partition of the observations vector, constituted by the sub-vectors corresponding to the different sets of the levels of the fixed effects factors.

Keywords: Best linear unbiased estimators, mixed models, models with orthogonal block structure, U-matrices.

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**NONLINEAR FRACTIONAL PARTIAL DIFFERENTIAL EQUATION AND IT'S
BOUNDEDNESS**

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ABSTRACT

In this paper, we study the boundedness and stability of a solutions for a class of nonlinear time-fractional differential equations with initial data by the help of fractional Duhamel principle. well known advantage of caputo derivatives with respect to the classical derivatives is its capability of taking into account the previous historical effects of model at each time step. This feature of fractional-order operators makes them more accurate and appropriate in modeling of the systems. An illustration how these are achieved and physical basis of fractional operators with different memory is presented in several research work recently.

Keywords: : Existence, Fractional order, differential equation, Duhamel principle.



**BİLECİK İLİ İNHİSAR İLÇESİNDE NAR (*PUNICA GRANATUM*) L.
YETİŞTİRİCİLİĞİNİN DURUMU**

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ÖZET

Nar çok eski zamanlardan beri tanınan bir meyvedir. Son yıllarda yetiştirme tekniği, depolama, taşıma ve sağlığa faydaları konusunda yapılan çalışmalarla birlikte nar meyvesi tüketimi ve ticareti artan bir meyve durumuna gelmiştir. Türkiye'de 2020 istatistiklerine göre 600.021 ton nar üretimi 59 ilde gerçekleştirilmiştir. Bilecik, Marmara, Ege, İç Anadolu ve Karadeniz bölgelerinin kesişim noktaları arasında Marmara Bölgesi'nin güneydoğusunda bulunmaktadır. Bilecik ili coğrafyasında değişen yükselti farklılıkları ve bunların yarattığı ekosistemler sayesinde bitki çeşitliliği yönünden zengindir. Bilecik ili inhisar ilçesi ise mikro klima özelliği, verimli toprak yapısı, suyu, iklimi ve birbirinden farklı özellik gösteren pek çok nar tipinin bulunması ile nar yetiştirme açısından oldukça elverişli bir ortama sahiptir. Burada yılda ortalama 20 ton nar üretilmektedir. İnhisar'da ekşi ve tatlı olmak üzere iki nar çeşidinin yetiştirildiği, Tatlı devediş narın ön planda olduğu bilinmektedir. Bu çalışmanın amacı ise Bilecik ili İnhisar ilçesinde mevcut potansiyelin değerlendirilmesi için nar üretim alanı, üretim miktarı, verim ve pazarlama konuları araştırılmasıdır.

Anahtar Kelimeler: çözüm önerisi, nar, problem, üretim

ABSTRACT

Pomegranate is a fruit that has been known since ancient times. In recent years, pomegranate fruit consumption and trade have become an increasing fruit with studies on cultivation technique, storage, transportation and health benefits. According to 2020 statistics Turkey, 600 021 tons of pomegranate production was carried out in 59 provinces. Bilecik is located in the southeast of the Marmara Region between the intersections of the Marmara, Aegean, Central Anatolia and Black Sea regions. Bilecik province is rich in plant diversity thanks to the changing altitude differences in its geography and the ecosystems created by them. Bilecik province İnhisar district has a very suitable environment for growing pomegranate with its microclimate feature, fertile soil structure, water, climate and many types of pomegranate with different characteristics. Here, an average of 20 tons of pomegranate is produced annually. It is known that two types of pomegranate, sour and sweet, are grown in İnhisar, and sweet 'Devediş' pomegranate is at the forefront. The aim of this study is to



investigate pomegranate production area, production amount, yield and marketing issues in order to evaluate the existing potential in Bilecik province, Inhisar district.

Key words: Pomegranate, problems, production, solutions



**ÇOCUKLARDA COVID-19 İLE İLİŞKİLİ ÇOKLU SİSTEMİK İNFLAMATUVAR
SENDROM ve HEMŞİRELİK YÖNETİMİ**

MULTIPLE SYSTEM INFLAMMATORY SYNDROME AND NURSING
MANAGEMENT RELATED TO COVID-19 IN CHILDREN

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ÖZET

İnsandan insana damlacık yoluyla bulaşan SARS-CoV2, çok kısa bir sürede toplumlar ve sağlık sistemleri için ciddi şekilde tehdit oluşturmuş ve virüsün sebep olduğu COVID-19, 11 Mart 2020 tarihinde Dünya Sağlık Örgütü tarafından pandemi olarak ilan edilmiştir. Erişkinlerde daha yaygın gözlenen ve daha ağır seyreden SARS-CoV2 ile ilgili ilk raporlar ve yayınlar daha çok erişkin odaklıdır. Mevcut veriler tüm SARS-CoV-2 vakalarının %2,1 ila %8,4'ünü pediatrik vakaların oluşturduğunu göstermektedir. Yetişkinlerin aksine, enfekte çocukların büyük kısmının asemptomatik olduğu veya hafif semptomlar gösterdiği bildirilmektedir. Nisan 2020'de İngiltere'den COVID-19 ile ilişkili, Kawasaki hastalığı veya toksik şok sendromu benzeri klinik ile hastaneye başvuran çocuk hastaların bildirilmesiyle SARS-CoV2'nin çocuklara daha az zarar verdiği inancı değişmeye başlamıştır. Mayıs ayından itibaren dünyanın çeşitli bölgelerinden yeni olgular rapor edilmiş ve Dünya Sağlık Örgütü bu olguları Pediatrik Multisistemik İnflamatuvar Sendrom (MIS-C) olarak tanımlamıştır. Çocuklarda tipik olarak COVID-19 enfeksiyonundan 2-4 hafta sonra yüksek ateş, gastrointestinal semptomlar (karın ağrısı, ishal, bulantı), döküntü ve artmış inflamasyonla ilişkili laboratuvar bulguları ortaya çıkmaktadır. MIS-C belirtileri/semptomları gösteren çocukların çoğu hızla şok ve kardiyorespiratuar yetmezliğe doğru ilerler. Nadir görülmesine rağmen, hastalığın şiddetli geçirilmesi, çocukların yüksek oranda yoğun bakıma tedavisine ihtiyaç göstermesi ve mortalite riski nedeniyle önemli bir endişe kaynağıdır. MIS-C tedavisine ilişkin standart bir klinik uygulama kılavuzu bulunmamakla birlikte, çeşitli çalışmalar mevcut yönetim ve tedavi planlarının olumlu sonuçlar verdiğini bildirmektedir. Yeni tanımlanan bir sendrom olması nedeniyle tanısal yönetimi, tedavi ve hemşirelik bakımı için güvenilir ve kanıta dayalı bilgiye ihtiyaç vardır. Mevcut literatür incelendiğinde tanı ve tedaviye yönelik çeşitli çalışmalar olmakla birlikte hemşirelik yönetimine yönelik çalışmaya rastlanamamıştır. Klinik ve yoğun bakımda tedavi ve bakımı gerçekleştirilen MIS-C hastalarının iyileşme sürecinde nitelikli bir hemşirelik bakımının önemli bir yeri bulunmaktadır. Bu sunumda, farklı klinik tablolar ile kendini gösterebilen Çoklu Sistemik İnflamatuvar Sendromlu çocukların hemşirelik yönetimine dikkat çekmek amaçlanmıştır.

Anahtar Kelimeler: Çocuklar, Hemşirelik bakımı, Multisistem İnflamatuvar Sendrom



ABSTRACT

SARS-CoV2, which is transmitted from person to person by droplet, has become a threat for societies and health systems in a very short time and COVID-19 caused by the virus was declared as a pandemic by the World Health Organization on March 11, 2020. Initial reports and publications on SARS-CoV2, which is more common in adults and has a more severe course, are mostly adult-focused. Available data suggest that pediatric cases composed 2.1% to 8.4% of all SARS-CoV2 cases. It has been reported that most infected children are asymptomatic or exhibit mild symptoms unlike adults. In April 2020, the belief that SARS-CoV2 harms children less has started to change with the reporting of pediatric patients admitted to the hospital from the UK with a clinic related to COVID-19, Kawasaki disease or toxic shock syndrome. New cases have been reported from various parts of the world since May and the World Health Organization has defined these cases as Pediatric Multi-system Inflammatory Syndrome (MIS-C). Laboratory findings associated with high fever, gastrointestinal symptoms (abdominal pain, diarrhea, and nausea), rash and increased inflammation typically occur in children 2--4 weeks after COVID-19 infection. Most of the children showing signs/symptoms of MIS-C rapidly progress to shock and cardiorespiratory failure. It is a major concern due to the severe course of the disease, the high rate of intensive care in children and the risk of mortality even though it is seen rarely. Although there is no standard clinical practice guideline for the treatment of MIS-C, several studies report that current management and treatment plans provide positive results. Reliable and evidence-based information is needed for its diagnostic management, treatment and nursing care as it is a newly described syndrome. When the current literature is examined, no studies on nursing management have been found although there are various studies on diagnosis and treatment. A qualified nursing care has an important role in the recovery process of MIS-C patients treated and cared for in clinical and intensive care. In this presentation, it has been aimed to draw attention to the nursing management of children with Multiple System Inflammatory Syndrome, which can present itself with different clinical tables.

Keywords: Children, Nursing Care, Multiple System Inflammatory Syndromes



EMOTIONAL INTELLIGENCE AS A PREDICTOR OF OCCUPATIONAL ABILITY

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ABSTRACT

In current era, emotional intelligence has been one of the most influential aspect of occupational success. Emotional intelligence is an ability of a person to use his/her emotional intellectually. As a assessment method of occupational ability, emotional intelligence is considered an important ability due to its noteworthy impact/influence on many significant aspect of occupational development including employee development, productivity and strong leadership skills. Rationale behind this section is to examine empirical evidence about the role of emotional intelligence in occupational ability among employees. Two empirical research studies having independent samples were included in this review. Studies were selected according to the inclusion and exclusion criteria. Author highlighted some methodological flaw in the studies. each and every part of the research studies included in the review was critically analyzed. Author indentified some gaps in existing research on emotional intelligence and occupational ability which could be taken into considerations by future researchers.



KAVRAM KARİKATÜRLERİ VE KAVRAMSAL DEĞİŞİM METİNLERİNİN 6. SINIF ÖĞRENCİLERİNİN BİLİŞSEL YÜKLERİNE ETKİSİ

THE EFFECT OF WEB AIDED CONCEPT CARTOONS AND CONCEPTUAL CHANGE TEXTS ON THE COGNITIVE LOAD OF 6th GRADE STUDENTS

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ÖZET

Öğrencilerin kavram öğrenimi sırasında kavram veya kavramların öğrenimi çeşitli değişkenler ile de incelenmektedir. İncelenen değişkenlerden biriside bilişsel yük dür. Bilişsel yük “belli bir zaman diliminde çalışan bellek tarafından kullanılan kaynaklar” şeklinde tanımlanmaktadır (Kılıç, 2007). Bu bilişsel yük kuramı sınırlı bilgi işleme kapasitesinin arttırılmasını sağlayan etkin öğretim yöntemlerini geliştirmeyi amaçlamaktadır (Pass ve ark., 2003). Bilişsel yükün farklı çeşitleri vardır. Bunlar dışsal bilişsel yük, içsel bilişsel yük ve etkili bilişsel yüküdür. Öğrenme karmaşık bir süreçtir. Birey istese de istemese de sürekli yeni bilgiler öğrenmektedir. Bireyin zihindeki bu karmaşık bilgiler içsel bilişsel yükü oluşturmaktadır. Öğrenme ortamının iyi olmaması, öğrenme materyallerinin iyi tasarlanmaması gibi etkenler de dışsal bilişsel yükü oluşturmaktadır. Etkili bilişsel yük ise zihindeki bu olayların şema halinde oturması, düzenlenmesidir. Bilişsel yük ile ilgili yapılan çalışmalarda fazla bilişsel yüklenmenin başarıyı olumsuz etkilediği görülmektedir (Kılıç, 2007). Bunun için uygun öğretim yöntemleri, öğretim materyalleriyle öğrenme işleminin kolaylaştırılması gerekmektedir

Bu çalışmada 6. Sınıf “Bitki ve Hayvanlarda Üreme, Büyüme ve Gelişme” ünitesi konularına için geliştirilen kavram karikatürü ile kavramsal değişim metinlerinin öğrencilerin akademik başarısına olan etkisi araştırılmıştır. Çalışma 2015-2016 eğitim-öğretim yılında Ordu ilinde 30 deney ve 30 kontrol grubu öğrencisiyle yürütülmüştür (N=60). Yarı deneysel bir araştırma yöntemi olan “ön test- son test kontrol gruplu araştırma modeli çalışmada kullanılmıştır. Kontrol grubunda dersler çalışma yaprağı şeklinde hazırlanan kavram karikatürleri ile kavramsal değişim metinleri kullanılarak işlenmiş, deney grubunda ise web destekli kavram karikatürleri ile kavramsal değişim metinleri kullanılmıştır. Çalışmada veri toplama aracı olarak, bilişsel yük ölçeği deneysel süreç sonrasında öğrencilere uygulanmıştır. edilmiştir. Araştırmadaki veriler SPSS 21 ile analiz edilmiştir. Araştırmanın sonucunda Deney grubundaki



web destekli öğretim materyalleri öğrencilerdeki bilişsel yükü düşürüp öğretim verimliliği düzeyini arttırmıştır.

Anahtar Kelimeler: Bilişsel Yük , Kavram karikatürü, Kavramsal değişim metni

ABSTRACT

During the concept learning of students, the learning of the concept or concepts is also examined with various variables. One of the variables examined is cognitive load (Kılıç, 2007). This cognitive load theory aims to develop effective teaching methods that provide limited information processing capacity (Pass ve ark., 2003). There are different types of cognitive load. These are external cognitive load, internal cognitive load and effective cognitive load.

Learning is a complex process. Whether the individual wants it or not, she constantly learns new information. This complex information in the mind of the individual constitutes the inner cognitive load. Factors such as poor learning environment and good design of learning materials also create external cognitive load. Effective cognitive load is that these events in the mind sit and be arranged in a scheme. In studies on cognitive load, it seems that excessive cognitive load negatively affects success (Kılıç, 2007). For this, it is necessary to facilitate learning tasks with appropriate teaching methods and teaching materials.

In this study, the effect of concept cartoons and conceptual change texts developed for the 6th grade “Reproduction, Growth and Development in Plants and Animals” unit on the academic achievement, retention and cognitive load of the students were investigated. The pre-test and post-test control group research model, which is a quasi-experimental research method, was used in the study. In the study, The cognitive load scale was applied to the students after the after the experimental process As a result of the study, Web-based teaching materials in the experimental group decreased the cognitive load in the students and increased the level of teaching efficiency.

Keywords: Cognitive load , Concepts Cartoons, Conceptual change texts



**OIL PRICE, OIL REVENUE, NON-OIL REVENUE AND GOVERNMENT
SPENDING IN NIGERIA: A SVAR ANALYSIS OF REVENUE AND EXPENDITURE
RELATIONSHIP**

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ABSTRACT

The present paper examines the dynamic relationship among oil price, oil revenue, non-oil revenue and government expenditure between the periods of 1981 to 2017. This is an attempt to further confirm the revenue and expenditure relationship in Nigeria as an oil-revenue dependent economy. The structural model of SVAR will be adopted to account for the exogeneity of the global oil price to the Nigeria's economy. The Johansen cointegration test will also be done to confirm the oil price exogeneity and to show long run relationship among the variables. The finding of the study will reveal the existence of both revenue-spend hypothesis and spend-tax hypothesis in Nigeria. Finally, this study will suggest that more spending and diversification efforts should be directed towards generation of non-oil revenue for economic sustainability of the country.



SPATIAL ECONOMETRICS ANALYSIS WITH APPLICATION OF PHILLIP'S CURVE ON NIGERIAN ECONOMY**¹Okoro-Ugochukwu, N. A., ^{1,2,3} Adenomon, M. O**¹Department of Statistics, Nasarawa State University, Keffi, Nigeria & NSUK-LISA Stat Lab, Nasarawa State University, Keffi, Nigeria²Chair, International Association of Statistical Computing (IASC) African Members Group³Foundation of Laboratory for Econometrics and Applied Statistics of Nigeria (FOUND-LEAS-IN-NIGERIA)**ABSTRACT**

in recent times, spatial econometrics application is given reasonable attention as it deals with data of spatial type either in cross-sectional or panel form. This study examined application of Phillip's Curve on the Nigerian Economy using 2018 crosssectional data of consumer price index (CPI) as inflation rate and unemployment rate data souced from the National Bureau of Statistics (NBS), Nigeria. The phillip's curve states that inflation and unemployment rates have a stabe and inverse relationship. Results from the Ordinary Least Squares (OLS) confirmed a negative relationship between inflation and unemployment in Nigetia though not significant while autocorrelation is present in the estimated model at 10% level of significance. The Moran I statistic for spatial autocorrelation test is only significant at 10% while the Monte-Carlo simulation of Moran I statistic at 10,000 simulation revealed the presence of spatial autocorrelation at 1% level of significant. The following spatial models namely: Spatial Lag Model (SLM), Spatial Error Model (SEM) and Spatial Autoregressive with autoregressive error structure (SARAR) were applied in this study. The result from the spatial lag model shows a unit increase in unemployment leads to a decrease of 0.0011 of inflation rate in Nigeria. Lastly, a unit increase of unemployment in one state of Nigeria produces a total impacts of reduction of 0.0014 in inflation rate. The findings support Phillip's Curve but the relationship is not significant in the case of the Nigerian Economy.

Keywords: Phillip's Curve, Cross-sectional, Inflation, Unemployment, OLS, SLM, SEM, SARAR, Models



**OPTIMIZATION OF CUTTING PARAMETERS IN THE MACHINING PROCESS
OF INCONEL 718 USING THE SIGNAL-TO-NOISE RATIO BASED TAGUCHI
GREY RELATIONAL ANALYSIS**

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ABSTRACT

Inconel 718 is a precipitation hardenable nickel-based alloy that can withstand severe mechanical stresses and strains while remaining corrosion and creep resistant. It displays high tensile and creep-rupture properties at temperatures up to 704°C along with no spontaneous hardening during heating and cooling. These properties lead it to be highly desired for the manufacturing of aircraft, rocket and submarine engine components. Unfortunately, all these super-alloy inherent characteristics that leads it to be the ideal choice in harsh environments likewise makes it extremely difficult to machine.

The present study focuses on experimental investigation and effective approach to optimize the turning characteristics of the Inconel 718 through multiple response outputs represented by the cutting force (F_z), the surface roughness (R_a) and the material removal rate (MRR). The gray relational analysis (GRA) method was applied and Taguchi's signal-to-noise ratio (S/N) was employed to obtain the best combination using the larger-the-better approaches for multi-optimization. Machining was performed with a ceramic composite cutting tool (CC670) and the tests carried out according to the Taguchi design (L_{18}). The objective was to identify the best combination of the cutting parameters represented by the cutting speed (V_c), the feed rate (f), the depth of cut (ap) and the insert radius (r) for the simultaneous minimization of both (F_z) and (R_a) and maximization of (MRR).



The results achieved identify the set of optimal parameters represented by ($V_c=200\text{m/min}$, $f=0.16\text{ mm/rev}$, $ap=0.1\text{mm}$ and $r=1.6\text{mm}$) that produce the desirable output parameters illustrated by ($F_z=123.9747\text{N}$, $Ra=0.966\mu\text{m}$ and $MRR=3.2\text{cm}^3/\text{min}$).

Keywords: Multi-Response Optimization, Grey Relational Analysis, Nickel Base Super-alloy, Cutting Parameters, Machinability



**TRIVALENT LOGIC IN DECISION-MAKING FUNCTIONS BY NONLINEAR
OPTICAL METHODS**

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ABSTRACT

Mathematical operations described by multivalent logic correspond to an attractive field of research regarding the possibility to design ultrafast and low-dimensional applications. Trivalent gate systems provide outstanding power advantages in data path logic circuits regarding their potential to adjust parameters without complete definition in decision-making processes.

The possibility of future applications related to quantum computing by multivalent devices can represent an alternative for implementing artificial neural networks or encrypting functions controlled by dynamic physical or chemical properties.

In this direction, we experimentally analyzed third-order nonlinear optical phenomena and probabilistic effects based on the optical monitoring of concentration gradient associated with nanoparticles in precipitation. A probabilistic bit simulation was carried out by the assistance of fuzzy set theory.

This work has been devoted to further investigating probabilistic gate functions based on nonlinear sensors. We highlight immediate applications of trivalent logic gate systems for identifying information acquired by nonlinear instrumentation methods.

Keywords: Nonlinear optics, Fuzzy logic, Probabilistic logic, Topological isolators, Sensors



GDP OR GNH (GENERAL NATIONAL HAPPINESS)

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ABSTRACT

The main objective of this paper is to estimate through research the GNH (General National Happiness) model used in Bhutan and whether this model is workable under Slovak conditions. The article contains 2 sections and additional sub-sections. In the first part which is the theoretical part, we can get acquainted with GDP and its shortcomings, among other things related to GDP and GNH. In the further subchapters of the theoretical part, we deal with one of the defining parts of the thesis, happiness, and with the results of research that has examined the happiness and well-being of people in Slovakia.

The main goal of our practical section is to develop the possibility of a model that works in the Slovak cultural and economic conditions through the examination of the GNH model. To achieve this goal, we have conducted a questionnaire survey and then used the business GNH method to calculate worker happiness and the organizational conditions for happiness, followed by GNH in Slovakia.

The closing chapter summarises the conclusions, so with the help of our experience gained during the research, we determine what modifications the model could be used under domestic conditions.

Key words: GDP, GNH, happiness, welfare, business, employee, organisation



**E-TASK APPLICATION BASED ON PROBLEM BASED LEARNING IN DATA
BASED DESIGN COURSES IN COLLEGE EDUCATION****Sri Restu Ningsih**

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ABSTRACT

At this time, there are still many universities that use the Teacher Centered Learning (TCL) method in their learning process. This makes students less creative and independent in the learning process and in making assignments given by the lecturer. This study aims to develop a learning media based on Problem Based Learning (PBL), using an E-Task application to improve innovative and creative behavior in students in the Database Design course. E-Task is an electronic assignment whose application is a medium or aids for lecturers and students for the teaching-learning process which focuses on making student group assignments using the PBL method. Students can carry out group discussions in this application to work on group assignments given by the lecturer, as well as independent assignments can be done using this application. This research uses the basic concept of system development, namely the System Development Life Cycle (SDLC) with the Waterfall model which is described by the Unified Modeling Language (UML) system design tool. With the E-Task application in the Database Design course, it can increase student innovation, creativity and activity in the learning process, and lecturers can process student grades more quickly and practically with a computerized system.

Keywords: E-Task, Problem Based Learning, Waterfall, Database Design



**EXCHANGE RATE AND BALANCE OF PAYMENT IN NIGERIA (1986-2017). AN
AUTO REGRESSIVE DISTRIBUTIVE LAG (ARDL) APPROACH**

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ABSTRACT

Nigeria has witnessed several exchange rate policies and regimes; however, these policies had not led to the achievement of a favourable balance of payment position in the country. This study examined the effect of exchange rate on balance of payment in Nigeria from 1986-2017. Ex-post facto research design was adopted for this study. The study employs the use of secondary data which was sourced from CBN bulletin. The variables use to establish these effects are Exchange rate (EXR), interest rate (INTR) and Money supply (MS) were use as independent variables showing its effect on the dependent variable balance of payment (BOP). The auto regressive distributive lag (ARDL) econometric technique and granger causality test was used to achieve the objectives of the study. The result shows that there is a negative and significant relationship between EXR and BOP in long run and positive and insignificant relationship between EXR and BOP in short run in Nigeria under the period of studies. It also revealed that that there is unidirectional causality among the variables. EXR cause change in BOP, but BOP does not cause change in EXR. Therefore, it was recommended that Foreign Exchange policy measures should be put in place to check the pressures of foreign exchange and act when there is need for devaluation of Naira. Government should harmonize monetary and fiscal policies to boost non-oil exports and also pay more attention to other sectors of the economy most especially now oil price is drastically fluctuating among other recommendations was made.

Keywords: ARDL, balance of payment, exchange rate, causality test, interest rate.



THE ROLE OF WEBSITE PERSONALIZATION IN CREATING URGE TO BUY IMPULSIVELY: A CONCEPTUAL FRAMEWORK

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ABSTRACT

Online retailers are using technology to attract, engage and induce consumers to purchase impulsively. Personalization is instrumental in two ways – First to understand the uniqueness of need of the individual consumer and second to tailor offerings to meet the need. There are personalization techniques on the place in case of brick and mortar stores, where seller get to know the need and offer the suitable product or service. In the case of e-commerce, technology can play important role in customizing the web content, design, interface and overall atmospherics as per the preferences of each customers. There are studies based on personalization of mobile applications and social commerce. There are very few studies available on the role of personalization in web context that creates urge to buy impulsively and lead to online impulse buying. The current study will focus to understand the antecedents of website personalization that creates urge to buy impulsively. A conceptual framework and model of the relationship between website personalization and urge to buy impulsively. The study will contribute in the understanding of the website related factors and will help the marketers to adapt suitable strategies for better personalization, engagement and impulse purchase. Both theoretical and practical implications are discussed for academician and practitioners.

Keywords: Website quality, Web-personalization, online impulse buying, impulse purchase intention.



**OPTIMIZATION OF CUTTING PARAMETERS DURING THE MACHINING OF
POLYAMIDE (PA66-GF30%) USING THE DESIRABILITY FUNCTION
APPROACH (DFA)**

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ABSTRACT

Thermoplastic polymers are widely used in several domains of engineering because of their good properties. The processing of engineering polymers has been the subject of a lot of research work. In this work, a modeling and optimization study of the cutting conditions (V_c , f and a_p) on performance parameters such as; surface roughness (R_a), tangential force (F_z) and material removal rate (MRR) was performed. The machining tests were performed during dry turning of 30% glass fiber reinforced polyamide (GFRP) using a metal carbide cutting tool based on Taguchi (3^3) orthogonal plane (L_9). The response surface methodology (RSM) and analysis of variance (ANOVA) were used to propose mathematical models for predicting the output parameters. The models found were exploited in order to perform a multi-objective optimization based on the desirability function approach (DFA) which aims to minimize (R_a , F_z) and maximize the (MRR). The results revealed that the most significant factor affecting the surface roughness (R_a) is the feed rate (f) with a contribution (55.09%), while the cutting force (F_z) is affected by the depth of cut (a_p) with a contribution (73.18%). Finally, the optimal cutting conditions found by the (DFA) are: $V_c = 206$ (m/min), $f = 0.080$ (mm/rev) and $a_p = 1.468$ (mm) with a desirability of 0.828.

Keywords: GFRP, modeling, ANOVA, turning, metal carbide, optimization, RSM.



EFFECT OF DIFFERENT TYPES OF FILLER LOADINGS (GLASS/POLYESTER WASTE, OLIVE NUTS AND SAWDUST) ON THE MECHANICAL PROPERTIES OF UNSATURATED POLYESTER RESIN

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ABSTRACT

The objective of this work was to study the mechanical properties of an unsaturated polyester resin mixed with three types of filler loadings: glass / unsaturated polyester composites waste, olive nuts and sawdust.

The resin chosen for this study is used in the manufacture of bumpers for the automotive industry. As for the filler loadings, we used a shred from the recycling of glass / unsaturated polyester composite waste and two types of vegetable filler loadings based on sawdust and olive nuts.

The obtained results are summarized as follows:

- 1) Optical microscopy analysis showed an incompatibility between all the filler loadings used and the unsaturated polyester resin.
- 2) The mechanical characterization by bending load, showed a kind of embrittlement of the material provoking the disappearance of the nonlinearity of the load curve with a significant decrease in fracture displacement. These results also showed that the introduction of the filler loadings into the resin reduces the load capacity of the material. This loss in mechanical properties recorded for all loaded resins is probably due to the poor adhesion between the filler loadings and the matrix confirmed by optical microscopy.
- 3) As for the characterization of the resin charged by Charpy impact test. Very wide dispersion in the results was observed and no relevant explanation could be given for the results obtained due to a lack of information on the quality of the charge-matrix interface.

Keywords: Biodegradable composite material, unsaturated polyester resin, glass /unsaturated polyester composites waste, olive nuts, sawdust.



**ON DETERMINING THE MORE AFFECTED REGION BY THE CORONAVIRUS
DISEASE: EVIDENCE FROM NIGERIA'S PERSPECTIVE**

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ABSTRACT

The rate at which coronavirus disease affects human race is sporadic in nature, and therefore calls statistical investigation. A number of journal articles have been published on coronavirus on cases of infection and even discharge. However, the effect of this infectious disease, popularly known as COVID-19, on Nigeria's two sub-divided regions (southern and northern) is of serious concern as this paper investigates which of the two regions is more affected. Our datasets on the number of infected persons were sourced from the webpage of Nigeria Center for Disease Control (NCDC) and, numerically grouped into two regions. To determine which of the regions is more affected by COVID-19 using t-test, both normality and variance homogeneity assumptions were checked via the use of Shapiro-Wilk and Bartlett's tests with R statistical package. Our results show that southern region is more affected by the pandemic. As such, we recommend that governments' agencies and commissions as well as non-governmental organizations including the international communities should pay more attention to the southerners than the northerners in Nigeria in curbing the menace of the pandemic.

Keywords: Coronavirus, Nigeria, Northern and Southern Regions



**A REGRESSION ANALYSIS OF FACTORS AFFECTING
GLOBAL CRUDE OIL AND GAS PRICE**

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ABSTRACT

The fluctuation in crude-oil and gas prices is affected by numerous factors. The price of crude oil and gas has undergone several critical fluctuations over the past few decades owing to the influence of a number of contingencies, comprising of war and instability in politics, economic and financial downturn, terrorist attacks, and natural disasters. The regression analysis method benefits the studies the impact of explanatory variables of the crude oil and natural gas prices. The analysis shows that the crude oil and the natural gas prices are highly affected by some variables events and crisis. To minimize the numbers of the variable, the ordinary least squares method was used to reject the least significant variables and proceeds to further regression analysis on the most affected variables to end up with more precision findings. The study model gives an opportunity to understand the involvement of these variables and assists on predictions of prices to grow the economy and to prevent circumstances that negatively attributes.

Keywords: Explanatory variable, Oil and gas, Regression analysis, Residuals, Variance



İNGİLİS DİLİNİN ORTA-İXTİSAS MƏKTƏBLƏRİNDƏ

KOMMUNİKATİVYÖNÜMLÜ TƏDRİSİ

COMMUNICATIVE TEACHING OF ENGLISH IN SECONDARY SPECIAL SCHOOLS

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ÖZET

Azərbaycanda həyata keçirilən təhsil islahatları bütövlükdə pedaqogika sistemində köklü dəyişikliklər edilməsini tələb edir. Bütün bu dəyişikliklər müəllimlərin peşəkarlıq səviyyəsinə olan tələblərin artırılmasını zəruri edir. Peşəkarlığın təkmilləşdirilməsi isə yalnız bilik, bacarıq və vərdişlərin inkişafı deyil, eyni zamanda şəxsiyyətin təkmilləşdirilməsi məsələlərini əhatə edir.

Bu günün müəllimi dərstdə ünsiyyət qurmaq, problemlə situasiyalar yaratmaq, problemləri düzgün həll etmək, tələbələrə əməkdaşlıq etmək, tədqiqat aparmaq bacarığına malik olmalıdır.

Yeni ictimai tələb xarici dil fənninin statusunun dəyişməsinə də şərtləndirir. Bu günə qədər orta və ali məktəblərdə ümumtəhsil fənni kimi tədris olunan xarici dil indi tətbiqi əhəmiyyət kəsb edir ki, bu xüsusiyyət də fənnin təliminin ana xəttini təşkil etməlidir. Bununla əlaqədar orta təhsilin son mərhələsində, orta ixtisas məktəblərində və ali məktəblərdə xarici dilin öyrədilməsində differensial təlim fənninin tətbiqi xarakteri əsasında həyata keçirilməlidir.

İndi müəllimdən aşağıdakı suallara cavab vermək tələb olunur:

Mən nəyi öyrətməliyəm, necə öyrətməliyəm, necə təşkil etməliyəm və necə dəyərləndirməliyəm?

Bu gün təlim məsələləri yeni məzmun kəsb etməklə qarşıya yeni vəzifələr qoyur. Bu işdə müasir təhsil sisteminin mühüm pilləsi sayılan orta ixtisas məktəblərinin, xüsusilə gələcəyin müəllimlərinin ixtisaslaşdığı orta ixtisas məktəblərinin də üzərinə böyük məsuliyyət düşür. Bu məktəblərdə müxtəlif fənlərin tədrisi ilə yanaşı, xarici dillərin tədrisi də həyata keçirilir və peşəsinin incəliklərinə mükəmməl bələd olan ixtisaslı kadrlar hazırlanır.

Orta ixtisas məktəblərində dil öyrənmənin tələbələrə gələcək ixtisası ilə əlaqələndirilmiş şəkildə təşkil edilməsi zəruridir. Xarici dil müəllimi tələbələrə müstəqil işləməyi, lüğətdən və digər məlumat mənbələrindən sərbəst istifadə etməyi öyrətməlidir. Bu zaman tələbələr orta məktəbdə qazandıqları bilik və bacarıqlara istinad etməklə dili daha dərin şəkildə mənimsəyirlər.



Kommunikasiya prosesi, xüsusilə də şifahi nitq ünsiyyəti prosesi dil sisteminin təzahürü olan qrammatik qaydalarla deyil, dildə mövcud olan normalarla idarə edilir. İngilis dilini ixtisas fakültələrində öyrənən tələbələrə qrammatik qaydalarla yanaşı, dildə mövcud olan və kommunikasiya prosesini idarə edən və onu tənzimləyən normaları aşılamaq zəruridir. Şübhəsiz, dili tədris edən müəllimlər tələbələrə real, həqiqi ingilis dilini, yəni gündəlik həyatda istifadə edilən ingilis dilini öyrətməlidir.

Anahtar Kelimələr: kommunikativ, ingilis dili, tədris, ünsiyyət, müəllim

ABSTRACT

Education reforms in Azerbaijan require radical changes in the pedagogical system as a whole. All these changes make it necessary to increase the requirements for the professional level of teachers. Professional development includes not only the development of knowledge, skills and habits, but also the development of personality.

Today's teacher must be able to communicate in class, create problem situations, solve problems correctly, cooperate with students, conduct research.

The new social demand also changes the status of foreign language subjects. Until now, a foreign language taught as a general subject in secondary and higher education is now of practical importance, and this feature should be the main line of teaching the subject. In this regard, differential training in the teaching of foreign languages in the final stage of secondary education, secondary special schools and universities should be carried out on the basis of the nature of the application of the subject.

The teacher is now asked to answer the following questions:

What should I teach, how should I teach, how should I organize, and how should I evaluate?

Today, training issues pose new challenges by acquiring new content. In this work, a great responsibility falls on the secondary special schools, which are an important stage of the modern education system, especially the secondary special schools where the teachers of the future specialize. In addition to teaching various subjects, these schools also teach foreign languages and train qualified personnel who are well versed in the intricacies of the profession.

It is necessary to organize language learning in secondary special schools in a way that is related to the future profession of students. A foreign language teacher should teach students to work independently and use dictionaries and other sources of information freely. At the same time, students learn the language more deeply, referring to the knowledge and skills they have acquired in high school.

The process of communication, especially the process of oral communication, is governed by the norms that exist in the language, not by the grammatical rules that are a manifestation of the language system. In addition to grammatical rules, students studying English in specialized faculties need to be introduced to the norms that exist in the language and govern



and regulate the communication process. Of course, language teachers must teach students real, authentic English, that is, English used in everyday life.

Keywords: communicative, English, teaching, communication, teacher



ARABIC CONSONANTS CLASSIFICATION ACCORDING TO PLACES OF ARTICULATION

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ABSTRACT

The objective of our work is to develop a system of identification of Arabic fricative consonants as well as the study of its performances. Our system allows these consonants to be classified into three classes: (Class 1: (/ħ/, /χ/, /ʕ/, /ʁ/, and /h/), Class 2: (/ʒ/ and /ʃ/) and Class 3: (/z/, /s/ and /s^h/). We have chosen as an acoustic index for characterizing Arabic fricatives the energy percentage distribution in speech segments (syllables) of CV type, of which C alludes to the Arabic fricative consonants and V alludes to one of these three vowels/a/,/u/or/I/. Our algorithm developed under Matlab software has a recognition rate of 82.6%. After that, we tested and measured our algorithm performance using the Weka software algorithm (J48). In the light of the results obtained; we notice that our algorithm presents a good classification of these consonants.

Keywords: Automatic speech recognition; classification; fricatives.



BOR BİLEŞİKLERİNİN SIÇANLARDA γ -RADYASYONUNA BAĞLI BEYİN HASARINA KARŞI KORUYUCU ETKİSİ**PROTECTIVE EFFECT OF BORON COMPOUNDS AGAINST BRAIN DAMAGE CAUSED BY γ -RADIATION IN THE RATS****Dr. Öğr. Üyesi Nurhan Erkaya**

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ÖZET

Radyasyon tedavisi, kanserin yayılmasını azaltmak için kullanılan standart tedavilerden biridir. Kanser bölgesinde etkili olduğu halde bazı kanser türlerinde radyasyona karşı hassasiyet görülmektedir. Radyasyon tedavisinden sonra sağlıklı dokularda kötü yönde değişiklikler olduğuna dair raporlar mevcuttur. Özellikle son çalışmalar dokularda reaktif oksijen türlerinde (ROS) hızlı bir artışa neden olduğunu ortaya koymuştur. Radyoterapi sonrası sağlıklı dokudaki hasarı azaltmak için farklı radyoprotektanlar araştırılmıştır. Bor ve oksijen elementlerinden oluşan borat bileşikleri, yeryüzünde ve bazı besinlerde yüksek konsantrasyonlarda bulunur. Bor bileşiklerinden lityum borat (LB) antioksidan, antikanser, antienflamatuar ve antiepileptik özelliklerinden dolayı tıpta çok kullanılır. Bu çalışmanın amacı sıçanlarda akut γ -radyasyona bağlı beyin hasarına karşı lityum boratın radyoprotektif etkilerini araştırarak literatüre katkıda bulunmaktır.

Sprague-Dawley sıçanları rastgele olarak üç gruba ayrıldı: kontrol, γ -radyasyon tedavisi (tek doz 12 Gy γ -radyasyon ışınlaması), hem γ -radyasyon hem de lityum borat tedavisi. Son sıçan grubuna, γ -radyasyonuna maruz bırakılmadan önce arka arkaya 5 gün boyunca lityum borat (75 mg/kg) ağızdan uygulandı. Her grubun beyin dokularında lipid peroksidasyon (LPO), kaspaz 3, 6-keto-prostaglandin F1 alfa (6 keto-PGF1- α), endothelial NOS (eNOS) ve tromboksan B2 (TXB2) seviyeleri ELISA ile ölçüldü.

Lityum borat verilmesi, γ -radyasyona maruz kalan sıçan beyinlerinde LPO, 6-keto-PGF1- α , TXB2 caspase 3 seviyelerinde önemli bir azalmaya neden oldu. Lityum borat grubu, kontrol ve γ -radyasyon gruplarına kıyasla eNOS aktivitelerinde önemli bir artış gösterdi. Lityum boratın radyasyona bağlı sıçan beyin dokusunda oksidatif stresi ve inflamasyonu azalttığını bulduk.

Sonuç olarak lityum borat radyasyon yan etkilerine karşı yeni bir radyoprotektif ajan olarak kullanılabilir.

Anahtar Kelimeler: Lityum borat, Beyin, γ -Radyasyon, Sıçan

ABSTRACT

Radiation therapy is one of the standard treatments used to reduce the spread of cancer. Although it is effective in the cancer area, some types of cancer are sensitive to radiation. There are reports of adverse changes in healthy tissues after radiation therapy. Different radioprotectants have been investigated to reduce the damage to healthy tissue after radiotherapy. Especially recent studies have revealed that it causes a rapid increase in reactive oxygen species (ROS) in tissues. Borate compounds, consisting of boron and oxygen elements,



are found in high concentrations in the earth and some foods. Lithium borate (LB), one of the boron compounds, is widely used in medicine due to its antioxidant, anticancer, anti-inflammatory and antiepileptic properties. The aim of this study is to contribute to the literature by investigating the radioprotective effects of lithium borate against acute γ -radiation induced brain damage in rats.

Sprague-Dawley rats were randomly divided into three groups: control, γ -radiation therapy (single dose of 12 Gy γ -radiation irradiation), both γ -radiation and lithium borate therapy. Lithium borate (75 mg / kg) was administered orally to the last group of rats for 5 consecutive days before exposure to γ -radiation. Lipid peroxidation (LPO), caspase 3, 6-keto-prostaglandin F1 alpha (6 keto-PGF1- α), endothelial NOS (eNOS) and thromboxane B2 (TXB2) levels were measured in the brain tissues of each group by ELISA.

Administration of lithium borate caused a significant reduction in LPO, 6-keto-PGF1- α , TXB2 caspase 3 levels in rat brains exposed to γ -radiation. The lithium borate group showed a significant increase in eNOS activities compared to the control and γ radiation groups. We found that lithium borate reduced oxidative stress and inflammation in the tissue of the rat brain caused by radiation.

As a result, lithium borate can be used as a new radioprotective agent against radiation side effects.

Keywords: Lithium borate, Brain, γ -Radiation, Rat



**HEAT FLUX OPTIMIZATION IN SOLAR CONCENTRATOR RECEIVER BASED
ON GENETIC ALGORITHMS TO IMPROVE THEIR ENERGY EFFICIENCY**

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ABSTRACT

In this work, the optimization of the heat flux absorbed by the receiver of a solar concentrator is carried out, to increase the efficiency in this clean energy source. This is achieved by using artificial intelligence techniques, based on a genetic algorithm approach, to solve the problems of the performance optimization of solar systems, caused by the various constraints posed in the energy balances of the examined solar tower concentrator. Where, the obtained results are analyzed with objective functions for the maximization of the thermal flux received by minimizing the losses of the thermal flux in the studied system, show the existence of an optimal value of efficiency of the receiver; for the total surface of the heliostat, the receiver temperature, the molten salt temperature, the opening area of the receiver, the area of the receiver, the diameter, thickness, thermal conductivity of the receiver tubes and the vapor flow rate at the turbine inlet. However, these results have been implemented into operation in areas rich in solar potential, making it possible to improve electricity production in these areas with improved energy efficiency depending on the power cycle chosen such as the Hirn cycle with reheating and withdrawal used from the studied solar tower system.

Keywords: Performances; Clean energies; Heat flux; Genetic algorithms; Energy balance; Solar tower concentrator; Optimal efficiency; Power cycle



TOURISTS' PREFERENCES IN TOURISM DESTINATION SELECTION IN MALAYSIA

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ABSTRACT

Nowadays, people are embarking to go everywhere in this world. As such, the tourism industry endeavors end up being fundamental in the nation. The government has contributed a ton of cash-flow to make the tourism industry remembering the true objective to dismantle in more guests come to Malaysia. Therefore, the purpose of this conceptual paper is to review the literature and ultimately propose a conceptual framework linking the tourists' preference with tourism destination selection in Malaysia. This paper intends to illustrate the relevant authorities and travel agencies to enhance and improve the quality of their services cater to different tourists' preferences.

Keywords: Tourist, preferences, tourism destination, selection, Malaysia



VISUALIZATION OF CARBON DIOXIDE-WATER MOLECULAR SYSTEM

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ABSTRACT

CO₂ hydrate are a structure-I hydrate composed of 46 water molecules and 8 guest molecules at most per unit cell, which forms two small cages and six large cages. These compounds are technologically important both as energy resource and on atmosphere in case of global warming. As an energy resource, hydrate deposits contain the largest known reserve of natural gas. On the other hand, CO₂ hydrates are indispensable to evaluate the feasibility of CO₂ storage in a dented ocean floor as a measure to mitigate the global warming. In this work we describes a set of Monte Carlo computer simulations designed to reveal the structure, stability, chemical structure, molecular arrangements in cages and hydrate and nonhydrate dividing through a greater range of temperature and pressure.



RABBIT AND RED FOX DYNAMICS WITH ALTERNATIVE PREY: EFFECT OF MANGE

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ABSTRACT

In this article, we control the declining red fox population despite RHD in its prey (European rabbit). The red fox population is widely affected by Rabbit hemorrhagic disease (RHD) and Mange disease. We proposed a four-compartment spatiotemporal rabbits-alternative prey-red fox eco-epidemiological model to discuss the impact of mange and hunting on red foxes. We have derived existence, boundedness, stability, and bifurcation analysis. Turing instability is analyzed for the spatiotemporal model. Numerical simulation shows that the critical value of hunting rate is a reason for stability switches, and Hopf bifurcation occurs in the system near interior equilibrium. Also, the mange contact rate plays a vital role in present dynamics. The dynamic becomes chaotic at a threshold value of the mange disease transmission rate. It is also a significant factor in controlling the red fox population. Our analysis confirms the real scenario that the present dynamic is stable with very few healthy red foxes. The model does not have diffusion-driven instability due to alternative prey.

Keywords: Spatiotemporal, Turing instability, Mange, Alternative prey.



FINITE DIFFERENCE SOLUTION OF BLASIUS PROBLEM AND HEAT TRANSFER UNDER BIOMAGNETIC FLUID**Sadia Anjum Jumana and M. Ferdows**

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ABSTRACT

Blasius problem is one of the classical boundary layer flow related problems in fluid dynamics, describing the 2-D, steady laminar flows over a partially-infinite surface that is in parallel to a fixed unidirectional flow. These problems often arise in fluid dynamics, quantum mechanics, aerodynamics since they describe not only the velocity but also the temperature throughout the boundary layer which is of significant requirement in those fields. Biomagnetic fluid dynamics (BFD) appears to be a comparatively recent area of research in fluid dynamics. The biological fluids that prevail in living beings and whose flows are influenced by the appearance of magnetic fields, are defined as biomagnetic fluids. In bioengineering as well as medical science, the applications are countless. For example, drug targeting in blood cells using magnetic particles, controlling blood flow during surgery, treating cancer, tumor or wounds by producing magnetic hyperthermia etc. Acknowledging the importance, this research describes the finite difference solution of laminar incompressible boundary layer and heat transfer flow containing constant properties of Blasius boundary value problem embedded by magnetic interaction of biomagnetic fluid in the presence of a magnetic field. The solution procedure involves converting the governing system of coupled PDEs (Momentum and Energy equations) into nonlinear ODEs by establishing similarity transformations. The transformed ODEs along with the boundary conditions are then solved numerically by introducing an efficient numerical technique based on the finite difference algorithm. The significant effects of the governing parameters on flow fields are presented more in details. In order to validate our work, we have compared our results numerically as well as graphically with the corresponding results obtained by other researchers and find almost precise agreement with them. It has been analyzed theoretically by using suitable transformations that biomagnetic interaction parameter has a great enhancement rather than regular fluid.



**MODULATION DOMAIN SPECTRAL SUBTRACTION FOR SPEECH
ENHANCEMENT USING COHERENT DEMODULATION TECHNIQUE**

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ABSTRACT

In this work, we study the domain of modulation for speech improvement. More precisely, we want to determine the importance of the modulation domain for spectral subtraction compared to the acoustic domain. For this purpose, we adopt a new approach based on the modulation domain spectral subtraction criterion in order to discard noise-dominant low-frequency (4–16 Hz) temporal modulation envelopes. Moreover, we employed coherent demodulation using spectral Center-Of-Gravity (COG) method which ensures distortion-free filtering of modulators. The experiment results of different acoustic non-stationary noises show that the proposed approach can improve the speech intelligibility while compared to the other existing techniques in the acoustic domain.

Keywords: Modulation domain, Spectral subtraction, Coherent demodulation.



**EVAPOTRANSPIRATION FACTOR IN 3D MATHEMATICAL MODELING OF
GROUNDWATER LEVEL CHANGES****Elena Sierikova, PhD**

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ABSTRACT

For the cities sustainable development, the construction protection against dangerous groundwater level (GWL) rising and flooding, it is necessary to correctly assess the existing hydrogeological conditions and to predict them with the proper accuracy [1]. It is important to note the area of flooding within the territory of Ukraine amounted about 9 million hectares. This list starts with the big cities of Ukraine [1].

For the first time, the boundary conditions of the groundwater level changing mathematical model in 2D and 3D formulation have been developed. Mathematical model takes into account artificial coverings on the soil surface and groundwater discharge processes due to evapotranspiration to improve predictions and management of groundwater level on the built-up areas [2-4].

The value of GWL changing at constant evapotranspiration has been obtained in 2D and 3D formulations, which has been visualized by calculations for limited areas of the Kharkiv territory in Fig.2, which shows the function $h_1(x,y)$. In this case it was supposed that value of GWL changing were calculated at $y=3$ and different values of z .

By number 1 the values obtained with usage of 2D model are denoted, numbers 2, 3, 4 correspond to values $z = (l+a)\frac{\pi}{4}$, $z = (l+a)\frac{\pi}{6}$ and $z=0$.

From these results one can concluded that values of GWL changing obtained at 3D simulation are less than ones obtained as the result of calculations carried out according to the two-dimensional theory. Therefore, data of 2D simulation can be used as an upper bound for GWL changing estimation. GWL changing at other values of y have demonstrated the similar behavior. These data are shown at Fig. 1. GWL changing at $y= -2$ and different values of z have presented at Fig. 2.



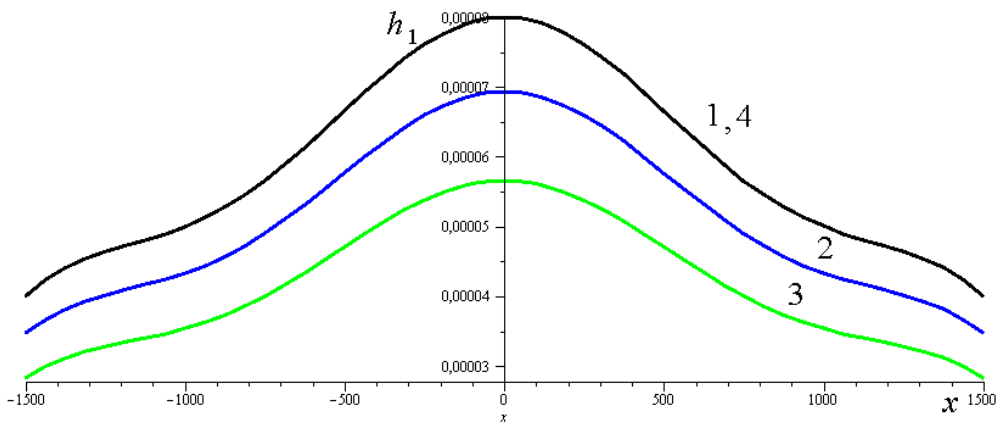


Fig. 1. GWL changing at other values of y .

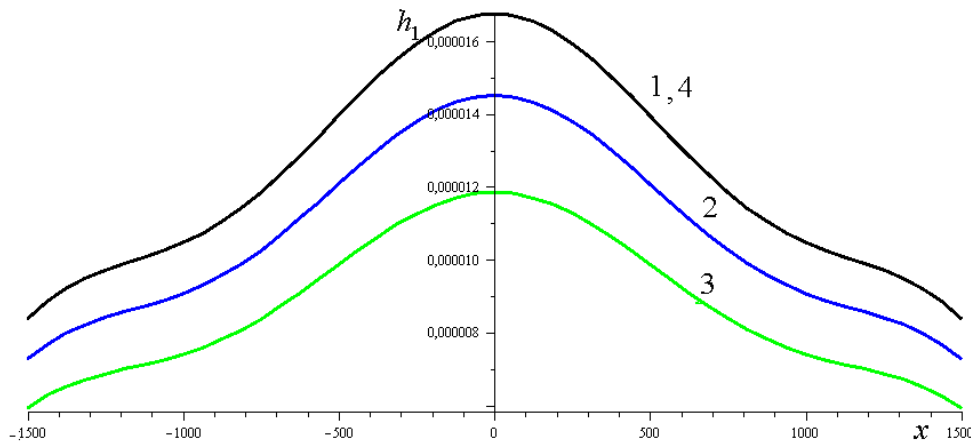


Fig. 2. GWL changing at $y = -2$ and different values of z .

The values of GWL changing during variable evapotranspiration have been also obtained, which have shown in Fig. 3. Here numbers 1, 2, 3 correspond to values $z = (l + a) \frac{\pi}{2}$,

$z = (l + a) \frac{\pi}{4}$, $z = (l + a) \frac{\pi}{6}$. By number 4 the results of 2D simulations are marked.

As before, these results have demonstrated that values of GWL changing obtained at 3D simulation are less than ones obtained as the result of calculations carried out according to the two-dimensional theory. Therefore, data of 2D simulation can also be used as an upper bound for GWL changing estimation. In figure 4a the data are obtained at $x = (l + a) \frac{\pi}{2}$ and different

value of z , while in figure 4b the data are shown that were obtained at $x = (l + a) \frac{\pi}{4}$.



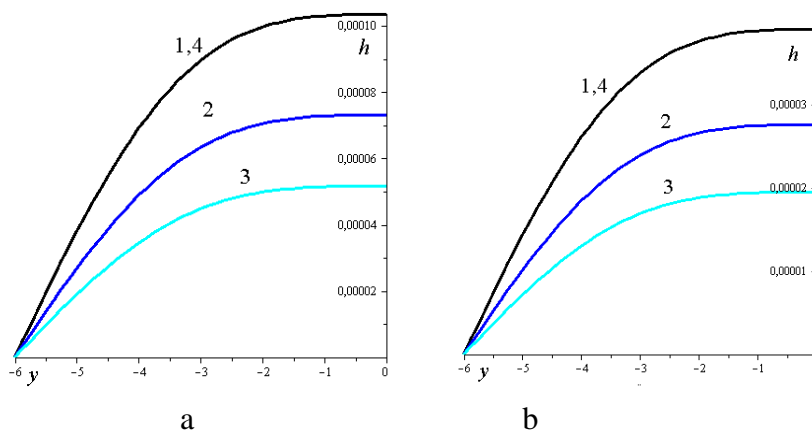


Fig. 3 – GWL changing with variable evapotranspiration

Three-dimensional modeling of groundwater level changing in contrast to two-dimensional allows to take into account the dependence of evapotranspiration on the presence of artificial coverings on the soil surface, which are located unevenly and have different filtration coefficients, which causes corresponding groundwater level changes of urban areas.

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**ANALYSIS OF THE INFLUENCE OF THE TOURISM SECTOR ON LOCAL
REVENUE (PAD) IN NORTH MALUKU PROVINCE 2014-2018**

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ABSTRACT

The tourism sector is one of the leading sectors in the economy. At the national level, the contribution of the tourism sector is through foreign exchange, while at the regional level it is through local revenue (PAD), particularly local taxes and levies. Currently, many regions have started to develop their tourism sector, including North Maluku. This study aims to analyze the influence of the tourism sector on local revenue (PAD) in North Maluku Province in 2014-2018. This study uses secondary data and panel data analysis with a Fixed Effect Model (FEM) approach using the Eviews 9.0 program. The results of the analysis show that individually the number of domestic tourists, the number of foreign tourists, and the number of restaurants have a positive and significant effect on PAD. Meanwhile, the amount of accommodation does not have a significant effect on PAD. But together, the number of domestic tourists, the number of foreign tourists, the number of accommodations, and the number of restaurants have a positive and significant effect on PAD in districts and cities in North Maluku Province in 2014-2018. Therefore, tourism must be developed in an integrated manner from various sides through cooperation between the community, government, tourism entrepreneurs, and other related parties.

Keywords: domestic tourists, foreign tourists, accommodation, restaurants, local revenue (PAD).



**MALEZYA NANOTEKNOLOJİ GELİŞİMİNİN ÖNÜNDEKİ ALTYAPI
ENGELLERİNİ VE ZORLUKLARI VURGULAMADA KALİTATİF BİR
YAKLAŞIM**

**A QUALITATIVE APPROACH IN HIGHLIGHTING INFRASTRUCTURE BARRIERS
AND CHALLENGES TO MALAYSIAN NANOTECHNOLOGY DEVELOPMENT**

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ÖZET

2001'de Sekizinci Malezya Planı'na (2001-2005) ilk kez dahil edilerek 2001'de nanoteknolojiyi bilimsel araştırmanın ön saflarına itmek için hükümetin ilk girişiminden bu yana, uzun yıllar, sahip olduğu toplumsal çapta önemli bir etkiye tanık olmadan geçti. yapabilmek için lanse edildi. Bununla birlikte, nanoteknolojinin endüstriyel gelişimi, endüstrideki paydaşlar arasında işbirliği eksikliği, oldukça yavaş gelişme, bilgisiz halk, bilinçsizlik vb. Gibi gelişimsel konularda adil bir paya sahip olmuştur. altyapı ile ilgilidir.

Bu nedenle, bu çalışma, Malezya'da nanoteknolojinin gelişimini şimdiye kadar etkileyen altyapı sorunlarını keşfetmeye ve daha iyi anlamaya çalıştı. Bu makale, sertifikalı nanoteknoloji tabanlı şirketlerde üst düzey pozisyonlardaki kalifiye kişilerle 15 görüşme yoluyla toplanan bulguları sunmaktadır. Bu şirketler NanoVerify Sdn tarafından doğrulanmıştır. Bhd., Malezya nanoteknoloji endüstrisinin doğrulama, sertifikasyon ve ticarileştirme girişimleri yoluyla gelişimini kolaylaştırmaktan sorumlu yerel kuruluş olan Bhd.

Şu sorulardan oluşan açık uçlu bir görüşme protokolü geliştirildi: "Malezya nanoteknoloji endüstrisinde firmanızın karşılaştığı altyapı sorunları nelerdir?", "Bu sorunları çözmenin çözümü nedir?" Ve "Sizin şirketin altyapı stratejisi ve nanoteknoloji geliştirmenize nasıl uygulandı? "

15 katılımcının 35 dakika ile 3 saat arasında değişen görüşme seansı daha sonra kelimesi kelimesine yazıya döküldü, temalara göre kodlandı ve kategorize edildi ve ardından analiz edildi ve nihai raporda sunuldu. Bu katılımcılar tekstil, elektronik, kozmetik, tarım, madeni yağlar ve otomotiv endüstrilerindendi.

Çalışmanın sonuçları, kurulum ve bakım maliyetinin ana sorun olduğunu, kamu hizmetlerinin ve destek hizmetlerinin nanoteknoloji gelişimini sürdürme gereksinimlerine, özel ekipman edinmedeki zorluklara, yüksek teknoloji parklarına duyulan ihtiyaç ve ihtiyaca bağlı olmadığını ortaya koymuştur. yüksek standartlı ve garantili hizmetler (elektrik temini ve su gibi).

Özetle, altyapı ve tesisler Malezya'da nanoteknoloji gelişiminde ana konular haline geldi ve bu gelecek vaat eden endüstrinin büyümesini sürdürmek için, tüm paydaşların devam etmek için gerekli altyapının kurulmasında daha büyük bir rol oynaması gerekiyor. bu umut verici teknolojiyi ülke ve halkın yararına geliştirmek.

Anahtar Kelimeler: Nanoteknoloji yönetimi, Malezya, endüstri geliştirme, altyapı, röportaj



ABSTRACT

Since the initial drive by the government to push nanotechnology into the forefront of scientific research in 2001 with its first inclusion in 2001 under the Eighth Malaysia Plan (2001-2005), many years has passed without witnessing significant societal-wide impact, which it has been touted to be able to do. However, the industrial development of nanotechnology has had its fair share of developmental issues, such as lack of collaboration between stakeholders in the industry, fairly slow development, uninformed public, lack of awareness, etc. Among the issues that have been highlighted in the literature is related to infrastructure.

Therefore, this study attempted to discover and obtain a greater understanding of infrastructure issues that has thus far affected the development of nanotechnology in Malaysia. This paper presents the findings that were gathered through 15 interviews with qualified individuals of senior positions in certified nanotechnology-based companies. These companies have been verified by NanoVerify Sdn. Bhd., which is local body that is responsible for facilitating the development of the Malaysian nanotechnology industry through verification, certification, and commercialization initiatives.

An open-ended interview protocol was developed which consisted of the following questions: “What are the infrastructure problems that your company faces in the Malaysian nanotechnology industry?”, “What is the solution to resolving those problems?”, and “What is your company’s infrastructure strategy and how was it implemented into your nanotechnology development?”

The 15 respondents’ interview sessions, which ranged from 35 minutes to more than 3 hours, were then transcribed word for word, coded and categorized according to themes, and then analyzed and presented in the final report. These respondents were from textiles, electronics, cosmetics, agriculture, lubricants, and automotive industries.

The results of the study revealed that cost for setting up and maintenance is the main issue, utilities and supporting services are not up to the requirements for sustaining nanotechnology development, difficulties in acquiring specialized equipment, the need for high technology parks, and the need for high standard and guaranteed utilities (like electricity supply and water). In summary, infrastructure and facilities have become the main issues in nanotechnology development in Malaysia, and in order to sustain the growth of this promising industry, all stakeholders need to play a greater part in ensuring the establishment of the required infrastructure in order to continue to advance this promising technology for the benefit of the country and the public.

Keywords: Nanotechnology management, Malaysia, industry development, infrastructure, interview



**THE IMPORTANCE OF ATTITUDE / BEHAVIOR IN THE OBSERVATION OF
WORK TEAMS**

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ABSTRACT

Taking as a starting point the diagnosis of a reference year made to a certain entity, as being in a culture of dependency, and also, all the indicators related to the accident rate, associated with a period of 5 years following, as well as, the strategic objectives established across the entire organization.

It was intended to perceive as the same policy; the same Corporate Security Management System (CSMS); the same resources; the same activities; the same initiatives; the same dangers and risks and the same interventions, generated significantly different results.

In short, it was intended above all to reflect, not on the objectives themselves, but on the path, to achieve them, the effectiveness, if one is on the path and in the right direction, if this “journey” has become an experience of changing and feel that you are doing the right “things” in order to achieve the goals.

On the basis of the problem, it is evident that in highly complex organizational structures, whether technical or social, it is sometimes not easy to reach a balance between the needs and objectives of the business and the desirable in terms of risk acceptance.

Keywords: Motivation; Behavior; operating strategy; Safety Culture.



INVESTIGATING THE EFFECT OF HETEROGENEOUS ERROR-VARIANCE IN ESTIMATING LINEAR DYNAMIC PANEL DATA MODELS***¹OGUNLEYE, Timothy A. & ²ADEJUMO, A. Olusola**^{1,2}Department of Statistics, Faculty of Physical Sciences, University of Ilorin, Ilorin, Kwara State, Nigeria**ABSTRACT**

Several methods of estimating both linear and non-linear dynamic panel data models exist in the literature. This paper considers seven different estimators: Pooled (OLS), Anderson-Hsiao (AH), First-Differenced (FD), Forward Orthogonal Deviation (FOD), Difference Generalized Method of Moment (DGMM-1), System Generalized Method of Moment (SGMM-1) and a newly proposed estimator (Prop-est.). Assuming a random effect model situation with error-variance geometrically increases in the form of $2^r, 1 \leq r \leq 8$, for which only one unit of time is used with four different levels of cross-sectional units ($N = 10, 20, 100, 200$), therefore a Monte Carlo experiment is conducted for the simulation studies. However, the absolute bias as well as root mean square error criteria was used to access the performances of the estimators under consideration. Our simulation results show that both one-step SGMM-1 and the Prop-est. perform excellently well in terms of bias while only the Prop-est. asymptotically outperform all other estimators in terms of efficiency and consistency. It is therefore established that SGMM-1 and the Prop-est. estimators should be recommended for obtaining parameters of linear dynamic panel data models when error-variances possess positive increment with geometric heterogeneity.

Keywords: Linear Dynamic Panel Data Model, Variance Heterogeneity, Monte-Carlo Experiment.



**SIMULATION OF COMPLEX SOCIAL SYSTEMS. TOOLS, RESULTS and
POSSIBILITIES****¹Prof. Dr. Makarenko Alexander, ²Ass. Prof., Dr. Malezhyk Peter,****²Prof. Dr. Gasanov Aydin**¹Institute of Applied System Analysis at National Technical University of Ukraine (Igor Sikorskiy Kiev Polytechnical Institute)²National Pedagogical University of Ukraine (M.P. Dragomanova)**ABSTRACT**

Recent investigations on complex societal systems require the applications of simulations. There exist the number of such models and approaches. The examples are multi-agent systems, differential equations, system dynamics, theory of networks, OR and many others. But many problems still haven't final solutions. Especially it is valid for large social systems and for global processes. The example is the sustainable development problems.

The critical review of existing tools is proposed in the talk. The examples are neural networks, cellular automata, differential equations. Also some new models and approaches are described (see [1-5]): models with associative memory, artificial life, models of individuals mentality, models with anticipation. The problems of special data base for such models are discussed. The role and importance of ontologies and cognitive maps in such models are described. Some examples of proposed approaches applications is given. One of the most important problem is the process of sustainable development. Education discipline 'social informatics' are discussed.

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**A CASE STUDY ON MANAGEMENT OF A DIGITAL TRANSFORMATION
PROJECT FOR A TRADITIONAL BUSINESS**

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ABSTRACT

The use of Information and communication technology (ICT) to automate operations and decision-makings by replacing existing processes with (newer) digital processes is known as digital transformation. In 2019 a large-size traditional Livestock company placed in the middle east defined a project for implementing integrated ICT environment with the aim of improving its production. the goal is to employ Information Technology (IT) technologies and network facilities to communicate, store and use all information exist in a legacy system far from IT industry to a format which could lead to improve production performance. This article is reviewing this project as a case study based on observation and reporting methodology. The first author as an IT business analyst had to lead a team consist of technology managers, IT People and Business stockholders to complete the project based on predefined goals, integrate traditional business to a fast-growing environment using ICT as a main tool. This project was a multiple phase time-limited operation activities with a limited budget and delay tolerance. Project phases were (1a) defining project charter, (1b) Identify Stakeholders, (2) Scope statement as (2a) project initiation then (2b) project planning, (3) execution, (4a) monitoring and (4b) closure. As a case study with this conference paper, the authors present their faced challenges and applied solustions during the completion of the project. Suggestion presented by this article is expected to be beneficial for ICT project managers as well as business operations managers.

Keywords: Information and communication technology, Digital transformation, Project management, Case study.



**IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON
PREVENTION OF WORKPLACE HARASSMENTS**

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ABSTRACT

Harassment covers a wide range of behaviors of an offensive nature. It is perceived as behavior that is related to humiliation or embracing an individual. In legal perception, harassment covers disturbing upsetting, or threatening feelings. There are different types of harassment, such as cyberbullying, religious harassment, sexual harassment, racial harassment, disability harassment, gender discrimination, etc. Each one of these types may be divided into a few different subcategories. This article is focusing on workplace harassment. Based on existing literature and studies, it not only lowers performance but also lessens job satisfaction and affects the mental health of an individual worker or a group of workers. Business leaders are seeking modern technologies to omit or at least minimize harassment in their working place, where information and communication technology (ICT), to some extent, performed as a means. ICT is a wider term that refers to technologies including, but not limited to, the internet, cellular networks, mobile phones, computers, software, middleware, social networking, and many more other media applications and services. With the aim of reviewing existing scientific literature, with this paper the authors present a conceptual framework to provide a roadmap for working places to apply ICT in order to prevent harassment. Moreover, the role of ICT in controlling, monitoring, and reducing workplace harassment is also highlighted in the conclusion of this article.

Keywords: Information and communication technology, Workplace, Harassment, Literature review.



**ANTIFOULING TEMPERATURE-RESPONSIVE POLYMER BRUSH COATINGS
BASED ON POLY(DI(ETHYLENE GLYCOL)METHYL ETHER
METHACRYLATE-CO-ACRYLAMIDE) FOR BIOMEDICAL APPLICATION**

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ABSTRACT

Over the last decades, numerous polymer coatings for clinical diagnostics and medical procedures have been successfully fabricated. They could be utilized to coat the surfaces of many types of medical devices such as wound dressing, artificial joint, vascular prosthesis, stent, bioartificial kidney, and catheter to provide desirable properties. But their commercialization has been hindered by their inability to be purged and maintain sensing functionality when exposed to biological fluids such as plasma or blood. To improve and expand their using, typical functional groups responsible for the fouling resistance such as ether, hydroxyl, amide, peptoid, β -peptoid, and open-ring oxazoline have been introduced into polymer coatings, or new non-cytotoxic antifouling coatings have been created. In this work, we fabricated novel antifouling T-responsive polymer brush coatings based on poly(di(ethylene glycol)methyl ether methacrylate188) POEGMA188, poly(di(ethylene glycol)methyl ether methacrylate-co-acrylamide) P(OEGMA-co-AM) and polyacrylamide PAM. Due to their non-cytotoxicity and hydrophilic properties they have poor cell as well as protein adhesion, and may be used in biological and medical fields.

Polymer brush coatings based on POEGMA188, PAM and 5 types of P(OEGMA-co-AM) with different ratio were created via surface-initiated atom transfer radical polymerization. Thickness and composition were examined by ellipsometry and Time of Flight Secondary Ion Mass Spectroscopy (ToF-SIMS), respectively. To observe surface morphology we investigated polymer brush coatings in dry state at room temperature using Atomic Force Microscopy (AFM). The wettability and protein adsorption of Bovine Serum Albumin (BSA) and Fibrinogen (Fg) were tested at different temperatures.

All brush coatings express temperature-responsive wettability (from hydrophilic to hydrophobic) and antifouling properties. This makes it possible to use them for biomedical purposes.

Keywords: antifouling, polymer brushes, brush coatings, protein adsorption, POEGMA, PAM.



**A USER-FRIENDLY EVALUATION TOOL FOR POINT CLOUD CLASSIFICATION
AND SEGMENTATION****Muhammed Fatih ERDOĞAN**

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ABSTRACT

In recent years, point cloud data has been begun to use in many application areas such as robotic and architecture, thanks to developments in 3D sensing technologies. Simultaneously, researchers proposed a variety of advanced techniques for the classification and segmentation of point clouds. However, evaluation tools have been remained scarce despite producing metric and visual results is a time-consuming process. In this study, we present a user-friendly evaluation tool for point cloud classification and segmentation. We used QT library to build the interface and Point Cloud Library (PCL) to process point cloud data. The interface contains two QVTK widgets to visualize ground truth and test sample and also an information panel, which presents critical messages about the ground truth and test sample. Besides, it shows the commonly used metrics such as precision, recall, F1, IoU, MIoU, and accuracy.

In the classification problem, the number of classes is known in advance, and the points in the test sample must belong to one of these classes. We utilized this information to produce results. On the other hand, evaluating segmentation results is problematic since the number of segments is undetermined. The proposed tool offers two options (automatic and manual) to determine paired segments. The automatic pair-making option takes into account the number of points and bounding boxes of segments, while the manual option allows choosing points by clicking desired segments in the ground truth and test sample.

The evaluation tool also provides a visual result as updating the test sample. The correct results can be stained with the same colors related to classes or paired segments in the ground truth. The visual result can be saved as an image or a point cloud, while the metric results can be stored in Excel datasheets. We plan to publish the tool publicly available for researchers.

Keywords: Evaluation Tool, Classification, Segmentation, Point Cloud Data



**TÜRLERİN ŞÖLENİ: ‘YALNIZLAR İÇİN ÇOK ÖZEL BİR HİZMET’ ROMANINDA
HETEROGLOSSIA**

THE FEAST OF GENRES: HETEROGLOSSIA IN THE NOVEL ‘THE PERFECT
TREATMENT TO CURE YOUR LONELINESS’

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ÖZET

Mihail Mihailoviç Bahtin’in (1895- 1975) tarafından edebiyat eleştirisi sahasına kazandırılan heteroglossia kavramı, hem romanın diğer türlerle bağımlı ortaya koyar hem de romandaki farklı dillere, söylemlere, seslere dikkate çeker. Bahtin’e göre roman, doğası itibarıyla diğer tüm türleri kapsayan ve onları kendi içine alan bir yapıdadır. Heteroglossia, belirli bir ulusun dilindeki farklılıkların romandaki yansımalarını gözler önüne sermeye yardımcı olan bir yöntemdir. Heteroglossianın mevcut olduğu romanlar, türsel karnavallaşmanın izlerini taşır.

Çalışmamızın kuramsal bölümünde Bahtin’in heteroglossia kavramına yer verilmiştir. İnceleme kısmında ise Murat Gülsoy’un ‘Yalnızlar İçin Özel Çok Özel Bir Hizmet’ (20016) adlı romanındaki heteroglot unsurlar açığa çıkarılmıştır. Gülsoy’un söz konusu romanına parodi, pastiş, kolaj, epigraf, anıştırma, gönderme/atıf gibi anlatım teknikleriyle dâhil ettiği görsel, edebî ve edebî olmayan türlerin, romandaki türsel çeşitliliği sağladığı belirlenmiştir. ‘Yalnızlar İçin Özel Çok Özel Bir Hizmet’ romanının, el ilanı, kara sayfa, web sitesi adresi, ölüm raporu, makale, mektup, çeşitli şairlerin şiirlerinden mısralar, başka metinlerden alıntılanan epigraflar ile birbirinden farklı türleri bünyesinde barındırdığı saptanmıştır. Yazar, romanında farklı yaşta, sosyal statüde, eğitim düzeyinde kahramanlara yer verir. Bu durumun romanda çeşitli kesimden insanların dillerin sesi işitilmesine sebep olduğu görülmüştür.

Netice olarak, Murat Gülsoy’un ‘Yalnızlar İçin Özel Çok Özel Bir Hizmet’ adlı eserinin dilsel, türsel ve söylemsel açıdan heteroglot roman kategorisinde yer aldığı tespit edilmiştir.

Anahtar Kelimeler: Bahtin, Murat Gülsoy, Roman, Heteroglossia, Karnaval.

ABSTRACT

The concept of heteroglossia, introduced by Mikhail Mikhailoviç Bakhtin’in (1895- 1975) to the field of literary criticism, both reveals the connection of the novel with other genres and calls attention to different languages, discourses and voices in the novel. According to Bakhtin, the novel encompasses and incorporates all other genres by its nature. Heteroglossia is a method that helps to reveal the reflections of the differences in a particular nation's language. Novels in which heteroglossia is present bear the marks of genre carnivalisation. The theoretical section of this study includes Bakhtin's concept of heteroglossia.

In the review section, the study uncovers heteroglot elements in Murat Gulsoy's novel, ‘The Perfect Treatment to Cure Your Loneliness’ (2016). It was found that visual, literary and non-literary genres that Gulsoy included in his aforementioned novel through narrative techniques such as parody, pastiche, collage, epigraph, allusion, reference/attribution ensured genre



diversity in the novel. It was determined that the novel, 'The Perfect Treatment to Cure Your Loneliness', included different genres such as flyer, a black page, a website address, a death certificate, an article, a letter, lines from the poems of various poets and epigraphs quoted from other texts. The author includes heroes of different age, social status and educational levels in his novel. It was seen that this meant the voices of different people and languages from different social sectors are heard in the novel.

In conclusion, it was found that Murat Gulsoy's 'The Perfect Treatment to Cure Your Loneliness' belongs to the category of heteroglot novels in linguistic, genre and discursive terms.

Keywords: Bahtin, Murat Gülsoy, Novel, Heteroglossia, Carnival.



**JEOLJİK KAYA ÖRNEKLERİNİN ELEMENT İÇERİKLERİNİN CF-LİBS
YARDİMİ İLE BELİRLENMESİ**

DETERMINATION OF THE ELEMENT CONTENTS OF THE GEOLOGICAL ROCK
SAMPLES WITH THE HELP OF CF-LIBS

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ÖZET

Kalibrasyonsuz- Lazer uyarımlı emisyon spektroskopisi (CF-LIBS), herhangi bir kalibrasyon kullanmadan hem kalitatif hem de kantitatif analiz için kullanılabilen popüler bir tekniktir. Bu çalışmada, bir andezitik kaya ve onun gabroik anklavı üzerinde CF-LIBS analizini gerçekleştirerek majör ve minör elementleri belirlenmiş, XRF verileriyle ilişkilendirilmiş ve bu kayalar temel bileşen analizi (PCA) diyagramları kullanarak birbirinden ayrılmıştır. Bununla birlikte bu çalışmada lazer parametreleri karşılaştırılmıştır. 800 nm dalga boyunda bir femtosaniye lazer, plazma üretmek için kaya örneklerine odaklanmıştır. Plazmadan elde edilen spektrumlar QE65000 marka dedektör ile kaydedilmiştir ve spektrumlar NIST verilerine göre yorumlanmıştır. Analiz, bazı laboratuvar koşulları değiştirilerek tekrarlanmıştır İlk durumda, lazere sağlanan güç 0,8 W ve optik fiber ile numune arasındaki mesafe 11 cm dir. Durum 2'de lazere verilen güç 1.720 W'a çıkarılmış ve mesafe 3 cm'ye düşürülmüştür. Lazere verilen gücün artırılması ve fiber ile numune arasındaki mesafenin azaltılmasıyla daha anlamlı piklerin elde edildiği ve daha fazla elementin varlığı görülmüştür

Anahtar Kelimeler: Andezitik kaya, femtosaniye lazer, kalibrasyonsuz- LIBS, PCA



ABSTRACT

Calibration-free Laser-induced breakdown spectroscopy (CF-LIBS) is a popular technic that could be used for both qualitative and quantitative analysis without utilizing any calibration. In this study, CF-LIBS analyses on an andesitic rock and its gabbroic enclave have been executed to determine their major and minor elements and correlated with their XRF data, and these rocks have been discriminated from each other by using principal component analysis (PCA) diagrams. Along with this, here the laser parameters have been compared a femtosecond laser at a wavelength of 800 nm has been focused onto the rock samples to produce plasma. Spectra obtained from plasma have been recorded with QE65000 brand detector and spectra have been interpreted according to NIST data. The analysis has been repeated by changing some laboratory conditions. In the first condition, the power supplied to the laser is 0.8 W, and the distance between the optical fiber and the sample is 11 cm. In condition 2, the power delivered to the laser has been increased to 1.720 W and the distance has been reduced to 3 cm. It has been seen that the presence of more significant peaks and more elements were obtained by increasing the power given to the laser and decreasing the distance between the fiber and the sample.

Keywords: Andesitic rock, calibration-free LIBS, femtosecond laser, PCA



PRİMER VENÖZ ANEVİRİZMALARIN TANI VE TEDAVİSİ
DIAGNOSIS AND TREATMENT OF PRIMARY VENOUS ANEURYSMS

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ÖZET

Primer venöz anevrizmalar, tek bir kanal üzerinden ana venöz yapı ile ilişkili soliter venöz dilatasyon olarak tanımlanır. Venöz anevrizma bir variköz ven segmentinde yer almaması gereken izole bir venöz dilatasyon bölgesidir. Alternatif olarak venöz anevrizmalar, inflamasyona, travmaya veya venöz yetmezliğe sekonder olarak ortaya çıkabilirler. Venöz anevrizmalar yüzeysel veya derin venlerde olabilir. Yüzeysel venöz anevrizmalar, bacağın safen sistemi veya kolun bazilik ve sefalik venöz sistemlerinde oluşur. Derin venöz anevrizmalar, alt veya üst ekstremitelerin derin venlerinde lokalizedir. Genellikle asemptomatiklerdir; ancak hastalarda ödem, şişme ve ağrı dahil vasküler reflü semptomları olabilir. Derin venlerde oluşan anevrizmalar, venöz tromboembolizm riskinin artması nedeniyle yüzeysel venlerde olanlardan farklıdır. Tanıda venografi, manyetik rezonans görüntüleme, bilgisayarlı tomografi (BT); radyonüklid venografi ve renkli venöz dupleks ultrasonografik görüntüleme (CFDI) kullanılmıştır. CFDI günümüzde tercih edilen yöntemdir.

Venöz anevrizmada yaygın olarak bildirilen iki patolojik bulgu, düz kas hücrelerinde azalma ve fibröz bağ dokusunda artıştır. İkinci bir bulgu, lifli bağ dokusunda ve elastik liflerde bir artış olmasıdır. Bazı araştırmacılar, venöz anevrizmaların gelişimsel olduğunu, muhtemelen damar duvarındaki elastik liflerin zayıflığına sekonder olarak geliştiğini ileri sürmektedir. Venöz anevrizmaların ayırıcı tanısında en öncelikli olarak varisler düşünülmelidir. Ayırıcı tanıda hemanjiyomlar, higromalar, inguinal ve femoral herniler de düşünülmelidir. Venöz anevrizmalar, cinsiyetler arasında eşit olarak meydana gelen ve her yaşta görülen alışılmadık vasküler malformasyonlardır. Özellikle kasık bölgesi yakınında bulunuyorsa, kasık veya femoral herni olarak yanlış teşhis edilmiş olabilir. Venöz anevrizma için cerrahi tedavi seçenekleri arasında ligasyon, uç uca anastomoz ile rezeksiyon, interpozisyon greftiyle rezeksiyon ve lateral venorafî ile teğetsel anevrizmektomi yer alır. Alt ekstremitte venöz anevrizmalarıyla ilişkili en ciddi komplikasyon tromboembolizmdir. Derin venöz sistem anevrizmaları, yüzeysel sistemdeki anevrizmalardan daha sık tromboembolizme yol açar. Tedavi edilmeyen venöz anevrizmaların komplikasyonları arasında ödem, ağrı, tromboflebit veya tekrarlayan tromboembolizm ile trombüs oluşumu yer alır.

Anahtar sözcük: Venöz Anevrizma, Venografi, Primer , Tromboembolizm.



ABSTRACT

Primary venous aneurysms are defined as a solitary venous dilatation that communicates with the main venous structure through a single channel. Venous aneurysm is an isolated area of venous dilatation that should not be located in a varicose vein segment. Alternatively, venous aneurysms may arise secondary to inflammation, trauma or venous insufficiency. Venous aneurysms can be found in superficial or deep veins. Superficial venous aneurysms occur in the saphenous system of the lower limb or the basilic and cephalic venous systems of the upper limb. Deep venous aneurysms are localized in the deep veins of the lower or upper limbs. They are generally asymptomatic; however, patients may have symptoms of vascular reflux, including edema, swelling, and pain. Deep venous aneurysms differ from superficial ones due to the increased risk of venous thromboembolism. Venography, magnetic resonance imaging, computed tomography (CT), radionuclide venography and color venous duplex ultrasonographic imaging (CFDI) have been used for diagnosis. CFDI is the method of choice today.

Two common pathological findings in venous aneurysm are decreased smooth muscle cells and increased fibrous connective tissue. A second finding describes an increase or decrease in fibrous connective tissue and elastic fibers. Some authors suggest that venous aneurysms are developmental, perhaps secondary to the weakness of elastic fibers in the vessel wall. Varicose veins should be considered first in the differential diagnosis of venous aneurysms. Hemangiomas, hygromas, inguinal and femoral hernias should also be considered in the differential diagnosis. Venous aneurysms are unusual vascular malformations that occur equally between the sexes and occur at all ages. It may be misdiagnosed as an inguinal or femoral hernia, especially if it's located near the groin area. Surgical treatment options for venous aneurysm include ligation, resection with end-to-end anastomosis, resection with interposition graft, and tangential aneurysmectomy with lateral venoraphy. The most serious complication associated with lower extremity venous aneurysms is thromboembolism. Deep venous system aneurysms more often cause thromboembolism than the superficial system. Complications of untreated venous aneurysms include edema, pain, thrombophlebitis, or recurrent thromboembolism and thrombus formation.

Key words: Venous Aneurysm, Venography, Primary, Thromboembolism.



YEŞİL MİMARİ YAPILAR

GREEN ARCHITECTURAL BUILDINGS

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ÖZET

Gelişen teknoloji ve değişen dünyaya uyum sağlayan insanların zamanla ihtiyaçları da bu doğrultuda değişmiştir. Kullanıcı mekan içinde doğal yaşamdan kopmadan hayatına devam etmek istemektedir. Yapıların tek başına değil toplu şekilde değişime uğrayarak kentlerde büyük ölçüde yer almaktadırlar. Kullanıcı sağlığı ve çevre sağlığı bakımından yeşil mimari yapıların multidisipliner bir tasarım anlayışıyla ortaya çıktığı görülmektedir. Yeşil mimaride amaç çevreyi canlıyı, hava, su ve toprağı doğal enerji kaynakları kullanarak korumaktır. Belirli standartlar içerisinde oluşan yeşil mimari binaların geleceğe yön vermekte olduğu anlaşılmaktadır. Yapı içerisinde uygulanan bitki örtüsü ile peyzaj düzenlemesi doğal dengeyi bozmadan insanlarla yapıların ve doğal yaşamın bir arada olabileceğini göstermektedir. Yeşil mimari yapılarda sürdürülebilir malzemeleri kullanılarak canlıların hem de yapının ömrünü uzattığı görülmektedir.

Anahtar kelimeler: Yeşil mimari, sürdürülebilir yapılar, tasarım kriterleri

ABSTRACT

The needs of people who adapt to the developing technology and the changing world have changed over time in this direction. The user wants to continue his life without breaking away from the natural life in the space. They are located in cities to a large extent by changing the buildings not alone, but collectively. It is seen that green architectural buildings emerged with a multidisciplinary design approach in terms of user health and environmental health. The purpose of green architecture is to protect the environment, living, air, water and soil by using natural energy resources. It is understood that the green architectural buildings formed within certain standards give direction to the future. The vegetation cover and landscape arrangement applied in the building show that people and buildings and natural life can be together without disturbing the natural balance. It is seen that the use of sustainable materials in green architectural structures extends the life of living things and the building.

Keywords: Green architecture, sustainable buildings, design criteria



**YEM BİTKİLERİNDE BULUNAN TOKSİK MADDELERİN KABA YEM KALİTESİ
AÇISINDAN DEĞERLENDİRİLMESİ**

THE EVALUATION IN TERMS OF FORAGE QUALITY OF TOXIC SUBSTANCES
FOUND IN SOME FORAGE CROPS

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ÖZET

Yem bitkileri kalite kaba yemin en önemli kaynaklarından birisidir. Hayvan beslemede kaliteli kaba yemler ucuz bir kaynak olması, geniş getiren hayvanların rumen mikro flora ve faunasının gelişimi için gerekli mineral ve vitaminlerce zengin olması, protein, yağ ve selülozu içermesi, hayvanların performansını iyileştirmesi ve kalite hayvansal ürün alınmasında vazgeçilmezdir. Yem bitkileri; yoğun olarak, erken/geç dönemde, yaş, bozulmuş, öğütülerek, yalın şekilde gibi kullanılmaları durumunda, hayvanlarda bazı metabolik sorunlar olarak ortaya çıkabilmektedir. Bu olumsuzluklar yem bitkisinin türünden, yem bitkisinin kalitesinden, içerisindeki toksik maddenin yapısı ve miktarından, hayvanın cinsi ve yaşından kaynaklanabilmektedir. Yem bitkilerinin iyi tanınması ve hayvanlara yedirildiğinde nasıl sonuçlarla karşılaşılacağı iyi bilinmelidir. Yem bitkilerinde bulunan ve hayvan sağlığına zarar veren toksik madde/maddeleri içeren bitkilerin oranı yem rasyonlarında belirtilen sınır değerlere göre hazırlanmalı ve kontrollü şartlar altında yedirilmelidir. Bitki zehirlenmelerinden kaynaklanan ve belirtileri yukarıdaki bölümlerde anlatılan hayvanların gösterdikleri fizyolojik tepkiler bilinmeli ve olabildiğince erken harekete geçerek gerekli müdahaleler yapılmalıdır. Toksik etki yapan bitkilerin etki mekanizmasına göre zararları en aza veya zararsız hale getirilebilecek yollar kullanılarak yem kalitesi düşürülmeden istifade edilmelidir. Hayvan sağlığı ve hayvansal kaliteli kaba yem üretim açısından, bazı yem bitkilerinin zararlarının en düşük düzeye indirilmesinde izlenecek ilk yol, bu bitkilerin içeriklerinin tanınması yönünde olmalıdır. Bu derlemede; kültürü yapılan önemli yem bitkilerinin bünyelerindeki toksik etki yapan bazı maddelerin, kaba yem kalitesine etkilerinin incelenmesi amaçlanmıştır.

Anahtar Kelimeler: Yem Bitkileri, Kaba Yem, Toksik Madde, ODAP, Saponin

ABSTRACT

Forage crops are one of the most important sources of quality roughage. In animal nutrition, quality roughages are indispensable for being a cheap source, being rich in minerals and vitamins necessary for the development of rumen micro flora and fauna, containing protein, fat and cellulose, improving the performance of animals and purchasing quality animal products. Forage crops; if they are used intensively, such as in the early / late period, age, spoiled, ground, lean, some metabolic problems in animals may occur. These negativities may arise from the



species of the forage plant, the quality of the forage plant, the structure and amount of the toxic substance in it, the type and age of the animal. It should be well known about forage crops and what results will be encountered when fed to animals. The ratio of the plants containing toxic substances / substances that are found in the feed plants and harmful to animal health should be prepared according to the limit values specified in the feed rations and should be fed under controlled conditions. The physiological reactions of animals caused by plant poisoning and the symptoms of which are described in the sections above should be known and necessary interventions should be made by acting as early as possible. Depending on the mechanism of action of toxic plants, it should be benefited from reducing the quality of feed by using ways that can minimize or harmless harmful effects. In terms of animal health and animal quality roughage production, the first way to minimize the damages of some feed plants should be in the direction of the recognition of the contents of these plants. The purpose of this review is; understanding the effects of toxic ingredients on the quality of roughage in some important forage crops cultivated and presenting the current literature on this subject.

Keywords: Forage Crops, Roughage, Toxic Substance, ODAP, Saponin



YEREL YÖNETİMLERDE YOKSULLUK YÖNETİMİ
POVERTY MANAGEMENT IN LOCAL GOVERNMENTS

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ÖZET

Yoksulluk, geçmişten günümüze yalnızca gelişmemiş ya da gelişmekte olan devletlerin problemi olmayıp asırlar öncesinden süregelen ve gelişmiş olan ülkeleri de ilgilendiren çok boyutlu problemler kümesidir. Yoksulluk, ele alınırken yalnızca ekonomik olarak değerlendirmek yeterli değildir. Yoksulluk, sosyal, psikolojik, hukuksal, etnik ve siyasi gibi farklı etkenlerden oluşan sorundur. Bundan dolayı yoksulluğa etki eden tüm unsurlar bir bütüncül bakış açısı ile ele alınmadığı için yoksulluk tanımlamaları birçok zaman tam anlamını bulamamıştır. Yoksulluk, küresel bir sorun olarak ele alınsada, var olan problemler ve çözüm stratejileri açısından yerel sorundur.

Yoksulluk yönetimi, yoksulluğun nedenleri ve yoksulluktan kaynaklı sorunların çözümlenmesine yönelik politikalar geliştirilerek yoksulluğun sebep olduğu sonuçların en aza indirgenmesini sağlayacak çalışmalar ile ilgilenmektedir. Yoksulluk yönetiminde, yerel yönetimlerin sahip olduğu kaynaklar önem arz etmektedir. Bu kaynaklar bütçe, insan kaynağı, zaman yönetimi, para, bilgi ve fiziksel kaynaklardır.

Yoksulluğun önlenmesi için yerel yönetimlerin faaliyetlerinin geliştirilmesi önemli bir husustur. Yerelde gelir eşitsizliğinden kaynaklı problemlerin oluşması buna bağımlı oluşan sorunların önlenmesinde yerel ekonomik kalkınma kaynaklarının etkili olduğu literatürünü desteklemektedir. Bu nedenle, yoksullukla mücadele stratejileri geliştirilmesinde yerel yönetimlerin yönetsel mekanizmalarının söz sahibi etkinliği olması ve çalışmalarının desteklenmesini önemli kılmaktadır.

Sonuç olarak, bu çalışmada literatür taranarak yerel yönetimlerde yoksulluk yönetimi ele alınmış olup yoksulluk kavramı, yoksulluk yönetimi, yoksulluk ve sosyal hizmet ilişki ve yerel yönetimlerde yoksulluk yönetimi kavramları tanımlanmış ve geliştirilmesi gereken alanlara değinilmiştir.

Anahtar Kelimeler: Yoksulluk, Yerel Yönetimler, Yerelde Yoksulluk Yönetimi, Sosyal Hizmet

ABSTRACT

From past to present poverty has been a multidimensional group of problems concerned not only undeveloped or developing states but also developed countries as an ongoing question for ages. It is not enough to handle poverty just economically. Poverty is a question consisted of social, psychological, legal, ethnical and political factors. Therefore all the elements effecting



poverty weren't handled holistically, mostly the exact meaning of definitions of poverty weren't able to be found. Although poverty is handled as a global question it is a local question in terms of existing problems and solution strategies.

Poverty management is interested in reasons of poverty and studies which will provide to minimize the results caused by poverty via improving policies intended for resolving questions caused by poverty. Resources of local governments are important in poverty management. These resources are budget, human resource, time management, money, information and physical resources.

It is an important point to improve local governments' activities for preventing poverty. The problems emerging due to income inequalities within the local scope support the literature suggesting that the local economical development resources are effective in preventing questions related to those inequalities. Consequently, the effectiveness of managerial mechanisms of local governments and supporting their efforts are important with regard to developing strategies to struggle with poverty.

As a result in this study by scanning the literature and handling the poverty management in the local governments of the concept of poverty, poverty management, poverty and its relationship with social work have been defined the concept of poverty management in local governments and have been touched on the area to be improved.

Keywords: Poverty, Local Governments, Local Poverty Management, Social Work



**A DECISION PROCEDURE TO CONTROL COVID-19 CROSS-INFECTION IN
HEALTHCARE FACILITIES**

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ABSTRACT

As the World Health Organization defines Coronavirus disease (COVID-19), it is an infectious disease caused by a newly discovered coronavirus started from east of Asia in 2019. The noticeable crisis these days is the COVID-19 pandemic and one of the sensitive areas for this virus cross-infection is reported to be healthcare facilities (HFs), especially hospitals. HFs are expected to be safe for their patients and their personnel. The virus can be transmitted in HFs among patients and personnel as a hospital-acquired infection also known as nosocomial infection (NI). NIs are a serious problem of HFs and they involve many patients and HF personnel, annually. So it is important to propose a solution to prevent and/or decrease the level of COVID-19 transmission in HFs. Because the virus can be transmitted so easily and its prevention is hard to manage. One of the ways to increase the level of transmission of COVID-19 is the HFs personnel which cause traffic among wards. In this paper, researchers tried to decrease this infection problem by use of a Multiple Criteria Decision Making procedure, from operations research, with the aim of identification of risky wards based on the existing traffic. A simplified version of this proposed procedure is simulated in a hospital as feasibility proof. It is expected that the proposed procedure reduces the COVID-19 cross-infection in HFs.

Keywords: Decision Making, Nosocomial infection, Healthcare facilities, COVID-19.



**STUDYING THE FUTURE URBAN EXPANSION IN THE CITY OF ELMA, USING
GEOGRAPHIC INFORMATION SYSTEMS AND REMOTE SENSING
TECHNIQUES**

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ABSTRACT

In this study, we aim to shed light on the urban development of the city of El Eulma and assess its impact on the environment, and then determine the spatial suitability for this expansion between 2020-2040. In addition, we produce a set of maps that can contribute to direct urban expansion towards the most appropriate areas and thus avoiding prejudice to agricultural lands as well as areas exposed to natural hazards in order to achieve appropriate and sustainable urban expansion. For that, we use spatial analysis in geographic information systems (GIS) and remote sensing techniques and the data provided to us through Exploiting satellite images.

Like most of the Algerian cities, the city of El Eulma suffered from unorganized urban expansion at the expense of agricultural lands, as well as areas exposed to the risk of floods and landslides, as environmental factors were not taken into account in the planning process of land use. In addition to the preparation and reconstruction tools have been unable to keep pace with these Expansions and control them. Thence we propose to assess the spatial suitability for urban expansion in the city of Elma through several stages. First we began by identifying the criteria and influencing factors that will be taken into account to determine the spatial suitability model for urban expansion in the field of study, and to classify the spatial data for these factors using the spatial analyst in the (Arcmap) environment in geographic information systems. Then the suitability of these influencing factors is tested by giving relative values to each factor according to the degree of its importance and its impact based on the Expert Choice program under the Hierarchical Analysis Process Method (AHP). The results analysis show that the best suitable areas for the expansion of the city of Elma are concentrated on its eastern side, in addition to the presence of some empty pockets within the urban area and their conformity with the standards adopted in the suitability for construction. We also found out that the space of these vacant pockets, obtained through the results of our study, is sufficient to meet the demand for the property necessary for the expansion of the city in future.

Key words: Urban Expansion, Geographic Information Systems, Spatial Analysis, Remote sensing



ŞƏXSİYYƏTİN FORMALAŞMASINDA DEMOQRAFİK AMİLLƏRİN ROLU**THE ROLE OF DEMOGRAPHIC FACTORS IN SHAPING PERSONALITY****Dos. N.C.Abdinova**

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Demografiya müəyyən bir dövrdə bir qrup insan populyasiyasının həcmi, böyüməsini və xüsusiyyətlərini və ya onun təkamülünü araşdıran sosial elmdir. Yunan mənşəlidir (demo- “şəhər, əhali”, qrafika- “təsvir, öyrənmə” deməkdir) və “əhali araşdırması” kimi tərcümə edilir. Bunlar, məsələn, doğuş, ölüm və miqrasiya ilə əlaqəli statistik tədqiqatlardır.

Şəxsiyyətin formalaşmasında demoqrafik amillərin rolu böyükdür. Demoqrafik amillərin təsiri nəticəsində uşağın sosial inkişafında köklü dəyişiklər baş verir. Boşanma, təkrar niğah, miqrasiya və s. nəticəsində uşağın yalnız valideynlərinə, bacı-qardaşlarına, qonşulara, qohumlara, yoldaşlarına qarşı deyil, həm də özünə qarşı da münasibəti dəyişir. Beləliklə də müxtəlif demoqrafik amillərin təsiri nəticəsində uşağın sosial inkişafda yeni mənfi xüsusiyyətlər meydana çıxır ki, bu da ailə tərbiyəsində ciddi çətinliklər yaradır. Nəticədə isə bəzi valideynlərin pedaqoji biliyinin az olması, tərbiyə üsullarını kifayət qədər bilməməsi ailə tərbiyəsində meydana çıxan çətinliklərin öhdəsindən gələ bilməməklə nəticələnir.

Yuxarıda qeyd olunduğu kimi uşağın şəxsiyyət kimi formalaşmasında demoqrafik amillərin rolu böyükdür. Ailədə doğru həyat təzi yaşanmadıqda, uşaq və yeniyetmələrin ata-ana ilə münasibətləri pozulduqda demoqrafik amillər ailə münasibətləri vasitəsilə şagird şəxsiyyətinin formalaşmasında neqativ təsir göstərməyə başlayır.

Ailədə baş verən qarşılıqlı münasibətlər nəticəsində yaranan neqativ meyillər təkcə valideynlərlə uşaqlar arasında deyil, həm də bacı ilə bacı, bacı ilə qardaş, qardaş ilə qardaş arasındakı münasibətlərin də pozulmasına səbəb ola bilər. Bu zaman ailədə tez-tez dava, təhqir, küsmə halları ilə rastlaşan uşaq və yeniyetmələrin ünsiyyət tələbatı ödənilmədiyindən onlar “küçə qruplarına” qoşularaq bu tələbatlarını orada ödəyirlər. Onlar özlərinin bütün asudə vaxtlarını yalnız həmin qruplarla keçirirlər. Bunun nəticəsində də şagirdin təlimə münasibətində tədrisən ciddi dəyişikliklər əmələ gəlməyə başlayır.

Şagirdlərin təlim prosesində geridə qalması həm dövlət, həm valideynlər, həm də şagirdin özü üçün çox ziyandır. Çünki geridə qalma bir çox hallarda şagirdlərin özlərində müvəffəqiyyətlə oxuya bilmə inamını azaldır, onları təlimdən soyudur.

ABSTRACT

Demography is a social science that studies the size, increasing and features of a human population or its evolution over the certain period of time. This notion has the Greek origins



("city, population," means "description, study") and translates as "study of the population." These are statistical analyses related to birth, death and migration.

The role of demographic factors in shaping personality is huge. The significant makeover takes place in the social development of the child. The child changes his attitude not only towards his parents, siblings, neighbors, relatives, mates, but also towards himself as a result of divorcing, remarriage, migration, etc. Thus, the new negative properties, are originated due to the different demographic factors, have a great influence on the social development of child, which lead to creating difficulties on child-rearing. Consequently, some parents can not solve difficult tasks related to child-rearing, in view of the gap of pedagogical education and having little information about the methods of relevant task.

As stated above, the role of demographic factors in shaping personality of child is huge. The geographic factors start to affect via family relationship on shaping personality of pupil negatively, if members of family do not follow a good life, child and adolescents have problems in relationship with parents. Negative trends in the family can lead to disruption not only between parents and children, but also between sister and sister, sister and brother, brother and brother.

Hence, child and adolescents, who often face quarrel, insult, grievance, due to communication deficiency, join to "street groups" and satisfy their needs there. They spend their rest of time only with them. Consequently, serious changes gradually start to emerge with pupil's attitude to tuition. The gap in education process is harmful both government, parents and pupil. Because this case often reduces the confidence and desire to study.



**IMPACT OF THE LORENTZ FORCE ON COMBINED BUOYANCY-
THERMOCAPILLARY CONVECTION IN A VERTICAL CYLINDRICAL
ANNULAR CAVITY OCCUPIED WITH HYBRID NANOFLUID**

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ABSTRACT

This article numerically examines an effect of buoyancy and thermocapillary convection in a porous annular enclosure formed by two concentric cylinders filled with Ag-MgO/Water hybrid nanofluid with the effects of magnetic fields in the radial and axial directions. The inner wall is maintained at a hot temperature and the outer vertical wall is considered to be cold. Adiabatic condition is assumed for top and bottom horizontal walls. The Brinkman-extended Darcy model has been adopted in the governing equations. To solve the governing Navier Stokes equations, the finite difference scheme is used. In terms of streamlines, isotherms, average nusselt number and velocity profile, the numerically simulated outcomes are described in the annulus for numerous governing parameters. Our results show that the rate of thermal transport augments with an enhanced nanoparticle volume fraction regardless of other parameters except for a higher value of axial magnetic field. Also, it is observed that, an enhancement in Marangoni number escalates the profile of average nusselt number. It is found that the suppression of thermal transfer and fluid flow in the tall annulus is mainly due to the magnetic field acting along radial direction whereas in shallow annulus, the magnetic field in axial direction profoundly affects the flow field and thermal transfer.

Key Words: Thermocapillary convection, Cylindrical annulus, Hybrid nanofluid, Radii ratio



**FLOW ANALYSIS OF A SUPERSONIC BELL NOZZLE USING THE
CHARACTERISTIC APPROACH**

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ABSTRACT

Propulsion supersonic nozzles use the expansion of the combustion gases from the stagnation pressure generated in the combustion chamber to generate thrust. Their contour accelerates them from almost no velocity to supersonic speeds. Bell-shaped nozzles are nowadays the most common used geometries. They generate substantial thrusts in shorter lengths and consequently lesser mass compared to their conical counterparts. Their specific contour tends to direct the flow towards the axis of symmetry thus minimizing thrust losses due to divergence.

The present work simulates the supersonic flow field resulting from the expansion of the combustion gases (simulated by air) from the stagnation pressure and temperature of 30bars and 330K to atmospheric conditions. The method of characteristics is applied to design the supersonic section as a second-order polynomial and computes the characteristic curves or Mach lines from the throat to the exit section. This was performed by a home-developed computer program that applies the method of characteristics in two dimensions.

The results obtained in terms of pressure, Mach and temperature distributions within the initial ideal contour showed a smooth expansion of the gases. This ideal contour was further simulated in 2D and the results obtained in terms of developed thrust, thrust coefficient, effective velocity and specific impulse compared to those available in the specialized literature. Good agreement was achieved between the several components of the study. The ideal contour was further truncated to 20% of its length (TIC) with the aim of gaining mass without losing too much thrust. The results in terms of pressure and Mach are again presented.

Keywords: Supersonic Nozzles, Design, Method of Characteristics, TIC, Propulsion



**BACTERIAL PLASTICS: PRODUCTION, STRUCTURE, MOLECULAR BASIS
AND APPLICATION****Dr. Nazia Jamil**

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ABSTRACT

Escalating problem of environmental pollution interests have been shifted to the development of bioplastics because they provide dual benefits of utilizing the waste and cost-effective production of biodegradable microbial bioplastic. Polyhydroxyalkanoates (PHAs) are a class of biodegradable plastic that are synthesized intracellularly by different bacteria. Several inexpensive carbon substrates such as molasses, lauric acid, whey, cellulose, plant oils and hydrolysates of starch can be excellent substrates for bacteria to produce PHAs, which could lead to significant economic advantages. PHAs have emerged as potential useful materials for different applications owing to their unique properties. The versatility of PHAs in terms of their non-toxic degradation products, biocompatibility, desired surface modifications, wide range of physical and chemical properties, cellular growth support, and attachment without carcinogenic effects have enabled their use as in vivo implants. Microbial production of PHAs also provides the opportunity to develop PHAs with more unique monomer compositions economically through metabolic engineering approaches. At present, it is generally established that the PHA monomer composition and surface modifications influence cell responses. PHA synthesis by bacteria does not require the use of catalyst (used in the synthesis of other polymers), which further promotes the biocompatibility of PHA-derived polymers.

We have stock of more than hundred bacterial strains which are able to produce Biodegradable plastic. Biodegradable plastic was extracted from bacterial strains, which were isolated from different environments of Pakistan. All the strains were analyzed for resistant markers. Extraction of PHA was done by different methods. PCR base strategy was used to amplify *Pha* biosynthesis operon. These studies are benefitting from the fact that the PHA polymer presents a great variety of characteristics in terms of its biodegradability, elasticity, non-toxicity, biocompatibility, ability to function as nanoparticles, and possibility for tailor-made physical-chemical properties.

Keywords: Bioplastics, Biopolymers, polyhydroxyalkanoates, renewable carbon sources, biocompatibility, medical implantations.



THERMOELECTRIC GENERATORS, SOLAR CELLS, AND THERMAL COLLECTORS FOR SOLAR COGENERATION: A REVIEW OF RECENT RESEARCH TRENDS

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ABSTRACT

The research concerning solar cogeneration focuses on the advantages of improved electrical energy yield from photovoltaic modules as a result of reducing their surface temperatures and the utilization of excess heat as useful heat gain. Photovoltaics combined with cooling channels or a thermal component are known as photovoltaic thermal (PVT) collectors. A solid-state device can also be used to absorb the excess heat from the photovoltaic module to produce electrical energy, it is known as a thermoelectric generator (TEG). This device capitalizes on the difference in temperature between its hot and cold sides, the hot being connected to the rear side of the PV, while the cold can be connected to a heat sink or a cooling channel. This paper provides an overview of this technology and its recent trends with regards to the variable designs and design considerations along with the common adopted procedures and methodologies. The main components of this system which are the PV module, TEG and cooling channel are described as separate entities and as a whole unit – as a solar cogeneration system. It is found that all studies show an improvement in the PV module's energy conversion efficiency along with the added benefits of having cogeneration of heat and electrical power.

Keywords: Thermoelectric generators; solar cell; surface temperature; energy conversion efficiency; cogeneration



SIMULATING THE FOUR POINT BENDING EXPERIMENT OF THE RC BEAM USING FEM

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ABSTRACT

Reinforced concrete is used widely for the construction of buildings and infrastructure projects. These structures usually undergo severe loadings which push their structural members beyond the elastic limit. This inelastic response includes phenomena such as yield of the rebars and crack formulation. These phenomena lead both to capacity loss and large deformations, including crack propagation. This performance is quite difficult to be simulated in FEM programs. For this reason, numerous modeling techniques have been emerged during the last decade, such as the the XFEM method and the embedded elements. In present work, different numerical simulations of four-point-bending experiments of RC beams are performed and comparison of the results of different models with the experimental ones is made. The aim is to conclude to the optimum FE model parameters for the reproduction of the experimental results (figure 1) within a reasonable computer time effort. Moreover, different rebar scenarios are considered in order to estimate several design parameters to bearing capacity of the beam.

Keywords: RC, FEM, Damage plasticity

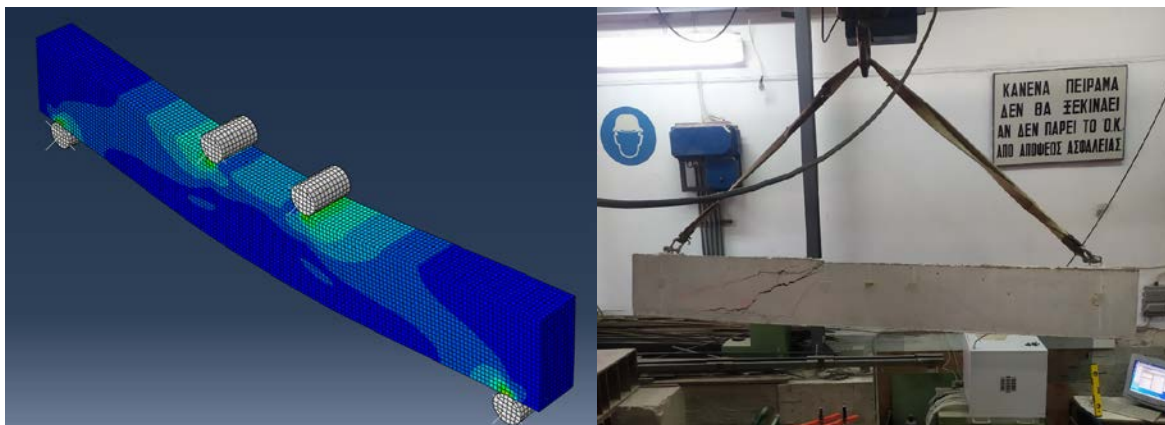


Figure 1: Simulation of the four point bending experiment in Abaqus (left). The translation of the RC beam in the concrete lab (right)



REAL TIME IOT BASED CROP PROTECTION AND SOIL MAINTENANCE

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ABSTRACT

Nowadays IOT is implemented in almost every field. IOT in agricultural field plays a major role. It is very easy to monitor and manage the water flow. The moisture level in the soil is measured using moisture level sensor. When the soil is dry and reaches the threshold point, the Cloud Service Brokerage triggers the relay to start the motor. Once the motor starts to pump, it pumps the water from a storage tank and the water flows to the field. pH sensor senses the pH level of the water. The sensor will check pH level of the water whether it is alkaline or acidic. DHT sensor is used to measure the humidity of the environment. Our main objective of this system is to maintain and manage the optimised moisture content in the soil, pH of the water and to have a knowledge about the humidity content in the environment.

Keywords: Internet of Things, soil moisture sensor, DHT sensor,PH sensor, arduino,Cloud Storage Brokerage, Crop protection soil maintainence.



TURKEY'S EXPORT COMPETITIVENESS IN THE LOW, MEDIUM AND HIGH TECHNOLOGY GOODS: AN ANALYSES FOR THE TERM 2000-2019**Dr. Öğr. Üyesi Kazım SARIÇOBAN**

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ABSTRACT

The purpose of this study is to determine Turkey's export specialization and competitiveness in products that require low, medium, and high technology. To do so, firstly, product groups are identified. In the SITC Rev. 3 (Standard International Trade Classification, Revision 3) classification, there are 260 3-digit group of goods in total. Among these, the product groups that require low, medium and high technology determined by WITS, the database of the World Bank, are selected. In the SITC Rev. 3 classification, 45 product groups requiring low technology, 55 product groups requiring medium technology and 18 product groups requiring high technology from 3-digit 260 product groups are used. 20-year export and import data of these product groups between 2000 and 2019 are obtained from the UN Comtrade database in US Dollars. In the study in which the Revealed Comparative Advantages method is used, analyses are made with the Relative Trade Advantage (RTA) index developed by Thomas L. Vollrath (1991). According to the findings, Turkey has shown global competitive advantage and specialisation in the 25 low-tech product groups out of the 45. In the low technology classification, "659- Floor Coverings etc." are the product groups with the highest RTA value by 12.09, and the "851- Footwear" product group with the lowest RTA value by 0.09. It is found that Turkey has a moderate competitive advantage in the 17 of the 55 product groups that require medium technology. In this classification in Turkey has its highest value "812- Plumbing, Sanitary, Eqpt. etc" producer group by 5.78 RTA value while its lowest in "721- Agric. Machines, Ex. Tractr" commodities by 0.01 RTA value. Finally, Turkey has been able to achieve a competitive advantage in only 2 out of the 18 products that require high technology in a global sense. These are "761-Television Receivers etc." with a RTA value of 3.42 and "771- Elect Power Machny. Parts" with a RTA value of 0.35. To sum up, Turkey has a competitive advantage and specialisation in the 55.6 per cent of all product groups that require low technology while 31 per cent of product groups that require medium technology and only 11.1 percent of high technology requires product in a global sense.

Keywords: Low-, Medium-, High-Tech Export, Competitiveness, Turkey

**AİLE VE SOSYAL HİZMETLERLE İLGİLİ KURUMLARIN YÖNETSEL YAPISI
VE PROJELERİ ÜZERİNE BİR DEĞERLENDİRME**

AN EVALUATION ON THE MANAGERIAL STRUCTURE AND PROJECTS OF
ORGANIZATIONS RELATED TO FAMILY AND SOCIAL SERVICES

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ÖZET

İnsanlar hayatlarını sürdürürken bazı dönemlerde sosyoekonomik çalkantılarla mücadele edebilmektedir. Bu çalkantılar aileleri olumsuz etkilemekte ve dezavantajlı duruma düşürebilmektedir. Ailelerin bu dezavantajlı durumlardan kurtulmalarında veya durumlarının iyileştirilmesi konularında ulusal düzeyde sosyal politikalar ve stratejiler Aile, Çalışma ve Sosyal Hizmetler Bakanlığı'na bağlı kuruluşlar tarafından geliştirilmektedir.

Bu çalışmanın amacı ailelere sosyoekonomik ve psikososyal destek sağlama konusunda insanlara destek olmayı hedefleyen Aile, Çalışma ve Sosyal Hizmetler Bakanlığı'nın yönetsel yapısı ve bağlı kuruluşlarca yürütülen projelerin genel çerçevesinin değerlendirilmesidir.

Bu bağlamda Aile, Çalışma ve Sosyal Hizmetler Bakanlığı'nın yönetsel yapısı genel çerçevede değerlendirilmiş ve yürütülen projeler ve içerikleri hakkında değerlendirmeler yapılmıştır.

Aile, Çalışma ve Sosyal Hizmetler Bakanlığı yönetmiş olduğu ve desteklediği projeler ile toplumsal olgulara müdahale imkânını geliştirmektedir. Bu projeler aktif olarak; Çalışma ve Sosyal Güvenlik, Aile ve Toplum Hizmetleri, Engelli ve Yaşlı Hizmetleri, Kadının Statüsü Genel Müdürlüğü ve Strateji Geliştirme Başkanlığı birim başkanlıkları tarafından yürütülmektedir. Aile, Çalışma ve Sosyal Hizmetler Bakanlığı'nın tek elden yürütmüş olduğu bu projelerin dışında proje destek programlarının yürütülmesi konusunda destek olan birim Sosyal Yardımlar Genel Müdürlüğü'dür. Bu birim ile gerek sivil toplum kuruluşlarına gerekse farklı kamu kuruluşlarına ilgili şartları sağlamaları durumu gözetilerek proje destek imkânı sunmaktadır. Proje içerikleri değerlendirdiğinde daha çok aile, engelli, yaşlı, kadın, çalışma ve sosyal güvenlik konularında projeler yapıldığı görülmüştür.

Anahtar Kelimeler: Aile ve Sosyal Hizmetler, Sosyal Sorumluluk, Projeler.

ABSTRACT

While maintaining their lives, people can struggle with socioeconomic turmoil in some periods. Because of these turmoils, families can be negatively affected and be at a disadvantage. National social policies and strategies for families to get rid of these disadvantageous situations or to improve them are developed by the organizations affiliated with the Ministry of Family, Labor and Social Services.



The aim of this study is to evaluate the managerial structure of the Ministry of Family, Labor and Social Services and the general framework of the projects carried out by affiliated organizations, which intends to support people in terms of providing socioeconomic and psychosocial support to families.

In this sense, the managerial structure of the Ministry of Family, Labor and Social Services has been evaluated within the general framework, and evaluations have been made about the projects and their contents.

The Ministry of Family, Labor and Social Services improves the possibility of intervention in social facts with the projects it manages and supports. These projects are actively carried out by the Directorate General of Labor and Social Security, Directorate General for Family and Community Services, Directorate General for Disabled and Elderly Care Services, Directorate General on Status of Women and Department of Strategy Development. Apart from these projects carried out by the Ministry of Family, Labor and Social Services exclusively, the unit assisting the execution of project support programs is the Directorate General of Social Assistance. It provides project support opportunities to either non-governmental organizations or different public institutions by the means of that unit by observing their fulfillment of the relevant conditions. When examining the contents of the project, it is seen that projects were generally carried out related to the subject matters of family, disabled, elderly, women, labor and social security.

Keywords: Family and Social Services, Social Responsibility, Projects.



IMAGE CAPTIONING USING CNN ALGORITHM

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ABSTRACT

With the increase in deep learning the combination of computer origin and natural language process has attracted great attention over the past few years. Image Illustration Computer is a representative of this field which teaches to use one or more sentences to understand the visual content of an image. Meaningful interpretation of high-level image semantics Generational process should be the recognition of not only the visual object but also the state, the ability to examine the properties, and the relationship between these objects.

Although image sliding is a complex and difficult task, a lot of researchers have made significant progress, mainly describe three image sliding methods using deep neural networks: Recurrent Neural Network (RNN) - for standardizing text quality and evaluating the performance of a machine translation system to translate from one natural language to another. The proposed model is evaluated using performance by previous performance determination types, Major models.



UNDERSTANDING THE TRIP CHARACTERISTICS OF THE PHYSICALLY CHALLENGED PEOPLE IN A TRADITIONAL NIGERIAN CITY

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ABSTRACT

The paper aims at examining the trip characteristics of the physically challenged people (PCP) in Ibadan metropolis. The specific objectives are to examine: the socio-economic and demographic characteristics of the PCP; the dynamics of impairment of the PCP and the trip characteristics of the PCP in Ibadan metropolis. Data were obtained from both primary and secondary sources. A total of 128 questionnaires were administered using convenience and snowballing sampling techniques. Findings revealed that majority (60.9%) of the PCP were youth and earn below N30,000 (\$83.6) monthly (the national minimum wage) despite considerable percentage were gainfully engaged. Findings further revealed that 60% of the PCP had leg-related injury with majority having to contend with the impairment for over 10 years. It was further established that trips embarked upon by the PCP were home-work in nature. 41.9% of the PCP preferred taxis over other modes while 49% rated their choice of transport mode as good. Almost 60% embarked on trip frequently, 53.7% experienced cancellation of trips occasioned by lack of access to public transport. The distance covered for most trips by the PCP was less than 1km whereas the wheel chair was used by majority get to the nearest bus-stops. About 60% spent average of 1 hour per trip which cost almost 50% above N250 (\$0.70). The study recommends that the government should improve on support facilities that would aid the ease of mobility and accessibility of the PCP within Ibadan metropolis beyond the workplace; give cost rebates to the PCP considering that majority are low-income earners; and integrate the needs of the PCP into transportation policy of the city.

Keywords: Ibadan metropolis; Nigeria; Physically challenged people (PCP), Transportation planning, Trip characteristics



PROJECT BASED LANGUAGE LEARNING: A BOON TO THE ONLINE MODE OF EDUCATION

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ABSTRACT

English language learning and teaching has been transforming tremendously for the last four decades. Project Based Learning(PBL) method is one such development which has attracted both the learners and the teachers in the online pedagogy. This study is based on an action research with the focus on PBL , involving dynamic online classroom approach with two groups of students, pursuing UG Law and English.

The research was designed under the paradigm of Action Research. The target learners were observed for an extended period of time during the online classes. The researchers monitored the creative writing skills of the students' by administering guided tasks on creative writing. A total sample of 30 students' from the UG course was chosen for the study after administering diagnostic test. The baseline assessment was carried out to explore the pre-intervention writing skill score of the students prior to the intervention cycle.

Analysis of this study clearly indicates that there is a marked improvement in both the groups of students involved in the PBL. Law students excelled in use of logical legal phrases and vocabulary and the literature and language students showed expertise in use of literary terms and creative linguistic vocabulary. This research paved ways to explore use of creative writing in students from different disciplines. PBL was carried out systematically online, the research proves that the intervention by researchers had resulted in a marked difference and improvement in creative writing skills. There was 92.5% improvement in the post test scores, based on the rubrics pertaining to the evaluation, after the PBL project completion.

Key words: Project Based Learning (PBL), self-evaluation, Rubric based evaluation



GRAPH DECOMPOSITION FOR SECURE COMMUNICATION**M. Yamuna*, K. Karthika**

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Cryptography is a vital part of today's information system, which includes emails to mobile communication, from web access to digital money. The need for information security has taken a change from physical and administrative documents to safety of data while in transit. From email to digital cash to cellular communication, cryptography plays a crucial role. Most of them involve strong mathematical algorithms and its implementation on a hardware or software. Graph theory is a branch of mathematics that has recently gained momentum in cryptography. In the last two decades new methods of encryption and decryption using graph theory have been proposed. Graph theory plays an important role in the field of cryptography for developing security schemes. A graph G is said to be a unicursal graph if G has exactly 2 odd degree vertices. By graph decomposition we mean decomposing an input graph $G = (V, E)$ into a collection of smallest subgraphs H_1, H_2, \dots, H_k , such that each edge of G belongs to exactly one subgraph H_i , $1 \leq i \leq k$. In this article we propose a method of encrypting and decrypting messages by decomposing a given graph into unicursal graphs.

Keywords: Graph, Unicursal, Decomposition, Encryption, Cryptography.



**POLY (PYRROLE-CO-O-ANISIDINE) SYNTHESIZED ON ZNFE COATED
CARBON STEEL SURFACE**

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ABSTRACT

Zinc-iron (ZnFe) alloy was deposited on carbon steel (CS) by chronopotentiometry technique, in acidic medium. Then, poly (pyrrole-co-o-anisidine) film was synthesized from 0.03 M pyrrole + 0.03 M o-anisidine containing 0.30 M oxalic acid solution. The syntheses were achieved on ZnFe alloy plated carbon steel (CS/ZnFe) by using cyclic voltammetry technique. Poly (pyrrole-co-o-anisidine) film characterized by linear sweep voltametry, AC impedance spectroscopy and anodic polarization techniques. Nyquist diagrams have shown that the copolymer film has high polarization resistance by exhibiting electrocatalytic effect at long exposure times.

Keywords: Copolymer, pyrrole, o-anisidine, corrosion



ÇEMEN (*Trigonella foenum-graecum* L.) BİTKİSİNİN TUZ STRESİ ALTINDA ÇİMLENME ÖZELLİKLERİNİN BELİRLENMESİ**DETERMINATION OF GERMINATION CHARACTERISTICS OF FENUGREEK (*Trigonella foenum-graecum* L.) PLANT UNDER SALT STRESS****Dr. Öğr. Üyesi Gülen ÖZYAZICI**

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ÖZET

Bu çalışmada, tuz stresinin çemen (*Trigonella foenum-graecum* L.) bitkisinin çimlenme ve fide gelişimi üzerine etkilerinin belirlenmesi amaçlanmıştır. Araştırma, Siirt Üniversitesi, Ziraat Fakültesi, Tarla Bitkileri Laboratuvarı'nda, 24±1 °C kontrollü şartlar altında yürütülmüştür. Çalışmanın bitkisel materyalini Berkem çemen çeşidi oluşturmuştur. Laboratuvar çalışması, tesadüf parselleri deneme desenine göre 4 tekrarlamalı olarak petri kaplarında kurulmuştur. Çalışmada; tuzun (NaCl) 0 mM, 50 mM, 100 mM, 150 mM ve 200 mM dozları araştırmanın konusunu teşkil etmiştir. Denemede 10. günün sonunda her bir petri kabındaki bitkilerden rastgele seçilen 10 bitki üzerinden ölçümler yapılmıştır. Çalışmada; çimlenme oranı, kökçük ve sapçık uzunluğu, toplam yaş ağırlık, kökçük ve sapçık yaş ağırlığı, sapçık ve kökçük kuru ağırlığı ve kökçüklerde lateral kök sayısı parametreleri incelenmiştir. Araştırma sonuçları; çimlenme oranı % 2.7-94.7, kökçük uzunluğu 0.233-3.236 cm, sapçık uzunluğu 0.414-4.175 cm, toplam yaş ağırlık 4.3-130.3 mg, kökçük yaş ağırlığı 0.3-21.7 mg, sapçık yaş ağırlığı 3.3-107.3 mg, kökçük kuru ağırlığı 0.06-2.22 mg, sapçık kuru ağırlığı 0.71-14.03 mg ve lateral kök sayısı 0.00-1.00 adet arasında değişim göstermiştir. Tuz konsantrasyonlarının artışına bağlı olarak çimlenme oranı, kökçük ve sapçık uzunluğu, toplam yaş ağırlık, kökçük ve sapçık yaş ağırlığı, kökçük ve sapçık kuru ağırlıkları ile lateral kök sayısı değerlerinde anlamlı azalmalar olduğu tespit edilmiştir.

Anahtar Kelimeler: Çemen, Tuz Stresi, Çimlenme Oranı, Kökçük Uzunluğu**ABSTRACT**

In this study, it was aimed to determine the effects of salt stress on germination and seedling development of fenugreek (*Trigonella foenum-graecum* L.). The research was conducted in Siirt University, Faculty of Agriculture, Field Crops Laboratory under controlled conditions of 24±1 °C. The plant material of the study was Berkem fenugreek variety. The laboratory study was set up in petri dishes with 4 replications according to the randomized plot design. In the study; salt (NaCl) 0 mM, 50 mM, 100 mM, 150 mM and 200 mM doses were applied and the hidropriming as a control has constituted the subject. At the end of the 10th day in the experiment, measurements were made on 10 plants randomly selected from the plants in each petri dish. In the study; germination rate, radicula length, plumula length, total fresh weight,



radicula fresh weight and plumula fresh weight, radicula dry weight and plumula dry weight and lateral root number parameters were examined. According to the results of the research; germination rate 2.7-94.7%, radicula length 0.233-3.236 cm, plumula length 0.414-4.175 cm, total fresh weight 4.3-130.3 mg, radicula fresh weight 0.3-21.7 mg, plumula fresh weight 3.3-107.3 mg, radicula dry weight 0.06-2.22 mg, plumula dry weight 0.71-14.03 mg and lateral root number 0.00-1.00 pieces varied in ranges. Depending on the increase in salt concentrations, it was determined that there were significant decreases in the values of germination rate, radicula and plumula length, total fresh weight, radicula and plumula fresh weight, radicula and plumula dry weight, and lateral root number.

Keywords: Fenugreek, Salinity, Germination Rate, Radicula length



EKRANLI ARAÇLARLA ÇALIŞMALARDA İŞ SAĞLIĞI VE GÜVENLİĞİ
OCCUPATIONAL HEALTH AND SAFETY IN WORKING WITH SCREENED
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ÖZET

Çalışma hayatının çoğu bölümünde yer alan ekranlı araçların uygun kullanılması hem iş sağlığı ve güvenliği hem de verimlilik açısından önem arz etmektedir. Ekranlı araçların kullanıldığı tüm meslek gruplarında bu araçların kullanımından kaynaklanan tehlike ve bunlara bağlı risklerin değerlendirilmesi ve gerekli önlemlerin alınması sağlanmalıdır.

Bu kapsamda, 6331 sayılı İş Sağlığı ve Güvenliği Kanununun 30 uncu maddesi gereği, Avrupa Birliği'nin 29/5/1990 tarihli ve 90/270/EEC sayılı Konsey Direktifi ile uyumlu olarak ekranlı araçlarla çalışmalarda alınacak asgari sağlık ve güvenlik önlemlerine ilişkin usul ve esasları belirlemek amacıyla 16/04/2013 tarihli ve 28620 sayılı Resmi Gazete'de "Ekranlı Araçlarla Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik" yayımlanmıştır.

Bu mevzuata göre; ekranlı araç, uygulanan işlemin içeriğine bakılmaksızın ekranında harf, rakam, şekil, grafik ve resim gösteren her türlü aracı ifade etmektedir. Bunlar ofiste kullanılan bilgisayarlar, iş amaçlı uzun süreli kullanımı olan dizüstü bilgisayarlar, tablet ve akıllı telefonlar, CNC tezgahlarının monitörleri, tanı amaçlı kullanılan görüntüleme cihazları gibi araçları kapsamaktadır. Fakat hareketli makine ve araçların kumanda kabinleri ve sürücü mahalli, taşıma araçlarında aracın kumandasındaki bilgisayar sistemleri, toplumun kullanımına açık bilgisayar sistemleri, işyerinde kullanımı sürekli olmayan taşınabilir sistemler, hesap makineleri, yazar kasa ve benzeri veri veya ölçüm sonuçlarını gösteren küçük



ekranlı cihazlar ile ekranlı daktilolar, Yönetmelik kapsamı dışında tutulmaktadır. Yönetmeliğe göre asıl işi ekranlı araç kullanmak ve iş hayatının büyük bölümünü bu araçları kullanan kişileri ‘operatör’ olarak tanımlamaktadır.

İşverenler, ekranlı araçlardan kaynaklanan riskleri en aza indirmek için işyerlerinin ve işin kişiye uygun bir şekilde düzenlenmesini sağlamalı, çalışanlarına riski azaltma konusunda bilgilendirme yapmalı ve yeterli ara dinlenmelerini planlamalıdır. Bu konuda iş sağlığı ve güvenliği risklerini belirlemek için, Tehlikeleri belirler, hangi çalışanların etkileneceğini tespit eder, tehlikeleri değerlendirir, önlemleri belirler, önleyici tedbirleri uygular, risk değerlendirmesini belirli aralıklarla gözden geçirir ve günceller.

Risklerin değerlendirilmesi için öncelikle hangi ekipmanın Yönetmelik kapsamı içinde olduğu ve hangi kullanıcıların risklere maruz kaldığı belirlenmelidir. İşyerinde gerçekleştirilecek risk değerlendirmesinde; özellikle görme, fiziksel sorunlar ve mental stresle ilgili riskler, bu risklerin olası etkileri ile farklı risklerin etkileşiminden kaynaklanabilecek olumsuz etkilerin ortadan kaldırılması veya en aza indirilmesi için her türlü sağlık ve güvenlik önlemleri alınarak çalışma merkezinin uygunluğu değerlendirilmelidir.

Anahtar Kelimeler: Ekranlı Araçlar, İş Sağlığı ve Güvenliği, Risk Değerlendirmesi

ABSTRACT

Proper use of screened vehicles in most parts of working life is important in terms of both occupational health and safety and productivity. In all occupational groups where screened vehicles are used, it should be ensured that the hazards arising from the use of these tools and the risks associated with them are evaluated and the necessary precautions are taken.

In this context, in accordance with Article 30 of the Occupational Health and Safety Law No. 6331, the procedures and principles regarding the minimum health and safety measures to be taken in working with screened vehicles in accordance with the European Union's 29/5/1990 dated and 90/270 / EEC Council Directive. "Regulation on Health and Safety Measures in Working with Screened Vehicles" was published in the Official Gazette dated 16/04/2013 and numbered 28620.

According to this legislation; screened vehicle refers to any vehicle that displays letters, numbers, figures, graphics and pictures on the screen, regardless of the content of the process applied. These include tools such as office computers, long-term business laptops, tablets and smart phones, CNC machine monitors, and diagnostic imaging devices. However, the control cabinets of moving machines and vehicles and the driver's quarters, computer systems in the control of the vehicle in transportation vehicles, computer systems open to public use, portable systems that are not used in the workplace, calculators, cash registers and similar small screen devices that show data or measurement results and screen typewriters, It is excluded from the scope of the regulation. According to the regulation, his main job is to use a screened vehicle and he defines the people who use these tools most of his work life as an "operator".



Employers should ensure that workplaces and work are organized in an appropriate way to minimize the risks arising from screened vehicles, inform their employees about risk reduction and plan adequate rest breaks. In order to determine the occupational health and safety risks in this regard, it determines the dangers, determines which employees will be affected, evaluates the dangers, determines the precautions, applies preventive measures, reviews and updates the risk assessment periodically.

In order to evaluate the risks, it should be determined which equipment is within the scope of the Regulation and which users are exposed to the risks. In the risk assessment to be carried out in the workplace; All kinds of health and safety precautions should be taken to evaluate the suitability of the work center, especially in order to eliminate or minimize the negative effects that may arise from the risks related to vision, physical problems and mental stress, the possible effects of these risks and the interaction of different risks.

Keywords: Screened Vehicles, Occupational Health and Safety, Risk Assessment



SİĞ BİR YAYLA GÖLÜNDE FİTOPLANKTON KOMPOZİSYONU VE FONKSİYONEL GRUPLAR (ÇİĞ GÖLÜ MAHALLİ SULAK ALANI, KUZEY TÜRKİYE)

PHYTOPLANKTON COMPOSITION AND FUNCTIONAL GROUPS IN A SHALLOW PLATEAU LAKE (ÇİĞ LAKE LOCAL WETLAND, NORTHERN TURKEY)

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ÖZET

Bu araştırma, Türkiye'nin kuzeyinde yer alan bir subtropikal hümik plataeu gölü olan Çiğ Gölü Mahalli Sulak Alanından, fitoplanktonun kompozisyonunu ve fonksiyonel gruplarını sunmaktadır. Göl 2016'dan beri koruma altındadır. Epilimnetik fitoplankton, Haziran 2015 ile Mayıs 2016 arasında (kış ayları hariç) aylık olarak örneklendi. Toplam 72 takson belirlendi ve bunlar aşağıdaki gibi yedi taksonomik bölümde sınıflandırıldı: %43 Chlorophyta (31 takson), %21 Charophyta (15 takson), %14 Bacillariophyta (10 takson), %10 Euglenozoa (7 takson), %7 Cyanobacteria (5 takson), %4 Miozoa (3 takson) ve %1 Ochrophyta (1 takson). Ötrofik sığ göllerin planktonik alg topluluğu, sıklıkla aynı fonksiyonel grubun bir türü ya da türlerinin hakimiyetindedir. Çiğ Gölü'nün planktonik alg topluluğunda yeşil algler (Chlorophyceae, Trebouxiophyceae) baskındır. Fonksiyonel grup yaklaşımına göre, popülasyonlar dört grup oluşturdu: X1 (esas olarak *Monoraphidium* türlerinden oluşuyordu), F (esas olarak *Botryococcus braunii* ve *Oocystis* spp. türlerinden oluşuyordu), J (esas olarak *Crucigenia* spp., *Crucigeniella* ve *Pediastrum tetras* türlerinden oluşuyordu), ve MP (sadece *Ulnaria ulna*'dan oluşuyordu). Bu türler, mezo-ötrofik ortamlarda hâkim ve küçük yapılı, besin eksikliğine tolerans gösteren ve karışık ortamlarda yaşamaya uyum sağlamış fitoplanktonik organizmalardı.

Anahtar Kelimeler: Alg Toplulukları, Ekolojik İndikatörler, Fonksiyonel Sınıflandırma, Fitoplankton, Küçük Sığ Göller, Sulak Alanlar

ABSTRACT

This research presents the composition and functional groups of the phytoplankton from Çiğ Lake Local Wetland, a subtropical humic plateau lake located in Northern Turkey. The lake is under protection since 2016. Epilimnetic phytoplankton were sampled monthly between June 2015 and May 2016 (except winter months). A total of 72 taxa was determined and these were classified into seven taxonomic divisions as follows: 43% Chlorophyta(31 taxa), 21% Charophyta (15 taxa), 14% Bacillariophyta (10 taxa), 10% Euglenozoa (7 taxa), 7% Cyanobacteria (5 taxa), 4% Miozoa (3 taxa), and 1% Ochrophyta (1 taxa). Planktonic algal



community of eutrophic shallow lakes are frequently dominated by one species or species of the same functional group. Green algae (Chlorophyceae, Trebouxiophyceae) are dominant in the planktonic algal community of Çiğ Lake. According to the functional-group approach, the populations formed four groups: X1 (mainly consisted of *Monoraphidium* spp.), F (mainly consisted of *Botryococcus braunii* and *Oocystis* spp.), J (mainly consisted of *Crucigenia* spp., *Crucigeniella* and *Pediastrum tetras*), and MP (only consisted of *Ulnaria ulna*). These species were dominant and small phytoplanktonic organisms in meso-eutrophic environments, tolerated to nutrient deficiency and adapted to live in mixed environments.

Keywords: Algal assemblages, ecological indicators, functional classification, phytoplankton, small shallow lakes, wetlands



TWO IMPORTANT OPERATIONS IN GENERALIZED UNIFORMITIES

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ABSTRACT

A family \mathcal{R} of relations on a set X is called a relator on X , and the ordered pair $X(\mathcal{R}) = (X, \mathcal{R})$ is called a relator space. Relator spaces of this simpler type are already substantial generalizations of not only ordered sets and uniform spaces, but also topological, closure and proximity spaces [4].

As it is usual, for any $x \in X$ and $A \subseteq X$, we write

(1) $x \in \text{int}_{\mathcal{R}}(A)$ if $R(x) \subseteq A$ for some $R \in \mathcal{R}$;

(2) $x \in \text{cl}_{\mathcal{R}}(A)$ if $R(x) \cap A \neq \emptyset$ for all $R \in \mathcal{R}$;

(3) $\text{res}_{\mathcal{R}}(A) = \text{cl}_{\mathcal{R}}(A) \setminus A$.

Moreover, we may also naturally define

(4) $\mathcal{T}_{\mathcal{R}} = \{A \subseteq X : A \subseteq \text{int}_{\mathcal{R}}(A)\}$;

(5) $\mathcal{F}_{\mathcal{R}} = \{A \subseteq X : \text{cl}_{\mathcal{R}}(A) \subseteq A\}$;

(6) $\mathcal{E}_{\mathcal{R}} = \{A \subseteq X : \text{int}_{\mathcal{R}}(A) \neq \emptyset\}$;

(7) $\mathcal{D}_{\mathcal{R}} = \{A \subseteq X : \text{cl}_{\mathcal{R}}(A) = X\}$.

Results: By using the arguments of Kuratowski [2] we prove that if \mathcal{R} is a topologically filtered relator on X to Y , then for any $A, B \subseteq Y$ we have

$$\text{cl}_{\mathcal{R}}(A) \setminus \text{cl}_{\mathcal{R}}(B) = \text{cl}_{\mathcal{R}}(A \setminus B) \setminus \text{cl}_{\mathcal{R}}(B).$$

Moreover, if \mathcal{R} is a topologically filtered relator on X , then for any $A, B \subseteq X$ we have

$$\text{cl}_{\mathcal{R}}(A) \cap \text{int}_{\mathcal{R}}(B) \subseteq \text{cl}_{\mathcal{R}}(A \cap B).$$

Furthermore, by modifying an argument of Levine [1] we also prove that if \mathcal{R} is a nonvoid, topological relator on X and $A \subseteq X$ such that $\text{cl}_{\mathcal{R}}(U) = \text{cl}_{\mathcal{R}}(A \cap B)$ for all $U \in \mathcal{T}_{\mathcal{R}}$, then

$$A \in \mathcal{D}_{\mathcal{R}}.$$

In addition to the latest result, we also prove that if \mathcal{R} is a topologically filtered, topological relator on X , then for any $U \in \mathcal{T}_{\mathcal{R}}$, we have

$$\text{res}_{\mathcal{R}}(U) \in \mathcal{F}_{\mathcal{R}} \setminus \mathcal{E}_{\mathcal{R}}.$$

The above results are accepted to publish in a joint paper with Themistocles M. Rassias and Árpád Száz [3].

Keywords: Generalized uniformities, interiors and closures.

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ELECTRONIC ELECTORAL SYSTEM USING BLOCKCHAIN TECHNOLOGY

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ABSTRACT

The electronic electoral system makes the election process automated and digitalized as it replaces the traditional paper ballots into online voting system. It is an efficient way for conducting an election, which has the characteristic of being real-time and providing high safety for the voting system. The electoral system reduces the cost for conducting the election, as the government should spend some amount to the election administrators for conducting the traditional paper ballot election. It also increases user participation by allowing them to vote from anywhere in the country and allowing access from any device that has an internet connection. Also, this article aims to evaluate the application of blockchain as a service to implement distributed electronic systems. An electoral system is safe as it uses blockchain to store the data as blockchain holds data in the form of nodes and it is highly secured as a node's hash value will be in the previous node. First, we design the user's credentials page which contains the unified identification number and the Global positioning system (GPS). Where GPS is used to track the user location when the user cast their vote. Then we design the ballot list to select the candidates in an authentic way. The implementation results show that it is an easier way to cast their votes with high security and brings out the accurate and quick publication of results. The electronic electoral system is highly secured as user's data can't be tracked, as data is encrypted by using cryptography technique and generates different hash value for each transaction.



SYNTHESIS OF POLYESTER RESIN FROM PET WASTE AND EXPLOITATION OF DIFFERENT RESOURCES FOR THE ELABORATION OF COMPOSITES

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ABSTRACT

The aim of the present work returns within the framework of the plastic materials waste recovery . It consists to the synthesis of an unsaturated polyester resin by a chemical recycling (glycolysis) of the waste of bottles in PET plastic. The new resin will be used as matrix in composite materials reinforced by fibers or by not expensive and ecological natural fillers. As an example, we developed a composite using this synthetic resin with sand and wood charges and with glass fiber reinforcements.

The chemical tests (Fourier transform infrared spectroscopy) showed a light difference, in terms of glycols ratio, between the synthesized resin unsaturated polyester and the standard one. This difference in structure affects certain parameters such as the mechanical properties of the synthesized resin. As for mechanical tests (three points bending test and Charpy impact test), they showed that the synthesized resin containing charges has mechanical properties more low than those some standard resin. On the other hand, when this resin is reinforced with woven glass fiber and mat, a notable improvement of the mechanical properties in three points bending and Charpy impact tests in the shock is recorded.

Keyword: Unsaturated polyester resin, glycolysis, composite



**PHYTOCHEMICAL ANALYSIS AND ANTIOXIDANT STUDY OF *BOMBAX CEIBA*
YOUNG ROOT**

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ABSTRACT

Various parts of *Bombax ceiba* (*B. ceiba*) are usually used as a traditional medicine for treating different types of malady. In this study, phytochemical analysis and antioxidant activity of *B. ceiba* young root of ethanol extract (BCYREE) was observed. For phytochemical screening of BCYREE; the constituents screened for were saponins, alkaloids, carbohydrates, glycosides, coumerins, total phenolics, flavonoids content, flavonols content, and proanthocyanidins. Also free radical reducing power of BCYREE was measured through copper ion reducing assay, ferric reducing antioxidant capacity, metal chelating activity assay, 2,2,-diphenyl-1-picrylhydrazyl (DPPH) free radical scavenging assay, nitric oxide scavenging assay, superoxide radical scavenging assay.

Keywords: *Bombax ceiba*, Young root, phytochemical analysis, DPPH assay, antioxidant activity



EINSTEIN POISSON WARPED PRODUCT SPACE**Pankaj Kumar**

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ABSTRACT

In this paper, we provide some results on Poisson manifold (M, Π) with contravariant Levi-Civita connection D associated to pair (Π, g) . We introduce the notion of Einstein Poisson warped product space $(M = B \times_f F, \Pi, g^f)$ (where $\Pi = \Pi_1 + \Pi_2$). Moreover, we show that if M is an Einstein Poisson warped product space with nonpositive scalar curvature and compact base B , J_1 is a field endomorphism on T^*B satisfies $J_1^2 = I$, then M is simply a Riemannian Poisson product. For a contravariant Lorentzian Poisson warped space $(M = B \times_f F, g, \Pi)$ (where $B = I \times \square$) one can determine contravariant Einstein equations and the cosmological constant Λ corresponding to the contravariant Einstein equation $G = -\Lambda g$. Moreover, it is shown that Einstein equation $G = -\Lambda g$, induces the contravariant Einstein equation $G_F^{ij} = -\Lambda_F g_F^{ij}$ with cosmological constant Λ_F on fiber space (F, g_F, Π_F) .



**CONTROL OF THREE-PHASE PERMANENT MAGNET SYNCHRONOUS
MACHINE BASED ON INTEGRAL BACKSTEPPING CONTROL TECHNIQUE**

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ABSTRACT

The present paper deals with the Integral Back-Stepping Control (IBSC) applied to three-phase Permanent Magnet Synchronous Machine (PMSM) to overcome some problems faced while the application of the conventional control techniques. Indeed, these techniques suffer from the PMSM parameters variations such as the stator resistance, the stator inductance and the inertia value, which can be occurred during the operation mode due to some internal and external operating conditions. This variations can lead to certain uncertainty within the used control due to the lack of their robustness. In this paper the Integral Back-Stepping Control (IBSC) is used to overcome such problems and to ensure a robust control of the PMSM with better performances. The obtained results by simulation prove the validity of the application of IBSC for ensuring a robust control of the studied PMSM with higher performance compared to the conventional control techniques.

Keywords: PMSM, IBSC , Lyapunov stability , robust control.



**PARTICIPATORY LEARNING MANAGEMENT IN IMPROVING STUDENT
ENTREPRENEURIAL BEHAVIOR OF INDONESIA****Jomed Ceilendra Saskana & Muhammad Said**

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ABSTRACT

This research is entitled Participatory Learning Management in Improving Student Entrepreneurial Behavior. The background of this research based on researcher survey that learning so far has not been able to answer the needs, demands of society and the world of work. The main problem in this research is entrepreneurial behavior of students are considered still so low, as a result of the learning management that does not involve students. The purpose of this study is to examine participatory learning activities in SMA Negeri 71 and SMA Negeri 102 Jakarta which included planning, implementation, evaluation, obstacles faced and solutions to overcome problems. The theory that is used as a guide in this research is theologically speaking, namely the command to read, and the principles of educational material, including matters of faith, morals, worship, social, and science. Philosophically, following constructivism philosophy, which explains that; school is a place for agents of change while the basic theory that is used as a benchmark is Learning by Doing, the principle of which is "students need to be involved and participate spontaneously. Students' desire for things they do not know yet, encourage active student involvement in a learning process, the teacher plays a role in providing a means for students to be able to learn. With the role of students and teachers in active learning, meaningful learning will be created so that it can shape students as whole human beings and the theory of six value systems from Professor Achmad Sanusi. This study applies a qualitative approach to the descriptive study method. Collecting data using interview techniques, documentation study and observation. The results showed various activities in the four stages of participatory learning management, namely: 1) Analyzing lesson planning, especially those related to syllabus and lesson plans (RPP); 2) To organize learning sources with the aim to reach learning efficient and effectively 3) Implementation of learning programs by implementing fun learning. 4) Applying authentic assessment. 5) Finding the obstacles faced by school leaders in improving students' entrepreneurial behavior. 6) Looking for solutions and improvement efforts in participatory learning in improving the entrepreneurial behavior of students at SMA Negeri 71 and SMA Negeri 102 Jakarta have implemented the five stages of participatory learning by placing students as subjects who are able to plan, explore and implement the learning material they need. At SMA Negeri 71 and SMA Negeri 102 Jakarta, they have implemented the five stages of participatory learning management. The results show that participatory learning management in improving students 'entrepreneurial behavior has a positive impact on improving students' entrepreneurial behavior. Therefore, it is hoped that the results of this study will serve as an overview and guideline for other high schools in improving the quality of graduates. Recommendations for other teachers are that they should implement the five steps of participatory learning comprehensively so that there will be an increase in student



entrepreneurial behavior which in turn can create students who have an entrepreneurial spirit and behavior.

Keywords: Management, participatory Learning and Entrepreneurship



ASSESSMENT OF STREET TRADING AND TRAFFIC DELAY SITUATION IN LAGOS STATE, NIGERIA: THE COMPUTER VILLAGE EXPERIENCE**Felix Gbenga ODEYEMI¹, Wheneyon Peter SURU¹ and Oluwaseun Ayodele OLOWOPOROKU²**¹Department of Surveying and Geo-informatics, Federal Polytechnic Ede, Osun State, Nigeria²Department of Urban and Regional Planning, Obafemi Awolowo University Ile-Ife Nigeria**ABSTRACT**

This paper assessed street trading activities and traffic delay situation in Computer Village, Lagos State, Nigeria. This is with a view to suggesting policy response capable of enhancing traffic flow in the area and others with similar background. The coordinates of the computer village area in Ikeja was achieved using Googl Earth software. Spatial analysis on the roads leading into the computer village area was done using the ArcGIS 10.4 by ESRI on an OpenStreet Map database, while simple descriptive analysis used while simple descriptive analysis used Excel 2016 package. Results were presented in maps and tables Multistage sampling technique was adopted in questionnaire administration. Two categories of respondents were identified (street traders and commuters). Eighteen major streets where street trading activities were predominant in the Computer Village area were identified. Convenience/accidental sampling technique was used in selecting eligible respondents as street traders were haphazardly located.

A total of 119 street traders were sampled. In the selection of eligible commuters, systematic sampling was used in the selection of commuter from two garages (Obafemi Awolowo way under bridge and Ipodo Community Park). A total of 80 commuters were sampled. The study revealed that majority (74.8%) of the street traders were male and they live in locations less than 1km from their place of business. Also the over mean number of years spent by the street traders was 7 years. On commuters, respondents identified obstruction of free flow of traffic, indiscriminate waste disposal and collection, occurrences of petty theft and fraud, encroachment into parking space, obstruction of pedestrian movement among others as the direct impact of street trading activities in the study area. The study recommends the integration of the trading into land use planning in Nigeria as well as promulgation of appropriate and effective institutional and legal frameworks to control traffic infringement activities.

Keywords: commuters, street trading, transportation, traders, Lagos, Nigeria



AGING AND COGNITIVE FUNCTIONING; A MINI REVIEW

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ABSTRACT

Certain cognitive abilities show at least a small decline with advanced age in many, but not all, healthy individuals. Although differences between the young and elderly can be shown in some cognitive areas described below, declining ability does not translate into impairment of daily activities. These changes are subtle. The most consistent change is cognitive slowing. For example, on a writing task in which people were asked to substitute as quickly as possible symbols for numbers, 20-year-olds performed the task almost 75 percent faster on average than 75-year olds. Age-related slowing is also evident on certain attentional tasks, such as trying to grasp a telephone number when someone rattles it off quickly. Overall, cognitive slowing is thought to be a contributing factor in elderly people's higher rate of automobile accidents per miles driven. Age hinders attention, particularly when it is necessary to multitask. When switching from one task to another, the elderly have more difficulty paying attention to multiple lanes of traffic, for example, or noticing if someone is about to step off a curb at a busy intersection. Processing information rapidly and dividing attention effectively are cognitive skills that peak in young adulthood. How fortunate it is that college and vocational students are typically at an age when the brain is working with optimum efficiency.

Keywords: Aging, Cognitive functioning; information



**URBANISATION AND SUSTAINABLE DEVELOPMENT: A CASE STUDY OF
TWO URBAN CITY IN SOUTHWESTERN, NIGERIA**

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ABSTRACT

Sustainable urbanisation is one of the keys to achieving sustainable development as it plays a major role in the economic, social and environmental development of an area. With the rapid rate at which urban population are increasing particularly in several cities of developing countries, uncontrolled rapid urbanisation may affect counties in achieving sustainable development. Currently, more than half of the world's population are living in urban cities, this has been projected to increase to two thirds of the world's population by 2050. Notably, larger proportion of the projected population increase is expected to live in urban cities in African countries with an estimation of about a quarter of the total world's urban population in 2050. Thus, the need to monitor urbanisation in urban cities of developing nations has become a challenge. Therefore, the objective of this paper is to determine the proximate factors responsible for urbanisation in two urban cities (Ile-Ife and Ila Orangun) in Southwestern, Nigeria for effective planning. The study utilized questionnaire to elicit information on the nature and challenges of urbanisation within the study area. The results revealed that level of urbanisation is influenced by job opportunity and education. The study concluded that government policy that will enhance sustainable urbanisation should be formulated.

Keywords: sustainable development, urban population, urbanisation, urbanisation factors, urban challenges



**OBTAINING TiO₂ POWDER AS AN INTERMEDIATE PRODUCT
DURING ELECTROCHEMICAL DEPOSITION**

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ABSTRACT

In our previous work, we were able to obtain TiO₂ film by electrochemical deposition method. During the electrochemical deposition of TiO₂ film on the substrate, sol formation was observed in the solution, and powder precipitation occurred at the bottom of the solution in the later stages of the experiment. In this study, the precipitated powder was separated and annealed at 500 °C in air atmosphere. Then, scanning electron microscopy (SEM), x-ray diffraction (XRD) and x-ray photoelectron spectroscopy (XPS) analyses techniques were used to characterize the morphology, structure and composition of the powder, respectively. The particle size of the powder was heterogeneous and was in the range of ~500 nm to 2 μm. X-ray diffraction analysis revealed that the powder was completely anatase phase TiO₂. From X-ray photoelectron spectroscopy analysis, the main compositions of the powder were determined as Ti, O, and C. Detailed XPS survey implies TiO₂ is doped with carbon. This study revealed that during the film deposition by our electrochemical method, the intermediate product formed in the solution is carbon doped TiO₂. This method enabled to obtain both TiO₂ film and powder simultaneously.

Keywords: Titanium dioxide powder, Electrodeposition, X-ray diffraction



INTANGIBLE HERITAGE AS A WAY TO STRENGTHEN CULTURAL COOPERATION

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ABSTRACT

The value of culture is its ability to attract foreigners to a nation. Culture can be seen as a common language, a common pool of memories, and shared way of thinking, reasoning, and communicating.

This study has been carried out in order to emphasize how cultural relations can blend into Jalə Ismayil's book "Romania-Azerbaijan: two countries, endless opportunities" (România-Azerbaidjan. Două culturi – infinite oportunități) that has been published in Romania. It explores the ways in which the cultural relations grow naturally without government intervention. The government does not create culture, but it can make country culture known. The businesses of trade and tourism, education, communications, migration and media access develop daily cross-cultural encounters.

Methodologically, the diachronic perspective, used in this exegesis to illustrate comparatively the collective and individual transfigurations, is complemented by the synchronous one, through the description of cultural events in a well-defined spatial and temporal context.

There are analyzed the stages of development of cultural relations, focusing on historical events and personalities that contributed to such development. The structure of the paper allows to present the past of Romanian-Azerbaijani relations, and to describe the interest on a certain segment of culture during communism. The research is based on library and archival materials from Azerbaijan, Romania, Russia and Turkey in order to depict the cultural interactions and to facilitate a dialogue between cultural heritage and contemporaneity towards a future to be built together.

Preserving and strengthening the collaborative relations between Azerbaijan and Romania, the paper expresses the mutual the need for knowledge. Therefore, a basic condition in this direction can be considered the highlighting of the importance of cultural relations in order to identify the existing gaps in the history of cultural relations and to create further possibilities of collaboration under the nowadays circumstances in order to be able to cultivate more intensive bilateral cooperation.

Keywords: Literature, Cultural heritage, Diversity, Cultural relations



**ANALYZING ELECTRONIC WORD OF MOUTH IN ALGERIAN HOSPITALITY
SECTOR: QUALITATIVE APPROACH**

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ABSTRACT

The electronic word of mouth (E. WOM) has developed in recent years especially with the proliferation of online platforms such as social networks and websites. Starting from the observation that E. BAO comments are now a major element in the process of information retrieval and buying decision, we analyzed the different characteristics of online messages. The aim of this study is to understand the determinants of hotel service quality through the analysis of comments posted during the period (2016-2020) in a special website for hotel booking (booking.com), these comments written by people who have already booked and visited the hotels proposed in this website for the destination of Algeria. We have grouped the seven criteria for evaluating a hotel in two key dimensions. The first dimension refers to the attributes of the stay in the establishment, contains these four hotel characteristics “the type of trip, the number of travellers, the type of rooms and the period of stay”. The second dimension referred to the Hotel Attributes, which depending on three criteria “Hotel Location, Star Rating, and Customer Rating”. The results of this research show that the choice of hotel depends on three main factors: the staff in contact; the location and comfort of the rooms.

Keywords: Electronic Word of mouth, Hospitality sector, Service quality, Booking.com.



İSLAM'DA İMAN VE AKAİD FARKLILIĞI VE AKAİDİN İMANLAŞTIRILMASI TARTIŞMALARI

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ÖZET

İman ile akaid farklıdır. İslam düşünce tarihinde itikadi mezheplerin ateşli savunucuları kendi itikadlarını iman haline getirdiler. Oysa iman Kur'an'da Yüce Allah'ın sübut ve manaya delaleti açısından apaçık inanılmasını emrettiği buyruklar iken, itikad; sübut veya manaya delaletî açısından kendisinde şüphe ve zan barındıran hususlardır.

Her şeyden önce şunu iyi bilmek gerekir ki, iman edilmesi gerekli olan hususları ancak Yüce Allah bildirir/bildirmiştir. Bu konuda hiçbir beşerin ve hiçbir nebinin kendiliğinden yeni bir iman esası koyma yetkisi yoktur. Ancak nebiler, kendilerine bildirilen vahiyler doğrultusunda imana ilişkin meseleleri kendi kavimlerine yeni lafızlarla açıklayabilirler.

Peki iman nedir? İman Arapça â me ne kökünden gelen ve bi harf-i ceri ile kullanıldığında kalbiyle tasdik etti/onayladı anlamına gelen bir kelimedir. Ancak İmam Ebu Hanife (ö150/767)'nin kabul ettiği bu iman tanımı tüm Hanefî-Mâtürdidi alimler tarafından kabul edilmiş ise de, burada â me ne sözcüğündeki emân/güven kısmı pek dile getirilmemiştir. Bize göre iman bu iki kavramla birlikte yani tasdik ve emân ile birlikte ele alınmalıdır. İ'tikad ise 'a ka de kökünden gelmekte olup, bağlanma, düğüm atma anlamına gelir. Burada her zaman iman kavramındaki emân/güven net olmayıp, soyut bir inanma ve bağlanma hali vardır.

Dini bir meselenin hükmü ortaya koyulurken öncelikle nassa yani kutsal metne (Kur'an'a) daha sonra Sünnet'e bakılır. İman meselelerinde ise tek geçerli nass Kur'an'dır. Kur'an'da da her mesele –özellikle sahabe sonrası insanların anlama kapasitesi bağlamında- sübuten ve/ya manaya delalet bakımından bir açıklık ve/ya kesinlik yoktur.



**FAULT DETECTION AND DIAGNOSIS SYSTEM
FOR A THREE-PHASE INVERTER USING ARTIFICIAL NEURAL NETWORK****ABID Mimouna**

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ABSTRACT

Power conversion systems require static converters such as three-phase inverters, which are the most widely used power converters in the industry. The main reason for their high use is a wide range of applications such as power supplies, motor control panels, renewable energy systems, energy management systems, etc.

A system may be threatened by anomalies that cause a total system shutdown, requiring system supervision to avoid this risk. It is important that a diagnostic system should be able to perform at the same time: non-operational maintenance and diagnoses faults after their detection and location, in order to implement either: a fall-back reconfiguration, or a safe shutdown and maintenance assistance.

In this paper, the design of a control system for the detection and diagnosis of the open circuit and short circuit fault of the IGBT in a three-phase voltage inverter is proposed in a wind energy conversion system (WECS). The main objective of this fault detection system is to efficiently detect and locate faults in one or more switches of the three-phase voltage inverter. By using the MATLAB program, it has been achieved to diagnose these faults with high accuracy.

Keywords: Three-phase inverter, IGBTs, fault diagnosis, open circuit, short-circuit, MLP neural network, Fourier analysis.



**FAULT TOLERANT CONTROL OF THREE PHASE INVERTER IN GRID
CONNECTED PHOTOVOLTAIC SYSTEM****MIMOUNI Amina**

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ABSTRACT

Solar photovoltaic (PV) generation has increased substantially over the last decade. It is currently the third most important renewable energy source worldwide in terms of global installed capacity slightly behind wind and hydropower. Power electronic converters play a major role for efficient and reliable large-scale integration of PV systems into the distribution grid. These power converters must be designed and controlled optimally to ensure maximum energy efficiency, also improve the power quality in the network. Therefore, they are a good option for solar PV applications due to the reduction of electrical constraints on the photovoltaic conversion system. Among the different power converters used the inverters, which are widely used in many power applications such as photovoltaic systems. Their service continuity, reliability and performance are major concerns today. However, the three-phase inverter is very sensitive to the failure of the switching devices and an open circuit fault that can occur in semiconductor switches will cause an increase in ripple current that reduces the extraction efficiency of the PV system. This paper presents an open-circuit fault diagnosis and fault-tolerant control strategy for a three-phase inverter in a grid-connected PV system which allows the system to maintain normal generation after the fault. The proposed fault diagnosis method is based on the use of artificial intelligence methods and the proposed fault tolerant topology is based on a redundant switch which is applied to the inverter to substitute the faulted switch when an open-circuit fault occurs in the power converter.

Keywords: Grid connected photovoltaic system, Three phase inverter, Open circuit fault, Fault tolerant control



**OPTIMIZATION OF CUTTING CONDITIONS DURING FINISHING TURNING OF
TITANIUM ALLOY Ti-6Al-4V USING GRA METHOD**

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ABSTRACT

Machining work is underway in industries related to the aviation sector to create parts from various titanium alloys, such as in airframes, engines and most space applications. This approach is due to the chemical and physical properties of these mixtures as well as to the mechanical properties such as rust resistance, lightness ... etc.

The aim of this study is to optimize the cutting conditions when turning the titanium alloy Ti-6Al-4V. The tests are carried out according to a Taguchi L18 plan by varying four input factors namely: the cutting speed, the feed rate, the depth of cut and the material of the tool (metallic carbide with coating (PVD) (GC1125) and uncoated carbide (H13A)). In addition, the GRA method was used to minimize the power consumed (P_c) and vibrations (V_t).

research will be documented with photographs and information about their technical properties will be given.

Keywords: Turning, Ti6-Al-4V, Optimization, GRA



**THE IMPORTANCE OF CUSTOMER RELATION MANAGEMENT: IMPROVING
A FRAMEWORK FOR A COMPANY IN THE SERVICE SECTOR**

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ABSTRACT

The customer is an individual or international entity, organization or company which picks up or receipts products and services: it is a crucial activity to define the useful services, real customers and the value-added and unvalue-added activities that fulfill certain characteristics of products or services. CRM is an enterprise technique and not just administrators must be obvious. Both members in the business should be transparent. Segmentations are the most significant aspect of the Customer Relation Management (CRM) system. The objective of the research is to better understand the analytic paradigm of CRM and analysis of CRM, in particular the clustering of consumers. Depending on just that argument, ABC Company in service sector is analyzed and evaluated in three components. These descriptions are the significance of CRM Strategies, the significance of Partnership Management and the importance of CRM Assessment. From the observation of specific business and market stats and the CRM strategy of ABC Company, a new community framework-model is proposed to define the much more lucrative capacity of Small and medium-sized enterprises.

Keywords: Business, Customer Relation Management (CRM), Framework, Strategy



**A DISRUPTIVE OPEN INNOVATION IDEA REALIZATION SYSTEM FOR
BUSINESSES: CEM-COMMUNITY-BASED EXECUTION MODEL**

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ABSTRACT

In the management and policy literature on technology and innovation, the concept of open innovation is currently prominent. In the scope of open innovation business environments, a growing number of businesses are clustering together to form innovation ecosystems in order to enhance their innovation capabilities by engaging with key stakeholders. There have not been enough studies available on the mechanisms that govern how and which companies and actors in open innovation ecosystems may improve their innovation capabilities.

This study covers the two hackathon project (Hackomusic and Hack4Art) results which aimed to bring the ecosystem profiles (entrepreneurs, artists, developers, designers, etc.) from the creative industry together and realize fast prototyping outputs that are based on the challenge given by businesses and institutions. Research findings indicate that firm and institutions' issues may be solved by the community faster and creatively.

Our results indicate that the communities have a significant role in supporting open innovation dynamics, expanding its opportunities, and accelerating the process of large corporations, startups, and public institutions' levels. Furthermore, the study states that community-based outputs have a chance to commercialization more than closed innovation creations. This paper presents a framework that provides insight about when and which of the Community-Based Execution Model (CEM) should be used in the startup ecosystem, large corporations and creative industries.

Keywords: Business Execution Model, Creative Industry, Entrepreneurship, Open Innovation Framework, Startup Ecosystem



**TERÖR VE TERÖR EYLEMLERİNDEN KAYNAKLANAN
TAZMİNAT DAVALARI VE DANIŞTAY'IN YAKLAŞIMI**
ARISING FROM TERROR AND ACTIONS OF TERROR
DAMAGE ACTIONS AND THE COUNCIL OF STATE APPROACH

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ÖZET

İdarenin, gerçekleştirmiş olduğu bir eylem veya işlem dolayısıyla zarar gören kişilerin zararlarını tazmin etme yükümlülüğü mevcuttur. Bu yükümlülük gereği idarenin sorumluluğu müessesesi kabul edilmiştir. İdareye yüklenebilecek bir kusur neticesinde meydana gelen zararlardan idarenin sorumlu olmasına kusur sorumluluğu; zararın meydana gelmesinde idarenin doğrudan kusuru olmasa da sorumlu tutulmasına idarenin kusursuz sorumluluğu adı verilir. İdarenin sorumluluğu, içtihadi olarak gelişim sağlamış bir alandır. Buna paralel olarak yargı kararlarıyla kapsam ve sınırları belirlenen kusursuz sorumluluk hali ise iki temel ilke şeklinde tezahür etmektedir. Bunlardan ilki risk ilkesi bir diğeri de kamu külfetleri karşısında eşitlik ilkesidir.

İdarenin kusursuz sorumluluğu hallerinden olan sosyal risk ilkesi gereği idarenin faaliyet alanıyla ilgili önlemekle yükümlü olduğu halde önleyemediği zararların karşılanması mümkün kılınmıştır. Sosyal risk ilkesinin özel bir görünüş biçimini ise terör eylemlerinden dolayı meydana gelen zararların tazmini hususu oluşturmuştur. Bu zararların karşılanması hususunda ilk başlarda idarenin sorumluluğuna ilişkin genel kurallar geçerli olmuştur. Söz konusu bu kurallar, Danıştay içtihatlarında da sık sık yer bulmuştur. Ancak içtihadi olarak gelişen bu alanda ortaya çıkan yetersizlikler yasal düzenleme yapılmasını zaruri kılmıştır. Bu nedenle 2004 yılında terörden kaynaklanan zararların karşılanmasına yönelik olarak 5233 sayılı Terör ve Terörle Mücadeleden Doğan Zararların Karşılanması Hakkında Kanun yürürlüğe girmiştir. Bu Kanunun amacı, terör eylemleri veya terörle mücadele kapsamında yürütülen faaliyetler nedeniyle maddi zarara uğrayan kişilerin zararlarının karşılanmasına ilişkin esasları ve usulleri belirlemektir.

Çalışmada idarenin sorumluluğunun temelleri ile kusur sorumluluğu ve kusursuz sorumluluk türleri açıklanarak, kusursuz sorumluluğun özel bir görünüşünü oluşturan sosyal risk ilkesinin terör olaylarıyla meydana çıkan zararlar nedeniyle idarenin sorumluluğu ile bağlantısı ve nihai olarak 5233 sayılı Kanunun uygulanmasıyla ortaya çıkan bazı uyuşmazlıkların çözümüne Danıştay'ın yaklaşımının ne şekilde olduğu ortaya konulacaktır.

Anahtar Kelimeler: İdarenin sorumluluğu, Risk ilkesi, Terörle Mücadele, Maddi zarar

ABSTRACT

The administration authority has an obligation to compensate the damages of people who were harmed by an administrative acts and actions. Due to this obligation, the responsibility of the administration has been accepted. Responsibility of the administration for damages



caused by a fault that may be attributed to the administration authority is called defect liability; even though it is not a direct fault of the administration in the occurrence of the damage, holding it responsible is called the administration's strict liability. The responsibility of the administration is an area that has developed as its jurisprudence. As same sentence, the state of strict liability, whose scope and limits are determined by judicial decisions, occurs in two basic principles. The first of these is the risk principle and the other is the principle of equality against public burdens.

In accordance with the social risk principle, which is one of the flawless responsibility of the administration, it has been made possible to compensate the damages that the administration is obliged to prevent but cannot prevent. A special aspect of the social risk principle is the compensation for damages caused by terrorist acts. In terms of compensating these damages, the general rules regarding the responsibility of the administration were initially applied. Also these rules are frequently included in the jurisprudence of the Council of State. However, the inadequacies that emerged in this field that developed as jurisprudence made it necessary to make legal regulations. For this reason, the Law No. 5233 on Compensation for the Damages Arising from Terrorism and the Fight Against Terrorism entered into force in 2004 in order to compensate the damages caused by terrorism. The purpose of this Law is to determine the principles and procedures for compensating the damages of persons who suffered material damage due to terrorist acts or activities carried out within the scope of the fight against terrorism.

This study has been carried out in order to explain the fundamentals of the administration's liability, defect liability and the types of strict liability, the connection of the social risk principles, which constitutes a special aspect of strict liability, with the responsibility of the administration due to the damages caused by terrorist incidents has been revealed. And finally, the approach of the Council of State to the resolution of some disputes arising from the implementation of Law No. 5233 will be explained.

Keywords: Administrative liability, Risk principle, Counter-terrorism, Pecuniary damage.



**BABALARIN EMZİRME TUTUMU VE KATILIMI ÖLÇEĞİNİN
TÜRKÇE UYARLAMASI: GEÇERLİK VE GÜVENİRLİK ÇALIŞMASI**
TURKISH ADAPTATION OF THE SCALE OF BREASTFEEDING ATTITUDE AND
PARTICIPATION OF FATHERS: VALIDITY AND RELIABILITY STUDY

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ÖZET

Amaç:Babaların Emzirme Tutumu ve Katılımı Ölçeğinin Türkçe'ye uyarlamasının geçerlik ve güvenilirliğini saptamaktır.

Gereç ve yöntemler:Metodolojik bir çalışmadır. Araştırmanın örneklemini 15/12/2019-30/07/2020 tarihlerinde Zonguldak Kadın Doğum ve Çocuk Hastalıkları Hastanesinde eşlerinin yanında gelen 280 baba oluşturdu. Verilerin toplanmasında “tanıtıcı bilgi formu”, Babaların Emzirmeye İlişkin Tutumları ve Babaların Emzirme Sürecine Katılımı bölümlerinden oluşan “Babaların Emzirme Tutumu ve Katılımı Ölçeği” kullanıldı. Verilerin analizinde tanımlayıcı istatistikler, kapsam geçerliği, açıklayıcı faktör analizi, birinci ve ikinci düzey doğrulayıcı faktör analizi, uyum ve ayırma geçerliği, madde analizleri, Cronbach- α , test tekrar test yöntemleri kullanıldı.

Bulgular:Ölçeğin Babaların Emzirmeye İlişkin Tutumları bölümünün açıklayıcı faktör analizinde Kaiser Meyer Olkin kat sayısı=0.807,Barlett's Sphericity Testi sonuçları $\chi^2=1362.758$; $df=91$; $p=0.000$ 'dır. Dört faktörün toplam varyansa yaptığı katkı=%66.731'dir. İkinci düzey doğrulayıcı faktör analizine göre model uyum indeksleri; Ki-Kare ($\chi^2=122.788$, $p=.000$, $sd=73$) değeri başta olmak üzere uyum indeksleri, $\chi^2/sd=1,673$, Normed Fit Index=0.912, Tucker-Lewis Index=0.953,Incremental Fit Index=0.963, Comparative Fit Index=0.962, RootMeanSquareError of Approximation=0.049, Goodness Of Fit Index=0.943, AdjustedGoodness Of Fit Index=0.918, RoodMeanSquareResidual=0.043'dür.Babaların Emzirmeye İlişkin Tutumları bölümünün iç tutarlılık güvenilirlik katsayısı=0.807'dir. Ölçeğin Babaların Emzirme Sürecine Katılımı bölümünün açıklayıcı faktör analizinde KaiserMeyerOlkin kat sayısı=0.814,Barlett'sSphericity Testi sonuçları $\chi^2=1366.579$; $df=91$; $p=0.000$ 'dır. Dört faktörün toplam varyansa yaptığı katkı=%66.470'dir. İkinci düzey doğrulayıcı faktör analizine göre model uyum indeksleri; Ki-Kare ($\chi^2=122.834$, $p=.000$, $sd=72$) değeri başta olmak üzere uyum indeksleri, $\chi^2/sd=1,706$, Normed Fit Index=0.912, Tucker-Lewis Index=0.951,Incremental Fit Index=0.962, Comparative Fit Index=0.961, RootMeanSquareError of Approximation=0.050, Goodness Of Fit Index=0.941,



Adjusted Goodness Of Fit Index=0.914, Root Mean Square Residual=0.044'dür. Babaların Emzirme Sürecine Katılımı bölümünün iç tutarlılık güvenirlik katsayısı=0.824'dür.

Sonuçlar:Bu ölçek Türk kültüründe uygulanması için geçerli ve güvenilir bir ölçektir ve eş desteğini sağlayarak emzirmeyi artırmak için girişimler tasarlamak ve değerlendirmek isteyen sağlık profesyonelleri için uygun bir araçtır.

Anahtar kelimeler:Emzirme, Babalar, Geçerlik, Güvenirlik

ABSTRACT

Aim:To determine the validity and reliability of the Turkish adaptation of the scale of breastfeeding attitude and participation of fathers.

Material and Methods: This was a methodologic study. The sample of the research comprised 280 fathers who came to the with their spouses Zonguldak Maternity and Pediatrics Hospital on 15 December 2019 and 30 July 2020. An introductory information form and the "The Scale of Breastfeeding Attitude and Participation of Fathers", which consists of the attitudes of fathers about breastfeeding and participation of fathers in breastfeeding process were used to collect the data. In the analysis of the data, descriptive statistics, content validity, exploratory factor analysis, first and second level confirmatory factor analysis, convergent and discriminant validity, item analysis, Cronbach- α , test-retest methods were used.

Results: In the exploratory factor analysis of the attitudes of fathers about breastfeeding section of the scale, the Kaiser-Meyer-Olkin floor number was 0.807 and the Barlett's sphericity test results were $\chi^2=1362.758$; $df=91$; $p=0.000$ 'dır. The contribution of the four factors to the total variance was 66.731%. According to second-level confirmatory factor analysis model fit indices, the Chi-Square test result was a follows ($\chi^2 = 122.788$, $p = .000$, $sd = 73$). The model fit indices were as follows: $\chi^2/sd=1,673$, Normed Fit Index=0.912, Tucker-Lewis Index=0.953, Incremental Fit Index=0.963, Comparative Fit Index=0.962, Root Mean Square Error of Approximation=0.049, Goodness of Fit Index=0.943, Adjusted Goodness of Fit Index=0.918, Root Mean Square Residual=0.043. The internal consistency reliability coefficient of the attitudes of fathers about breastfeeding was 0.807. In the exploratory factor analysis of the participation of fathers in breastfeeding process of the scale, the Kaiser-Meyer-Olkin floor number was 0.814 and the Barlett's sphericity test results were $\chi^2=1366.579$; $df=91$; $p=0.000$ 'dır. The contribution of the four factors to the total variance was=%66.470. According to second-level confirmatory factor analysis model fit indices, the Chi-Square test result was a follows ($\chi^2=122.834$, $p=.000$, $sd=72$). The model fit indices were as follows: $\chi^2/sd=1,706$, Normed Fit Index=0.912, Tucker-Lewis Index=0.951, Incremental Fit Index=0.962, Comparative Fit Index=0.961, Root Mean Square Error of Approximation=0.050, Goodness of Fit Index=0.941, Adjusted Goodness of Fit Index=0.914, Root Mean Square Residual=0.044. The internal consistency reliability coefficient of the participation of fathers in breastfeeding process section was 0.824.



Conclusion: This scale is a valid and reliable scale for its application in Turkish culture and is a suitable tool for healthcare professionals who want to design and evaluate initiatives to increase breastfeeding by providing partner support.

Keywords: Breastfeeding, Fathers, Reliability, Validity



**TEKNOLOJİ ÇAĞINDA ULUSLARIN GELECEĞİNİ BELİRLEMEDE
EĞİTİMCİLERE DÜŞEN GÖREV**

**THE DUTY FOR EDUCATORS IN DETERMINING THE FUTURE OF NATIONS IN
THE TECHNOLOGY AGE**

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ÖZET

Günümüzde teknolojinin eğitimdeki rolü inanılmazdır. Pandemi süreci ile uzaktan eğitimin geldiği nokta eğitim yazılımlarının önemini daha da artırmış; Robotik eğitimi okul öncesine kadar inmiş, yapay zeka uygulamaları telefonlar ile günlük yaşantımıza girmiş, arama motorları ses ile yönetilebilir yazılımlar ile çalışabilir hale gelmiş, çeviri yapan yazılımlar sayesinde yabancı dil bilme zorunluluğu da ortadan kalkmaya başlamıştır. Teknolojik gelişmeler yaşamımız ile bütünleşmektedir.

Asıl sorun Teknoloji çağında bizim ve ülkemizin, şu an nerede olduğumuz ve gelecekte nerede olacağıdır. "Barışı sağlamanın yolu savaşa hazır olmaktır" diyor Atatürk. 100 yıl içindeki bilim ve teknolojik gelişmelerin 2. Dünya savaşında ve günümüzdeki Azarbeycan-Ermeni savaşındaki kaderini belirlemedeki etkisi, herhangi bir ulusun varlığını sürdürmesinin bilim ve teknolojiye bağlı olduğunu göstermektedir.

Ulusların kaderinin teknolojik gelişmelere dayandığı bir dönemde, teknolojiye dayalı eğitim veren öğretmenlere çok büyük görevler düşmektedir. Teknolojiye dayalı eğitim, okul öncesi dönemine kadar inerken, eğitimciler buna hazırlıksız yakalanmıştır. Hatalar da yapılmaktadır. Üstelik eğitimde yapılan hataların telafisi de çok zor olmaktadır. Bu nedenle bu bildiri de bilim adamlarının ve eğitimcilerin, teknoloji çağındaki rolünün neler olacağı sorularına yanıtlar aranmakta ve çözüm önerileri sunulmaktadır.

Anahtar Kelimeler: Eğitim, Teknoloji, Bilim, Teknoloji Çağı, Teknoloji Eğitimi

ABSTRACT

Technology's role in education today is unbelievable. With the pandemic process, the point where distance education has come has increased the importance of educational software even more; Robotics education has descended until preschool, artificial intelligence applications have entered our daily lives with phones, search engines have become able to work with software that can be managed with voice, and the software which makes translation freed you from the obligation to know a foreign language. Technological developments are integrated with our lives.

The real problem is where we and our country are now and where they will be in the future in technology age. "The way to achieve peace is to be ready for war," says Atatürk. The impact of



scientific and technological developments in determining the fate of the Second World War and the Azarbijian-Armenian war in the past 100 years shows that the survival of any nation depends on its success in science and technology.

In a period when the fate of nations is based on technological developments, teachers who provide technology based education have a great responsibility. While technology based education goes down to the preschool period, educators have been caught unprepared for it. Mistakes are also made. Moreover, it is very difficult to compensate for mistakes made in education. In this paper, answers to the questions of what the role of scientists and educators will be in the age of technology are sought and solutions are presented.

Keywords: Education, Technology, Science, Technology Age, Education of Technology



VACUUM ASSISTED CLOSURE TEDAVİSİ VAKA SONUÇLARIMIZ
OUR VACUUM ASSISTED CLOSURE THERAPY CASE RESULTS

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ABSTRACT

Purpose: To examine and evaluate the results of vacuum assisted closure therapy case series in Yozgat State and City Hospital and Bozok University Medical Faculty Cardiovascular Surgery Clinic.

Material and Methods: Patients who applied to our clinics with wound infection and underwent Vacuum Assisted Closure (VAC) treatment between January 2014 and 2021 were retrospectively analyzed.

Results: The treatment results of patients who were hospitalized in the cardiovascular surgery clinic with saphenous wound infection and sternal wound infection and underwent VAC treatment were evaluated. Of the 32 cases who presented with sternal wound infection, 27 (84.37%) had diabetes and 6 (22.22%) had morbid obesity.

Conclusion: Complete recovery was achieved with antibiotics and vacuum-assisted sternum system treatment. Mediastinitis did not develop in any of our patients. Left anterolateral thoracotomy was performed in 16 patients (4.21%), right anterolateral thoracotomy in 12 (3.15%) patients, anterior left thoracotomy in addition to median sternotomy in 4 patients, and left right thoracotomy in three patients. Mediastinitis did not develop in any of our patients.

ÖZET

Amaç: Yozgat Devlet ve Şehir Hastanesi ile Bozok Üniversitesi Tıp Fakültesi Kalp ve Damar Cerrahisi Kliniği Vacuum assisted closure tedavisi vaka serisi sonuçlarını inceleyip değerlendirmek.

Gereç ve Yöntemler: Ocak 2014 ve 2021 zaman aralığında kliniklerimize yara yeri enfeksiyonu ile başvurup Vacuum Assisted Closure (VAC) tedavisi uygulanan hastalar geriye dönük olarak incelenmiştir.

Bulgular: Kalp damar cerrahi kliniğinde safen yara yeri enfeksiyonu ve sternal yara enfeksiyonu ile interne edilip VAC tedavisi yapılan hastaların tedavi sonuçları değerlendirildi. Sternal yara yeri enfeksiyonu ile baş vuran 32 vakanın 27 (%84,37)'sinde diyabet 6 (%22,22)'sında morbid obesite mevcuttu.

Sonuç: Yapılan antibiyotik ve vacuum-assiste sternum sistem tedavisi ile hastalarda tam şifa sağlandı. Hiç bir hastamızda mediastinit gelişmedi. Sol anterolateral torakotomi 16 hastada (%4,21), sağ anterolateral torakotomi 12 (%3,15) vakada, 4 hastada medyan sternotomiye ilave ön sol torakotomi ve üç hastada sol sağ torakotomi yapıldı. Hiçbir hastamızda mediastinit gelişmedi.



**IMPROVING THE NETWORK LIFETIME IN SOLAR ENERGY HARVESTING
SYSTEM FOR WIRELESS SENSOR NETWORKS**

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ABSTRACT

Improving the network lifetime are extremely important in Wireless Sensor Networks (WSNs) where the goal is to make the nodes operate as long as possible. In our article, the aim is to provide the optimal transmission power in order to maximize the network lifetime using the Orthogonal Multiple Access Channel (OMAC) in Harvesting System (HS-WSN). We begin the analysis by a single transmitter node After we generalize the analysis with M transmitter nodes. Nodes are able to harvest energy from nature and also transfer energy to those neighbors who lack energy. Eventually, we show the viability of our approach in simulations results.

Keywords: WSN, Energy-Efficiency, Harvest Energy, Orthogonal Frequency Bands, Lifetime network, EH-WSNs, transferred energy.



ZnS and CdS NANOPOWDERS: WET CHEMICAL SYNTHESIS AND CHARACTERIZATION**Suresh Kumar***

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ABSTRACT

The growth of nanoparticles of sizes in the range of 1-100 nm are remain the foremost interdisciplinary area of research from ancient time. Now-a-days group II-VI semiconductors perform a key role in modern technology. Nanopowder of pure CdS and ZnS have been synthesized via, simple and less expensive, wet chemical method using glucose both as capping agent and stabilizer. The structural, optical, compositional and morphological characterizations were performed using X-ray diffraction (XRD), Fourier transforms infrared spectroscopy (FTIR), optical absorption (UV-vis) spectroscopy and scanning electron microscopy (SEM-EDS) with energy dispersive spectroscopy. The XRD result shows that both pure CdS and ZnS are of high crystalline with hexagonal packing structure. The average crystallites size of synthesized nanopowders were calculated using Debye–Scherrer formula and are found to be 8 nm for CdS and 20 nm for ZnS, respectively. The direct band gap values obtained from optical analysis are 2.5 eV for CdS and 3.8 eV for ZnS, respectively. UV-vis spectra for both the samples show that the absorption peaks exhibit a blueshift *w.r.t.* their bulk counterpart. FTIR spectral data displayed the characteristic peaks for Cd—S and Zn—S bonds and confirm the formation of desired nanoparticles. The FE-SEM images show the granular morphological structure for both samples.

Keywords: ZnS; CdS; wet chemical synthesis; XRD; FTIR; direct band gap;



**IN VITRO FEEDING AND COLONIZATION OF *HYALOMMA EXCAVATUM* AND
HYALOMMA MARGINATUM TICK SPECIES**

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ABSTRACT

Ticks are blood-sucking obligate ectoparasites, differ from insects in many structural and biological aspects and they are arthropods, part of the class Acarchnida. Colonization and production of different tick species and their developmental stages under laboratory conditions is also important in terms of revealing the course and pathogenesis of tick-borne diseases within ticks and host and creating new ideas on how to prevent diseases. Animals such as cattle, rabbits, gerbils are frequently used during the production and colonization of tick species in laboratory conditions. A successful *in vitro* feeding system has the potential to reduce the number of laboratory animals used and is an important tool for studying the biology and vectorial capacity of ticks. Artificial feeding systems for different tick species have long been under development, but despite progress and improvement, *in vitro* feeding is not yet used routinely in laboratories.

The present study aimed to adjust the artificial feeding technique using silicone membranes of different thicknesses for adults, nymphs and larvae stages of both *H. excavatum* and *H. marginatum*. The results showed that the attachment and feeding rates of adult female *H. marginatum* and *H. excavatum* was 66.6% (8/12) and 58.3 % (7/12), respectively, using *in vitro* feeding system. However, immature forms (larvae and nymphs) of *H. excavatum* and *H.*



marginatum could not be fed *in vitro* despite repeated trails using different thickness of silicones.

In conclusion, this study demonstrated that a silicone membrane artificial feeding system could be used successfully for adult stage of both tick species. This method was used for the second time in the world for feeding *H. marginatum*, and for the first time in Turkey for feeding *H. excavatum*. In the light of these findings, the current study is expected to stimulated further *in vitro* tick feeding studies.

Key Words: Colonization, *Hyalomma excavatum*, *Hyalomma marginatum*, *in vitro* feeding

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**İLK ORTA ƏSR MUĞAN VİLAYƏTİNİN MUĞAN VƏ HƏMƏŞƏRƏ
ŞƏHƏRLƏRİ HAQQINDA**

**О ГОРОДАХ МУГАН И ХАМАШАРА ПЕРВОЙ СРЕДНЕВЕКОВОЙ В МУГАНСКОЙ
ОБЛАСТИ**

ABOUT THE FIRST MEDIEVAL CITIES OF MUGAN PROVINCE AND HAMASHARA

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Lənkəran Dövlət Universitetinin doktorantı

Açar sözlər: Muğan vilayəti, ilk orta əsr, şəhərlər, mənbələr.

Ключевые слова: Провинция Муган, раннее средневековый, города, источники.

Key words: Mugan province, early medieval, cities, sources.

XÜLASƏ

Məqalədə Muğan vilayətinin İlk Orta əsr (III –XI) şəhər - qalalarından bəhs olunur. Erkən feodalizmdə antaqonist siniflərin yaranması, sənətkarlıq və ticarətin inkişafı yeni şəhərlərin meydana gəlməsinə səbəb olurdu. Muğan şəhərləri haqqında mənbələr yazıda öz əksini tapmışdır. Ərəb, fars və Şərqi görkəmli tarix və coğrafiyaşünasları Muğan şəhərləri haqqında maraqlı məlumatlar verirlər. Onların əsərlərində Muğan, Bərzənd, Varsan, Həmşərə, Bacərvan, Kuştaspi, Şəhriyar kimi Muğan şəhərlərindən söhbət açılır. Xüsusilə Muğan və Həmşərə şəhərləri haqqında. Bəzilərinin yeri müəmmalı olsa da, alimlərimizlə araşdırıb tapmağa səy göstəririk.

РЕЗЮМЕ

В статье рассказывается о городов-крепостей раннего средневековья (III-XI вв) Муганской провинции. В условиях раннего феодализма в связи появлением антагонистических классов и развитием торговли появились также новые города. Интересные сведения об этих Муганских городах нашли свое отражение в трудах видных историков и географов Востока. В их произведениях рассказывается о таких городах, как Мугань, Барзанд, Варсан, Хамашара, Баджраван, Куштаспи, Шахрияр и т.д. Наряду недостаточной информации о местах нахождения некоторых из этих городов, Мы стараемся вместе с учеными принести ясность этой проблеме. В этой статье дается сведения о двух городов-крепостей – Муган и Хамашара.

ABSTRACT

The article deals With the early medieval towns and fortresses of Mugan province (III-Xi cent.) in evrly feudalism, the emergence of antogonistic classes the development of crafts and trade led to the emergence of new cilies Sources about Mugan cilies are reflected in the article. Prominent arab and persian historians and geographers provide interesting information about the cities of Mugan, in the works Mugan, Barzand, Varsan, Hamashara, Bajravan, Kushtaspi and Shahriyar are mentioned. Although the location of some of them is misterans,



we are trying to find out, with our sient ists in this article we give information about only two cities.



**DETECTING HIGH LEVELS OF STAGE FRIGHT AT STUDENTS USING
COMPUTATIONAL INTELLIGENCE TECHNIQUES**

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ABSTRACT

The theatrical performance at school is a top moment of expression of students' theatrical activities which is a complex form of expression and communication that pursues both pedagogical and artistic goals. However, some students feel uncomfortable participating in such cultural activities, as stage fright, an emotional experience that the individual feels when exposed to a public audience, has a negative effect on them. In some cases, in fact, this intense emotional experience has a repressive effect on the active and effective participation of the student, affecting his/her executive and communication skills. As a result, it is necessary to identify those students who are at risk, in order to develop coping practices for stage fright.

The purpose of this work is to detect high levels of stage fright at students through student segmentation using computational intelligence techniques. A clustering algorithm based on Mayfly Optimization Algorithm is applied on a data set of 774 10-12-year-old students to divide students according to their stage anxiety and the emotions that they develop during the performance. The results illustrate the effective formation of heterogeneous student groups, with the members of each having homogeneous characteristics of performance anxiety and emotions, highlighting the cases of students experiencing unmanageable emotional experiences in school theatrical performance. Thus, the drama teacher can easily find and manage students, by knowing the characteristics of each group, in order to develop management practices in those at risk.

Keywords: Stage fright, Theatrical performance, Student segmentation, Computational intelligence



BIOMEDICAL IMAGING AND ANALYSIS THROUGH DEEP LEARNING

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ABSTRACT

Deep learning algorithms, in particular convolutional networks, have rapidly become a methodology of choice for analysing medical images. Biological image analysis, with special emphasis on efforts related to the applications of computer vision, virtual reality and robotics to biomedical imaging problems. Doctors usually analyse these medical images manually through visual interpretation. But visual analysis of these images by human observers is limited due to variation in interpersonal interpretations, fatigue errors, surrounding disturbances and moreover this kind of analysis is purely subjective. On the other hand, automated analysis of these images using computers with suitable techniques favours the objective analysis by an expert and thereby improving the diagnostic confidence and accuracy of analysis. This paper reviews the major deep learning concepts pertinent to medical image analysis. We survey the use of deep learning for image classification, object detection, segmentation, registration, and other tasks and provide concise overviews of studies per application area. In conclusion, we address the cancer area in the implementation of the systems for lung cancer.

Keywords: Medical image analysis; denoising; ROI detection; feature extraction; medical image classification.



**A REAL TIME NEURAL NETWORK APPROACH FOR DETECTING
DISTRIBUTED DENIAL OF SERVICE ATTACK**

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ABSTRACT

A Distributed Denial of Service (DDoS) attack is a type of cyber-attack in which the perpetrator aims to deny the services on a network by inundating the traffic on the network by superfluous requests which renders it incapable to serve requests from genuine users. Recent statistics in the year 2020 shows an increase in DDoS attack that organization and businesses around the world witnessed and experienced attack every month which results to lose of huge amounts of dollars to businesses. However, there are several commercially available software which spot and prevent DDoS, nonetheless the huge cost of these software makes them difficult and hard to afford for small scale businesses. This study aims to fill this gap by proposing a machine learning based approach for detecting DDoS attack which can be adopted by small and medium scale enterprises to keep their networks secure from DDoS attacks. Neural network algorithms were used to spot the DDoS attacks. The experimental findings showed that the neural network techniques can spot DDoS attacks in real time and preferable than the available commercial software in the market.

Keywords: Distributed Denial of Service attack, Neural Network, Multi-Layer Perceptron, Flood-based DoS



**NUMERICAL ANALYSIS OF AN AXIAL FLOW CENTRIFUGAL PUMP AS
TURBINE USING CFD TECHNIQUES**

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ÖZET

Küçük hidroelektrik santraller, coğrafyanın uygun olduğu kırsal alanlarda elektrik üretimi için kullanılmaktadır. Mekanik ekipmanın seçimi, kullanılabilirlik, ticaret, satın alma maliyeti ve bakım arasında bir dengeye sahip olmalıdır. Tam uyumlu bir alternatif, türbin olarak pompalardır (PAT). Bu türbomakine, geleneksel bir santrifüj pompanın ters yönünde çalışır, sudan enerji alır ve onu rotasyonel mekanik enerjiye dönüştürür.

Bu çalışmada, eksenel akışlı PAT'ler, düşük basma yüksekliği ve yüksek su akış koşullarında uygulamaları nedeniyle incelenmiştir. Sayısal ve akışkan dinamiği çalışmaları incelenmiştir. Bununla birlikte, üreticiler türbin modu karakteristik eğrisini sağlamaz ve saha koşullarını belirlemek için tanımlanmış bir metodoloji yoktur. Bu nedenle, fiziksel montajda maliyet gerektirmesine rağmen, genellikle deneysel doğrulamaya başvurulur. Bu nedenle, literatüre dayalı olarak türbin modu karakteristik eğrisini oluşturmak için sayısal ve akışkan dinamiği davranışını araştırmak gerekir.

Bu amaçla, ticari bir eksenel akış pompası analiz edilir. Başlangıçta çark ve kasanın üç boyutlu modellenmesi yapılır. Daha sonra pompa sonlu elemanlarda ayrıştırılır ve sınır koşulları oluşturulur. Son olarak, akışkan dinamik davranışını doğrulamaya ek olarak, en yüksek verimlilik noktası (BEP) ile ilgili minimum hata elde edilene kadar pompa modundaki davranışı üreticinin karakteristik eğrisine göre doğrulayan sayısal simülasyon gerçekleştirilir. Ardından türbin modunda sayısal simülasyon gerçekleştirilir. Sonuç olarak, pompa modunda, BEP'e göre% 7,41'lik bir hata elde edilirken, türbin modunda maksimum verimlilik% 73'tür. Bununla birlikte, deneysel kurulumlarda maliyetleri düşürmeyi mümkün kılan ve sürdürülebilir kalkınmanın yedinci hedefini destekleyen bir alternatif önerilmiştir..

Anahtar Kelimeler: Yenilenebilir enerji, Eksenel akış, Küçük hidroelektrik santral, santrifüj pompa, verimlilik



ABSTRACT

Small hydroelectric power plants are used for power generation in rural areas where the geography is suitable. The choice of mechanical equipment must have a balance between availability of operation, trade, acquisition cost, and maintenance. An alternative that fully complies is the pumps as turbine (PAT). This turbomachine operates in the reverse direction of a conventional centrifugal pump, receiving energy from the water and transforming it into rotational mechanical energy.

In the present study, axial flow PATs are studied because of their application in low head and high water flow conditions. Numerical and fluid dynamic studies have been investigated. However, manufacturers do not provide the turbine mode characteristic curve and there is no defined methodology to determine the site conditions. Therefore, it is usually resorted to experimental validation, although it entails costs in the physical assembly. Therefore, it is necessary to investigate the numerical and fluid dynamic behavior to construct the turbine mode characteristic curve, based on the literature.

For this purpose, a commercial axial flow pump is analyzed. Initially, the three-dimensional modeling of the impeller and the casing is performed. Then, the pump is discretized in finite elements and boundary conditions are established. Finally, the numerical simulation is performed, validating the behavior in pump mode with respect to the manufacturer's characteristic curve until obtaining the minimum error in relation to the highest efficiency point (BEP), in addition to verifying the fluid dynamic behavior. Subsequently, the numerical simulation is carried out in turbine mode. As a result, in pump mode, an error of 7.41% is obtained with respect to the BEP, while in turbine mode the maximum efficiency is 73%. With this, an alternative is proposed that makes it possible to reduce costs in experimental setups and supports the seventh objective of sustainable development.

Keywords: Renewable energy, Axial flow, Small hydroelectric power plant, centrifugal pump, efficiency



SCREENING OF EXOPOLYSACCHARIDES PRODUCING BACTERIAL STRAINS FOR PLANT GROWTH PROMOTING POTENTIAL ISOLATED FROM HOT SPRING**Noor-e-Saba Naz Tahir and Rida Batool**

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ABSTRACT

Exopolysaccharide (EPS) producing bacteria can play a significant role in plant growth promotion. Bacterial EPS can help the plants to survive efficiently in extreme conditions. This study was designed to isolate EPS producing bacteria from extreme environment and check their effect on growth enhancement of *Zea mays*. Seven bacterial strains were isolated from water sample collected from Tattapani hot spring, Azad Kashmir, Pakistan. All strains were EPS producers but three strains (BE1, BN1 and BN3) exhibited high EPS production (14g-15g /100ml) when screened on P-media. These strains had ability to solubilize phosphate and produce HCN when analyzed for plant growth promoting characteristics. Plant microbe interaction experiment was performed in field under natural conditions. Bacterial strains were used to inoculate *Zea mays* seeds because it is an important cereal globally. All inoculated seedlings showed significant improvement in all growth parameters as compared to non-inoculated seedling. Alcian blue staining revealed that inoculated *Zea mays* seedling's roots showed good bacterial colonization as compared to control. Significant increment was observed in auxin and soluble protein content of inoculated *Zea mays* seedlings to that of control. Phylogenetic analysis revealed that bacterial strains BE1, BN1, BN3 showed similarity to *Ochrobactrum intermedium*, *Bacillus pumilus* and *Enterobacter ludwigii*, respectively. This study had shown that all isolated bacterial strains were excellent EPS producers with excellent capability to enhance yield of *Zea mays*

Key words: Tattapani, Exopolysaccharides, Phosphate solubilization, Plant growth promotion, Root colonization



**SINGLE AND DOUBLE OPEN SWITCH FAULT DIAGNOSIS BASED ON
ARTIFICIAL NEURAL NETWORK IN THREE PHASE INVERTER OF SOLAR
PUMPING SYSTEM**

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ABSTRACT

The fidelity of a renewable energy system such as a solar pumping system is important in agricultural applications. Various types of malfunctions may happen, which can affect the operation of the system. Such defects require unforeseen maintenance, which increases the cost. Diagnosis of faults and their tolerance systems is essential to the integrity of a modern electrical and electronic system. Thus, the fault diagnoses of these systems are important.

This paper presents using of an artificial neural network technique to diagnostic single switch fault and double switch fault (“type open-circuit”) which appears in the inverter, our system as a whole contains Photovoltaic module, boost converter using P&O MPPT technique, Three-phase inverter using SPWM, Three-phase induction motor and water pump.

Keywords: Solar pumping, Artificial neural network, Fault diagnosis, open-circuit fault, switch fault.



CLIMATE CHANGE PERCEPTIONS AND ADAPTATIONS OF PASTORALISTS IN MOROCCO'S ARID RANGELANDS**SNAIBI W.^{1,2}, MEZRHAB A.¹, SY O.³**¹ Laboratory Communication, Education, Digital Usage and Creativity, ETIGGE Research Team, Mohammed Premier University, Oujda, Morocco² Morocco's National Institute of Agronomic Research, CRRAO, Oujda, Morocco³ Geomatics and Environment Laboratory, Assane Seck University, Ziguinchor, Senegal**ABSTRACT**

In Morocco, rangelands extend over more than 500,000 km², lie mainly in arid areas and play economic, socio-cultural and environmental roles. From the mid-1970s, the high plateaus of eastern Morocco, which are one of the country's largest pastoral ecosystems, have shown proven signs of climate change (CC), thus threatening their sustainability and that of the extensive livestock production, the main local livelihood. The rangelands-based small ruminants raising, has become more vulnerable due to its heavy reliance on climatic conditions. The adverse impacts induced by climate change mainly include the decline in fodder production, the scarcity of water resources and the accentuation of rangeland degradation and poverty. To face it, livestock producers have undertaken a wide set of adaptation responses. However, these ones have been adopted differently depending on herders' socio-economic conditions, and the factors influencing pastoralists' choice of a specific measure from a range of existing options are still not studied. This paper aims to identify the main long-term changes that have affected local climatic conditions, to analyze the adaptation practices of pastoralists, taking into account their socio-economic categorization, as well as to ascertain the factors affecting the choices of adaptive strategies to be implemented. Mann-Kendall, Pettitt and Buishand tests and the standardized precipitation index were used to analyze the collected climate data, which cover the annual rainfall of 7 meteorological stations: Bni Mathar (1931-2019), Tendrara (1931-2019), Bouaârfâ (1981-2019), Figuig (1935-2019), Taourirt (1979-2019), El Aioune (1931-2019) and Oujda (1914-2019) and the temperature of Bni Mathar (1970-2016) and Oujda (1935-2020). Data on CC perceptions and adaptations were analyzed using descriptive statistics and Kruskal-Wallis test.

The results indicated that rainfall has experienced a general decreasing trend since the mid-1970s. This downward trend was significant for Bni Mathar ($\tau_b = -0.194$, $p = 0.007$) and Oujda ($\tau_b = -0.189$, $p = 0.004$) stations, with respectively precipitation losses of 23 and 30% and rupture dates localized at 1976 et 1980. The temperature series showed a significant upward trend in the minimum ($\tau_b = 0.647$, $p < 0.0001$; $\tau_b = 0.333$, $p < 0.0001$) and mean ($\tau_b = 0.553$, $p < 0.0001$; $\tau_b = 0.310$, $p < 0.0001$) temperatures, respectively for Bni Mathar and Oujda. The minimum temperature has experienced the highest increase, either 39 and 11% with dates of ruptures located in 1988 and 1986. The frequency of dry years has increased in recent decades, recording high values ranging between 40 and 62%. Between the periods before and after 1976, the drought frequency rose on average from 28 to 48%, an increase of over 71%. Furthermore, there was a significant difference in the frequency' adoption of CC adaptation measures,



according to the categories of pastoralists ($\chi^2 = 12.211$, DF= 2, p = 0.002) due to a strong dissimilarity between small and large herders. Agroecological zone, livestock herd size, climate perception, educational level, training, credit access, equipment and household size, were the main factors affecting pastoralists' choice of CC adaptive practices. Public programs aimed at strengthening livestock producers' resilience in Morocco's arid rangelands face to climate change, should taking into account these determinants, be adapted to differentiated local agroecological conditions and pay more attention to small herders who represent the most vulnerable group.

Keywords: Climate change, Vulnerability, Adaptation, Resilience, Adoption, Livestock producers, Morocco



**THE IMPLEMENTATION OF TECHNICAL ANALYSIS TO FORECAST STOCKS
PRICE IN EMERGING MARKET**

(Case : Indonesia Capital Market)

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ABSTRACT

This research aims to test the effectiveness of technical analysis implementation on blue chips stocks and penny stocks in emerging market. This research examines the forecasting result of bluechip stocks and penny stocks in Indonesia Stock Exchange as one of the emerging stock markets. In this study we have chosen and analyzed two classifications of stocks as the sample, 9 stocks selected from bluechip stocks group and 9 stocks classified as penny stocks group. The technical analysis tools used in this research are Simple Moving Average 5 (SMA5), Simple Moving Average 20 (SMA20), Simple Moving Average 60 (SMA60), Relative Strength Index (RSI), Moving Average Convergence/Divergence (MACD), and Stochastic Oscillator (SO). These tools used to reflect the trends and formation of stocks chart. This research results showed that technical analysis is effective used to forecast the penny stocks. It proved that in emerging market speculative transaction is the machine of stock exchange transactions. In this research, we used a mixed method of quantitative and qualitative analysis.

Keywords: Technical Analysis, Penny Stock, Bluechip Stock, mixed methods.



**MÜXTƏLİF POLLYUTANLARLA ÇIRKLƏNMİŞ ƏRAZİLƏRİN
MIKROORQANIZMLƏR VASITƏSİLƏ BIOREMEDIASIYASI**
BIOREMEDIATION BY MICROORGANISMS OF TERRITORIES CONTAMINATED
WITH VARIOUS POLLUTANTS

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Açar sözlər: bioremediasiya, mikrobioloji təmizlənmə, fitoremediasiya, pollyutant

Canlı orqanizmlərə təsirinə görə böyük təhlükə yaradan çirkləndirici maddələrdən pestisidlər, ağır metallar, karbon oksidləri və kükürd qazı göstərmək olar. Bu kimyəvi maddələrin biosferdə konsentrasiyası insanların fəaliyyətinin nəticəsidir. Neft və neft məhsulları ilə eləcə də asan həll olan duzlarla, ağır metallarla, pestisidlərlə çirklənmə il ərzində böyük həcmdə torpaqların yararsız hala düşməsinə gətirib çıxarır, torpaqların bioloji fəallığı zəifləyir və nəticədə torpağın eroziyası prosesi müşahidə olunur.

Belə torpaqları təmizləmək üçün bir sıra üsullar mövcuddur. Bu üsullar içində həm ekoloji, həm də iqtisadi cəhətdən ən əlverişlisi mikrobioloji (bioremediasiya) üsuludur. Bu üsul mikroorqanizmlər tərəfindən pollyutantların destruksiyasına əsaslanır. Son illərdə remediasiyanın təkmilləmiş yeni bir üsulundan bioremediasiya (mikroorqanizmlər və bitkilərin birgə təsiri) istifadə olunur. Bilirik ki, təbiətdə hər ekosistemin öz-özünü təmizləmə xüsusiyyəti vardır, bu mikroorqanizmlərin həyat fəaliyyəti və günəş şüalarının təsiri ilə gedir. Lakin çirklənmənin intensivliyi onların öz-özünə (təbii) təmizlənmə prosesini çətinləşdirir və buna sərf olunan biovaxtı xeyli artırır. Mikrobioloji təmizləmə üsulunun mahiyyəti mikroorqanizmlərin bu xüsusiyyətindən istifadə edərək, suda gedən özünü təmizləmə mexanizmini daha da aktivləşdirib sürətləndirməkdən ibarətdir. Fitoremediasiya iqtisadi cəhətdən əlverişli biotexnologiyadır. Bitki-mikrob assosiyası (simbioz) qarşılıqlı surətdə əlverişli olduğu üçün bu üsuldən istifadə böyük üstünlüyə malikdir.

İşin məqsədi Azərbaycanda müxtəlif çirkləndiricilərlə çirklənmiş su və torpaq ərazilərinin bioloji təmizlənməsi üçün aktiv mikroorqanizmlər və müxtəlif əlavələrdən ibarət biopreparatın yaradılmasıdır. Hazırkı dövrdə mikrobioloji kimyanın əhatə dairəsi genişlənir. Yeni mikroorqanizmlər qrupu kəşf olunur. Bu üsul çox sadə prinsipə əsaslanıb, kimyəvi birləşmələrlə çirklənmiş obyektlərdən mikroorqanizmlər ayrılır, onların içərisindən aktiv destruktörlər seçilir, optimal şəraitlərdə yetişdirilir və çoxaldılaraq yenidən çirklənmə zonasına daxil edilir. Burada nə baş verir? Hər çirklənmə ərazisinə xas olan mikroorqanizmlər öz həyat fəaliyyəti nəticəsində çirkləndiricidən qida mənbəyi kimi istifadə edir, inkişaf edir və çoxalır, eyni zamanda pollyutantlar mikroorqanizmlər tərəfindən mənimsənilərək daha zərərsiz və az toksik birləşmələrə çevrilir.

Tədqiqatlar zamanı Abşeron yarımadasının neftlə çirklənmiş torpaq və su ərazilərinin, ağır metallar və pestisidlərlə zədələnmiş bir çox torpaq nümunələrinin analizi aparılmış, bioremediasiya üçün aktiv mikroorqanizm ştamları ayrılmışdır. Belə ki, neft və neft məhsullarına qarşı 87-90% destruktiv qabiliyyəti olan mikroorqanizmlər seçilmişdir ki, bunlar



neftlə çirklənmiş ərazilərin təmizlənməsi üçün tövsiyə edilə bilər. Eyni zamanda toksikorezistent (yabanı və mədəni) bitkilərin skriningi aparılmışdır, bəzi dənəli bitkilər (günəbaxan, arpa, qarğıdalı, gənəgərçək və s.) tədqiq edilmiş və uşurla ağır metallar və pestisidlərlə çirklənmiş torpaq nümunələrinin təmizlənməsində tətbiq edilmişdir.

Son illər təbiətlə mübarizə prinsipinə yox, onunla əməkdaşlıq prinsipinə üstünlük verilir. Təbiətdəki mənfi təsirlərə qarşı ona yad vasitələrlə mübarizə apardıqca o da bizə qarşı yad və sərt davranır, onun özündə olan vasitələrdən istifadə etməklə isə təbiəti korlamaqdan və özümüzü mənfi təsirlərdən daha effektiv qorumuş olarıq.

Daha bir məqsədimiz işğaldan azad edilmiş torpaqlarımızda öz tədqiqatlarımızı davam etdirərək ərazilərimizin məhsuldarlığının və münbitliyinin bərpasına nail olmaqdır.

SUMMARY

Key words: bioremediation, microbiological purification, phytoremediation, pollutant

Among the environmental measures to treat polluted soils with pollutants, preference is given to biotechnological approaches that are economically viable and effective. In recent years, the role of microorganisms in maintaining the ecological balance has been revealed. Many different forms of microorganisms have the ability to include xenobiotics in the metabolism, that is, to use them for the constructive and energetic metabolism of the cell.

Microorganisms ensure the destruction of xenobiotic substances that are alien to the biosphere. It is known that almost all synthesized drugs are subject to microbial destruction.



**THE PERCEPTION OF ARCHITECTURAL BARRIERS IN SIEWIERZ
MUNICIPAL OFFICE FROM DISABLE PERSON POINT OF VIEW**

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ABSTRACT

The paper concentrate on problems connected with problems of peoples with disability. The main aims of the paper is to measure the level of quality of service in the case of architectural barriers in municipal offices by peoples in disability. We made following hypothesis: the types of disability significantly affects the perception of quality of services in municipal office regarding architectural barrier. The problem of satisfaction of people with disability in the case of architectural barriers in municipal office in Siewierz was analyzed from type of disability point of view. We distinguished five main types of disability in the paper: sensory impairment – a lack, damage or disorder of sensory analysers' function (this category includes the blind, the visually impaired, the deaf, hard of hearing persons and people with visual and auditory perception disorders); intellectual impairment – mental retardation; social functioning impairment – disorders of neural and emotional balance; communication impairment – hindered verbal contact (speech impediments, autism, stammering); motor impairment – people with motor organ dysfunction. On the basis of that are discussed in this publication the research, we can conclude that the overall assessment of architectural barriers for people with disabilities is as in the case of the Municipal Office in Siewierz at an average level. The problems focus mainly on matters of specialized service selected groups of customers with disabilities who require further elaboration. Another type of problem is to issue a limited number of parking spaces for the disabled, but for objective reasons, it will be difficult to solve. Also we can say that the assessment of the architectural barriers by peoples with various types of disability vary significantly. The architectural barriers are the problem especially for people with motor disabilities – those persons are going to municipal office often and because of type of their disability barriers within the office and near the office is the big problem for them. The results are supporting the hypothesis that the type of disability affects perception of architectural barriers by peoples with disabilities.

Keywords: sustainable architecture architectural barriers, disability, municipal office, public space, smart city



FUZZY LOGIC AND CHAOTIC ATTRACTORS IN DECISION-MAKING FUNCTIONS

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ABSTRACT

In recent years, several scientific efforts have been undertaken in order to accurately describe dynamic processes by their stability conditions and controlled chaos.

Chaos theory represents a topic of great interest, owing to its extraordinary potential to be sensitive to the initial conditions for evaluation. In particular, the nature of fuzzy logic, machine learning and artificial intelligence can be involved in decision-making functions assisted by nonlinearities.

In this direction, an attempt has been made in this work to further explore the evolution of chaotic attractors governed by Rössler equations experimentally implemented by optical and electronic signals. The analysis was carried out by a straightforward comparison of time-resolved measurements in a two-wave mixing configuration detecting photo-active nanoparticles.

Simplicity exhibited by chaotic functions is highlighted together to their potential in diverse technological applications. It is demonstrated the possibility to design hierarchical functions yielding optical effects with immediate applications for biomedical processes and synchronization technology. It is pointed out the advantages in the superposition nonlinear and chaotic systems for recording information in light in order to propose a basis for future research. The challenge of instrumentation methods by ultrafast methods is still in progress and it can be contemplated the use of nonlinearities and chaos algorithms.

Keywords: Nonlinearity, Chaos theory, Rössler systems, Instrumentation, Artificial intelligence



YÜKSEKTE ÇALIŞMALARDA İŞ SAĞLIĞI VE GÜVENLİĞİ

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ÖZET

Çalışma hayatında çalışanlar tarafından yürütülmekte olan çeşitli iş ve faaliyetler, çalışanların genel olarak açık ve kapalı ortamlarda özel olarak ise ofis ortamında, yerin altında, yüksek yerlerde, su üstünde veya altında vb. farklı şart ve koşullarda çalışmasını gerektirebilmektedir.

Birçok sektörde yürütülmekte olan işlerin doğası gereği ortaya çıkardığı olumsuz çalışma koşullarının en yaygın olanlarından birisi de şüphesiz ki çalışanların düşme riskine maruz kaldıkları yüksekte çalışmalardır. Ülkemiz mevzuatında yüksekte çalışma “seviye farkı bulunan ve düşme sonucu yaralanma ihtimalinin oluşabileceği her türlü alanda yapılan çalışma” şeklinde tanımlanmaktadır.

Mevzuatımızda belirtilen tanımın konuyu geniş yelpazede değerlendirdiği ve bir faaliyetin yüksekte çalışma olarak dikkate alınabilmesi için iki hususun aynı anda bir araya gelmesi gerektiği görülmektedir. Bu hususlar seviye farkı ve yaralanma ihtimalidir. Seviye farkı yani yükseklik ile ilgili olarak bazı Avrupa Birliği ülkeleri, Amerika Birleşik Devletleri, Avustralya gibi ülkelerde farklı sınır değerleri yer almaktadır. Mevzuatımızda ise bir rakamsal sınırlamaya gidilmemiş ve kapsam daha geniş tutulmuştur.

Örneğin, mevzuatımız 50 cm yükseklikte bir platform ya da basamak üzerine çıkılarak yapılan kısa süreli bir tadilat işini de; yerden 3 metre yükseklikte bir iskele üzerinde yapılan bakım, onarım işini de yüksekte çalışma olarak kabul etmektedir. Özellikle inşaat sektöründe yürütülen kalıp, demir ve beton döküm işleri ile sıva, boya, izolasyon gibi işler, çatı imalatı, köprü, çelik konstrüksiyon vb. birçok faaliyet ile çeşitli işyerlerinde platformlar, iskeleler, merdivenler vb. geçici iş ekipmanları üzerinde yapılan faaliyetler ya da sabit makine, tezgah



gibi iş ekipmanları veya yapılar üzerinde yapılan temizlik, bakım ve kontroller gibi daha birçok faaliyet, bünyesinde yüksekte çalışmayı barındırmaktadır. Bu ve bunun gibi riskli sektörlerde düşme tipi iş kazalarında ciddi yaralanmaların ihtimal dâhilinde olduğu dikkate alınır, yüksekte çalışma hususunun ne kadar önemli olduğu daha iyi anlaşılmaktadır.

Anahtar Kelimeler: Yüksekte çalışmalar, İş Sağlığı ve Güvenliği, Risk Değerlendirmesi

ABSTRACT

Various jobs and activities carried out by employees in working life, employees in general in open and closed environments, especially in the office environment, under the ground, high places, above or under water, etc. It may require operation in different terms and conditions.

Undoubtedly, one of the most common unfavorable working conditions caused by the nature of the work carried out in many sectors is working at heights where employees are exposed to the risk of falling. In the legislation of our country, working at height is defined as "work in all kinds of areas where there is a level difference and the possibility of injury may occur as a result of falling".

Undoubtedly, one of the most common unfavorable working conditions caused by the nature of the work carried out in many sectors is working at heights where employees are exposed to the risk of falling. In the legislation of our country, working at height is defined as "work in all kinds of areas where there is a level difference and the possibility of injury may occur as a result of falling".

It is seen that the definition specified in our legislation evaluates the subject in a wide range and in order for an activity to be considered as working at height, two issues should come together at the same time. These issues are the level difference and the possibility of injury. Regarding the level difference, ie height, there are different limit values in countries such as some European Union countries, United States of America, Australia. In our legislation, there is no numerical limitation and the scope has been kept wider.

For example, our legislation includes a short-term modification work done by climbing on a platform or step at a height of 50 cm; It accepts maintenance and repair work done on a pier 3 meters above the ground as working at height. Especially in the construction sector, mold, iron and concrete casting works and works such as plaster, paint, insulation, roof manufacturing, bridge, steel construction, etc. platforms, piers, stairs etc. in various workplaces with many activities. Many other activities such as activities carried out on temporary work equipment or cleaning, maintenance and controls on work equipment such as fixed machines, benches or structures include working at height. Considering the possibility of serious injuries in fall-type occupational accidents in this and similar risky sectors, it is better understood how important it is to work at height.

Keywords: Working at height, Occupational Health and Safety, Risk Assessment



COVID-19 SALGININ ULUSLARARASI TİCARETE ETKİSİ

THE IMPACT OF COVID-19 PANDEMIC ON INTERNATIONAL TRADE

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ÖZET

Covid-19 salgını dünya ekonomisini, tüm üretim sektörlerini ve birey ekonomilerini ciddi sonuçlarla ağır bir şekilde yaralamış ve yaralamaya devam etmektedir. Sınırların ötesine hızlıca yayılan virüsle beraber birbirine sınımsızlığa bağlı küresel ekonomiler bu küresel sağlık krizine savunmasız şekilde yakalanmış ve sert bir şekilde ekonomik bir şok yaşamışlardır. Ortaya çıkan ve ekonomilerimizi felç eden bu salgın kriziyle beraber ülkelerde sürdürülebilir kalkınma ve ekonomik hedeflerinden hızla uzaklaşmak zorunda kalmışlardır. Dünya Sağlık Örgütü'nün tavsiyesi ile beraber karantina uygulamasına geçen ve sokağa çıkma yasağı uygulayan ülkelerde tüketim alışkanlıkları değişmiş ve düşmüş azalan tüketimle beraber üretim sektörü de hem belirsizlik nedeniyle hem de azalan tüketimle beraber faaliyetlerine ya ara vermiş ya da üretim kapasitelerini azaltmıştır.

Ekonomik alanda gerçekleşen bu gelişmelerle beraber ülkelerinde dış ticaret faaliyetleri doğrudan etkilenmiştir. Talepte yaşanan azalma ve pandemi koşulları nedeniyle azalan üretim ve tüketim sonucunda ülkelerin hem ihracat hem de ithalatlarında değişimler yaşanmıştır. Bu çalışmada da 2018-2021 yılları arasında ihracat ve ithalat rakamlarına bakılarak Covid-19'un dış ticarete etkisi analiz edilmiştir.

Anahtar Kelimeler: Uluslararası Ticaret, Covid-19, Salgında Dış Ticaret

ABSTRACT

The Covid-19 pandemic has been (and still is) causing detriments on the world economy, all production sectors and individual economies. Firmly interconnected transnational economies have been thrown off balance by this global health crisis through the spread of virus and thrown into an economic crisis. Due to this pandemic crisis paralyzing national economies, countries suddenly had to diverge from their economic targets and objectives of sustainable development. Countries that have imposed quarantines and lockdowns based on the recommendation of the World Health Organization, not only the consumption levels have declined, but also the consumption habits have changed in general. This decline in consumption and uncertainty in turn has brought production sector to a halt, causing either a restraint in their production activities or reduction in their production capacities. Along with these developments in the field of economy, the foreign trade activities of countries have been directly affected. The decline in demand as well as the reduced levels of production and consumption due to pandemic-related conditions, certain variations have been observed in the imports and exports of countries. This study analyzes the impact of Covid-19 on international trade by delving into the quantitative data on imports and exports in the period of 2018-2021.

Keywords: International Trade, Covid-19, Foreign Trade in Epidemic



BOR MADENİNİN DÜNYA ÜZERİNDEKİ YERİ VE ÖNEMİ

THE PLACE AND IMPORTANCE OF THE BORON MINING IN THE WORLD

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ÖZET

Gelişen ve hızla değişen dünyada kaynaklarında aynı hızla tükenmeye devam etmektedir. 4000 yıllık bir geçmişe dayanan bor madeninin çok eski dönemlerden günümüze kadar birçok alanda kullanıldığı görülmektedir. Bor rezervi bakımından Türkiye, Güney Amerika, Rusya ve Amerika Birleşik Devletleri başta gelen ülkeler arasında yer almaktadır ve dünya ülkeleri arasında önemli bir yere sahip olmaktadır. Sert bir element olarak doğal yaşam içerisinde 230 farklı türü içinde barındırmaktadır ve 2500 derece hem kaynayan hem de hem de eriyen bir yapıya sahiptir. Bor madenin en çok kullanım alanı olarak temizleme ve beyazlatma sanayinde, Metalürji alanlarında, havacılık ve uzay araştırmalarında, elektrik ve elektronik sektöründe, bilgisayar sektöründe, otomobil sektöründe, enerji alanlarında İlaç sektöründe ve Kozmetik sanayinde, tekstil alanlarında, tıp dallarında, tarımsal sektörde, askeriye ve zırhlı araçlarda, Cam sanayinde, inşaat alanlarında, nükleer sanayinde, sektöründe, ileri teknolojik araştırma sektöründe gibi birçok sektörde kullanılmaktadır.

Anahtar kelimeler: Bor madeni, bor kullanım alanları, Türkiye bor rezervleri

ABSTRACT

In the developing and rapidly changing world, its resources continue to be depleted at the same speed. It is seen that the boron mine, which dates back to 4000 years, has been used in many areas from ancient times to the present. in terms of Turkey's boron reserves, South America, is among the leading countries, Russia and the United States and is an important place among the world countries. As a hard element, it contains 230 different species in natural life and has a structure that both boils and melts at 2500 degrees. Boron is the most widely used area of mine in cleaning and bleaching industry, metallurgy fields, aerospace research, electrical and electronics industry, computer industry, automobile industry, energy fields, Pharmaceutical industry and Cosmetics industry, textile fields, medicine branches, agricultural sector, military and It is used in many sectors such as armored vehicles, glass industry, construction areas, nuclear industry, advanced technological research sector.

Keywords: Boron, boron areas, boron reserves in Turkey



CONTEXTUALISING FLIPPED ONLINE CONTENT WITH LEARNER CENTRIC MOOCS FOR ENGINEERING STUDENTS IN PHYSICS EDUCATION

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ABSTRACT

Massive open online courses (Moocs) have been expanding very fast in the last few decades and especially in these difficult times of Covid, it has become important to promote online learning. At the same time several difficulties have been reported in literature regarding Moocs as lack in learners learning, low completion rates, lack of well organised activities to address learner needs.

In order to address these problems this study focuses on contextualising flipped online content with Learner Centric Moocs Model for enhancement of learning effectiveness in Physics course offered to Engineering students in their first year along with traditional lecturing. We study the effect of peer to peer learning and social networks in the Learning management system on student engagement and their cognitive development.

This research study also focuses on the students perceptions of learning through blended teaching. In the beginning, the students participation in the discussion forum was not promising as per the Moodle access report but with some key interventions and priming, the participation got improved which resulted in their better engagement in the content.

Pre-test and post-test results were used to measure the student learning effectiveness and the students perceptions were taken through a well designed questionnaire and personal interviews. Our results show considerable improvement in students involvement and performance when flipped online content was contextualised with a focussed discussion forum and blended learning course was implemented with specific key interventions.



A THREE POINT INTEGRATION SCHEME FOR SINGULAR PERTURBATION PROBLEMS**Mohammad Javed Alam, Hari Shankar Prasad, Rakesh Ranjan**Department of Mathematics, National Institute of Technology Jamshedpur, 831014,
Jharkhand, India.**ABSTRACT**

A Three Point Integration Scheme on a uniform mesh is presented for the solution of singularly perturbed differential equation of second order. This scheme is derived by the application of the exact and approximate rule of integration with finite difference approximation of derivatives. Thomas algorithm is utilized to solve the resulting tri-diagonal system of equations. Convergence of the scheme is discussed in detail. The scheme is shown to have convergence of first order. Model linear and non-linear example problems are solved and computational results are presented in the tables in terms of maximum absolute errors to show the accuracy and efficiency of the method. The numerical results are tabulated and compared with some existing results. It is easily observed that the derived scheme is able to produce precise results with insignificant computational effort when perturbation parameter- ε tends to zero for any fixed value of the mesh size- h .

Keywords: Singular perturbation problems, Two-point boundary-value problems, Boundary layers, Finite difference

