ABSTRACT BOOK

AVRASYA 10. ULUSLARARASI UYGULAMALI BİLİMLER KONGRESİ

TBİLİSİ-GÜRCİSTAN
2 - 5 MAYIS 2024

AVRASYA
10. ULUSLARARASI
UYGULAMALI BİLİMLER
KONGRESİ

AVRASYA

10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES

MAY 2 - 5, 2024
TBILISI

ISBN : 978-625-6283-10-7

ACADEMY GLOBAL PUBLISHING HOUSE

AVRASYA
10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
MAY 2 - 5, 2024
TBILISI

Edited By
Prof. Dr. ALİ BİLGİLİ

CONGRESS ORGANIZING BOARD
Head of Conferences : *Prof. Dr. Ali Bilgili*
Head of Organizing Board: *Dr Gültekin Gürçay*
Organizing Committee Member: *Prof. Dr. Hülya Çiçek*
Organizing Committee Member: *Prof. Dr. Həcər Hüseynova*
Organizing Committee Member: *Prof. Dr. Naile Bilgili*
Organizing Committee Member: *Doç. Dr. Nazilə Abdullazadə*
Organizing Committee Member: *PROF. DR. BAŞAK HANEDAN*
Organizing Committee Member: *Prof. Dr. Hülya Çiçek*
Organizing Committee Member: *Prof. Dr. Dwi Solisworo*
Organizing Committee Member: *Prof. Dr. Dody Hartando*
Organizing Committee Member: *Prof. Dr. Raihan Yusoph*
Organizing Committee Member: *Assoc. Prof. Dr. Ivaylo Staykov*
Organizing Committee Member: *Assist. Prof. Dr. K. R. Padma*
Organizing Committee Member: *Dr. Mehdi Meskini Heydarlou*
Organizing Committee Member: *Dr. Amaneh Manafidizaji*
Organizing Committee Member: *Aynurə Əliyeva*

Issued: 30.05.2024
ISBN: 978-625-6283-10-7

CONFERENCE ID

AVRASYA
10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES

DATE – PLACE
MAY 2 - 5, 2024
TBILISI

ORGANIIZATION
ACADEMY GLOBAL CONFERENCES

EVALUATION PROCESS
All applications have undergone a double-blind peer review process.

PARTICIPATING COUNTRIES
TURKEY – India - North Cyprus, - Tunisia – Japan – Iran – Thailand - Prague Czech Republic – Pakistan – Brazil – Indonesia – Oman - North Korea - Vietnam - Bahrain – Uzbekistan - United Arab Emirates – Yemen – Guyana – Cuba – Chile – Bulgaria – Malaysia – Russia – Poland –

PRESENTATION
Oral presentation

PERCENTAGE OF PARTICIPATION
More than 50 % of paper are presented by participants from maintained countries.
34 papers from Turkey and 48 paper from other countries.

Members of the organizing committees of the conference perform their duties with an "official assignment letter"

LANGUAGES
Turkish, English, Russian, Persian, Arabic

Scientific & Review Committee

T.C.
ANKARA ÜNİVERSİTESİ REKTÖRLÜĞÜ
Veteriner Fakültesi Dekanlığı
Klinik Öncesi Bilimler Bölümü
Farmakoloji ve Toksikoloji Anabilim Dalı

Sayı : E-41298163-051.01-1104230 05.10.2023

Konu : 31-14279 Prof. Dr. Ali Bilgili'nin
Uluslararası Kongrelerde Düzenleme ve
Bilim kurullarında yer alması hk.

VETERİNER FAKÜLTESİ DEKANLIĞINA

İlgi : Veteriner Fakültesi Dekanlığı (Sekreterlik Bürosu)'nın 04.10.2023 tarihli ve E-21304664-051.01-1103011 sayılı yazısı.

Yükseköğretim Kurulu'nun 15.06.2023 tarihli oturumunda doçentlik başvuru şartları ile ilgili değişiklik önerileri kapsamında Sağlık Bilimleri Temel Alanı'nda gerçekleştirilecek olan madde 8'in Bilimsel Toplantı başlığı altındaki "b" bendinde "(Diğer uluslararası/ulusal bilimsel toplantının düzenleme komitesinde, kurum/tüzel kişilik/karar organı tarafından resmi olarak görevlendirilmiş üniversite/enstitü/bilimsel kurum/branş derneği akademisyen temsilcisi bulunması zorunludur) ifadesi yer almaktadır. Bu kapsamda olmak üzere Anabilim Dalımız Öğretim Üyesi Prof. Dr. Ali Bilgili'nin Academy Global Conferences & Publishing **(www.akademikongre.org)** tarafından önümüzdeki tarihlerde düzenlenecek olan aşağıda isimleri belirtilen uluslararası kongrelerde; kongre başkanı, kongre düzenleme ve bilim kurulu üyesi olarak görev yapması için izin yazısının verilebilmesi hususunda bilgilerinizi ve gereğini arz ederim.

1- Balkan Summit 9th International Congress of Applied Sciences, 6-8 October 2023, Edirne, Türkiye. (Head of Conference and Member of the Science and Advisory Board).

2- Karadeniz 14th Internateonal Conference on Applied Sciences, October 13-15, 2023, Batumi, Georgia. (Member of Organizing Committee and Member of the Science and Advisory Board).

3- Academy Global Far East Asia 2nd International Conference on Applied Sciences, October 13-15, 2023, Manila, Philippines. (Member of Organizing Committee and Member of the Scientific Committee).

4- AICSR 10th International Conference on Health, Engineering and Applied Sciences, 29 October 2023, Ankara, Türkiye. (Member of Organizing Committee and Member of the Science and Advisory Board).

Zübeyde Hanım Mahallesi Şehit Ömer Halisdemir Bulvarı No: 9/C 06070 Altındağ / ANKARA
Telefon No: 0312 317 03 15 / 434 Belge Geçer No: 0312 317 60 73
e-posta: - internet adresi: -
KEP Adresi : ankunvrek@ankuni.hs01.kep.tr

Bilgi için:Mehmet KİBAR
Bilgisayar İşletmeni
Telefon No:(312) 317 03 15-4434
E-Posta: mkibar@ankara.edu.tr

5- Akdeniz 10th International Conference on Applied Sciences, November 2-5, 2023, Girnea, Turkish Republic of Northern Cyprus. (Member of Organizing Committee and Member of the Science and Advisory Board).

6- International Congress of Health, Engineering and Applied Sciences, 10-12 november 2023, Muş, Türkiye.

7- 6th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2023), 11-13 October 2023, Ankara, Turkey. (Member of the Scientific Committee).

8- ICAFVP 3rd International Conference on Agriculture, Food, Veterinary and Pharmacy Sciences, November 10-12, 2023, Beirut, Lebanon. (Head of Conference and Member of the Science and Advisory Board).

9- European Conferences 3rd International Health, Engineering and Applied Sciences Congress, 17-19 November 2023, Tirana, Albania. (Member of Organizing Committee and Member of the Science and Advisory Board).

10- Eurasia 9th International Applied Sciences Congress, 24-26 November 2023, Tbilisi, Georgia. (Head of Conference and Member of the Science and Advisory Board).

11- Anadolu 14th International Conference on Applied Sciences December 8-10, 2023, Gaziantep, Türkiye. (Member of Organizing Committee and Member of the Science and Advisory Board).

12- Selçuk 9th International Conference on Applied Sciences, December 15-17, 2023, Konya, Türkiye. (Member of Organizing Committee and Member of the Science and Advisory Board).

13- Ege 10th International Conference on Applied Sciences, December 22-24, 2023, Izmir, Türkiye. (Member of Organizing Committee and Member of the Science and Advisory Board).

14- Abant 2nd International Conference on Scientific Researches, December 28-30, 2023, Abant, Bolu, Türkiye. (Member of Organizing Committee and Member of the Science and Advisory Board).

Prof. Dr. Ayhan FİLAZİ
Anabilim Dalı Başkanı

Zübeyde Hanım Mahallesi Şehit Ömer Halisdemir Bulvarı No: 9/C 06070 Altındağ / ANKARA
Telefon No: 0312 317 03 15 / 434 Belge Geçer No: 0312 317 60 73
e-posta: - internet adresi: -
KEP Adresi : ankunvrek@ankuni.hs01.kep.tr

Bilgi için:Mehmet KİBAR
Bilgisayar İşletmeni
Telefon No:(312) 317 03 15-4434
E-Posta: mkibar@ankara.edu.tr

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI

Kongre Bağlantı Linki :

Join Zoom Meeting

https://us06web.zoom.us/j/81604584722?pwd=y2kFvDBw8AEhxbZ5eSknYVkdXt0yTt.1

Meeting ID: 816 0458 4722

Passcode: 202224

ÖNEMLİ AÇIKLAMA (Lütfen okuyunuz)

- ZOOM bağlantısı için yukarıda verilen bağlantıyı veya yine yukarıda verilen giriş bilgilerini kullanabilirsiniz.
- Oturum içerisinde en KIDEMLİ olan moderator olarak seçilir. Moderatörün oturum düzenini gözetmesi, akademisyen adaylarını yönlendirmesi beklenmektedir.
- Oturuma bağlanmadan önce Salon numaranızı adınızın önüne aşağıdaki gibi ekleyiniz. Bu sayede kongre açılışında beklemeden oturumlarınıza gönderilebileceksiniz. Ör. 5 Ahmet Ahmetoglu
- Sunum süresi 10 dakikadır. Bu sürenin aşılmamasını moderatörler temin edecektir.
- Sunum sonrası 5 dakikayı geçmeyen soru-cevap, tartışma süresi verilmektedir.
- Sunumlar TÜRKÇE veya İNGİLİZCE yapılabilmektedir.
- Kameralar, oturum süresince toplam % 70 oranında açık olmak zorundadır.
- Sunum yapan katılımcının kamerası açık olmak zorundadır.
- Sunum yapmak zorunludur. Herhangi bir nedenle sunum yapmamış olan katılımcıya sertifika verilmesi ve çalışmasının yayınlanması sözkonusu olamaz.
- Katılımcı, kendi oturumda, oturum bitene kadar bulunmak zorundadır.
- Katılımcıların kendi oturumları dışındaki oturumlara katılma zorunluluğu yoktur.
- ZOOM platformunun kapasite sınırı nedeniyle, DİNLEYİCİ, sadece kapasite izin verdiği sürece kabul edilebilmektedir.

IMPORTANT, PLEASE READ CAREFULLY

- To be able to make a meeting online, login via https://zoom.us/join site, enter ID instead of “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.
- Speakers must be connected to the session **10 minutes before** the presentation time.
- All congress participants can connect live and listen to all sessions.
- During the session, your camera should be turned on **at least %70** of session period
- Moderator is responsible for the presentation and scientific discussion (question-answer) section of the session.

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.
- Moderator is responsible for the presentation and scientific discussion (question-answer) section of the session.
- Before you login to Zoom please indicate your name surname and hall number,

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

3 Mayıs / May 3, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 1	Dr. Öğretim Üyesi Turgay KARALİNÇ	1	EXAMINING THE RELATIONSHIP BETWEEN ORGANIZATIONAL CYNICISM AND COUNTERPRODUCTIVE WORK BEHAVIORS: A META-ANALYSIS STUDY	Doç.Dr, AYDIN ÇİVİLİDAĞ Doç. Dr. Şerife DURMAZ Yüksek Lisans Öğrenci, BERK USLU
		2	THE SHARING ECONOMY IN SUSTAINABLE SOCIAL LIFE	Lisans Öğrencisi, Berfin Özdem Dr. Öğr. Üyesi, Filiz Sivaslıoğlu
		3	THE USE OF CHATBOTS IN DIGITAL MARKETING	Lisans Öğrencisi, Rümeysa Özcan Dr. Öğr. Üyesi, Filiz Sivaslıoğlu
		4	THE EFFECT ON THE WORK PERFORMANCE OF THE ACCOUNTANT OF PROBLEMS ARISING FROM THE MAIN COMPONENTS OF THE CERTIFIED PUBLIC ACCOUNTANCY IN TURKEY	Prof. Dr. GÖKHAN ÖZER Yüksek Lisans Öğrencisi YAVUZ ARSLAN Arş. Gör. Dr. ABDULLAH KÜRŞAT MERTER
		5	KOBİLERDE SÜRDÜRÜLEBİLİRLİK UYGULAMALARI: İNŞAAT SEKTÖRÜNDE BİR ÖRNEK OLAY	Yüksek Lisans Öğrencisi ECEM TURAN Prof. Dr. KETİ VENTURA
		6	ENTEGRE MEREC-TOPSIS YAKLAŞIMIYLA HAVALİMANI PERFORMANS ANALİZİ	Dr. Öğr. Üyesi, UMUT AYDIN
		7	THE RELATIONSHIP BETWEEN SUSTAINABLE MANAGEMENT STRATEGIES AND FINANCIAL PERFORMANCE IN HEALTH CARE BUSINESSES	Dr. Öğretim Üyesi Turgay KARALİNÇ

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

3 Mayıs / May 3, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 2	**Assoc.Prof.Dr. ZEYNEP ÖZKURT**	1	ŞİFRELEME ALGORİTMALARI VE KUANTUM HESAPLAMA UYGULAMALARI	Arş. Gör. İLYA KUŞ Prof. Dr. AYDIN ÇETİN
		2	GÖKKUŞAĞI KÜTLE ÇEKİM KURAMI ÇERÇEVESİNDE VAIDYA-EINSTEIN- SCHWARZSCHILD KARADELİ MODELİ İÇİN MOLLER ENERJİ MOMENTUM GÖSTERİMİ	Prof. Dr., MURAT KORUNUR Dr. Öğr. Üyesi, SİBEL KORUNUR
		3	UZAYSAL ÖZ-BENZER, YEREL DÖNEL SİMETRİK MODEL İÇİN RAİNBOW KÜTLEÇEKİM KURAMI ÇERÇEVESİNDE TELEPARALEL ENERJİ YOĞUNLUĞU	Prof. Dr., MURAT KORUNUR Dr. Öğr. Üyesi, SİBEL KORUNUR
		4	DETERMINING THE RANK OF A HOMOGENEOUS ELEMENT ON LEIBNIZ ALGEBRAS	Assoc.Prof.Dr. ZEYNEP ÖZKURT
		5	BASES OF FIXED POINT SUBALGEBRAS ON FREE NILPOTENT LEIBNIZ ALGEBRAS	Assoc.Prof.Dr. ZEYNEP ÖZKURT

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES ArtAsya 1st INTERNATIONAL GROUP EXHIBITION MAY 2 - 5, 2024 TBILISI Meeting ID: 816 0458 4722 Passcode: 202224				
3 Mayıs / May 3, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 3	**Assoc. Prof. Dr. ÖZCAN ŞAHİN**	1	ANALYTICAL METHODS USED IN THE DETERMINATION OF BCM-7 IN MILK A1	Assoc. Prof. Dr. ÖZCAN ŞAHİN Assoc. Prof. Dr. İBRAHİM AYTEKİN
		2	THE IMPACT OF RHIZOBACTERIA ON THE AMINO ACID LEVELS IN SOME CITRUS ROOTSTOCKS GROWN IN SALINE SOILS	Assoc. Prof. Dr. Şeyma ARIKAN Research Assist. Merve KARAKOYUN Assoc. Prof. Dr. Muzaffer İPEK
		3	USE OF BODY CONDITION SCORE IN BREEDER SELECTION	Ayşe ŞEN Levend COŞKUNTUNA
		4	SOME MISTAKES MADE IN LAMB MANAGEMENT	Levend COŞKUNTUNA Ayşe ŞEN
		5	Pro-Oxidant Effect of Olea europaea L. Leaf Extract In Healthy Rats.	Sedat Baran DAĞ İpek TABAK Prof. Dr. Melahat DİRİCAN Prof. Dr. Sibel TAŞ

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES ArtAsya 1st INTERNATIONAL GROUP EXHIBITION MAY 2 - 5, 2024 TBILISI Meeting ID: 816 0458 4722 Passcode: 202224				
3 Mayıs / May 3, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 4	**Assist. Prof. Dr., YÜKSEL ERASLAN**	1	TRANSFORMATÖRLERDEKİ FARKLI KADEME DEĞİŞTİRME ORANLARININ GÜÇ AKIŞI VE KAYIPLARA ETKİSİ	Arş. Gör. Dr. Enes KAYMAZ Doç. Dr. M. Kenan DÖŞOĞLU
		2	ÇBAG TABANLI RÜZGAR TÜRBİNİNDE MAKSİMUM GÜÇ NOKTASI TAKİBİ MODELLEMESİNİN GELİŞTİRİLMESİ	Doç. Dr. M. Kenan DÖŞOĞLU Muhammed ÖZDEMİR Dr. Öğr. Üyesi Mustafa DURSUN,
		3	AERODYNAMIC INVESTIGATION AND VALIDATION OF A UAV WING USING CFD AND VORTEX LATTICE METHODS	Res. Assist., Veysel EROL Assist. Prof. Dr., Ahmet ŞUMNU Assist. Prof. Dr., Yüksel ERASLAN
		4	STABILITY ASSESSMENT OF UNMANNED AERIAL VEHICLE WITH TWIST-MORPHING WING	Assist. Prof. Dr., YÜKSEL ERASLAN Prof. Dr., TUĞRUL OKTAY
		5	DESIGN OF OPTIMAL PID CONTROLLER FOR LIQUID TANK SYSTEM USING PSO AND ABC ALGORITHMS	Şahin YILDIRIM Mehmet Safa BİNGÖL Sertaç SAVAŞ

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES ArtAsya 1st INTERNATIONAL GROUP EXHIBITION MAY 2 - 5, 2024 TBILISI Meeting ID: 816 0458 4722 Passcode: 202224				
3 Mayıs / May 3, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 5	**Prof. Dr. Yusuf Bayraktutan**	1	THE CHANGING ROLE OF THE STATE IN CHINA AFTER THE 2008 GLOBAL CRISIS AND THE COVID-19 CRISIS	Tuğba TONGUÇ, Prof. Dr. Ercan EREN,
		2	Foreign Trade Implications of Covid-19 Pandemic: The Case of BRIC and MIST	Prof. Dr. Yusuf Bayraktutan Elif İmzalı
		3	The Effect of Renewable Energy Consumption on Current Account: A Panel Data Analysis	Prof. Dr. Yusuf Bayraktutan Elif İmzalı
		4	TÜRKİYE'DE KRİZ DÖNEMLERİNDE OTOMOTİV SEKTÖRÜNÜN İNCELENMESİ	Yüksek Lisans Öğrencisi EMRE TURAN Doç. Dr. FERHAN SAYIN
		5	DEVLET BORÇLANMASININ EKONOMİK BÜYÜME ÜZERİNE ETKİSİ	Dr. Öğr. Üyesi, İREM ERASA AKÇA Dr. Öğr. Üyesi, Özgür ALTUNTAŞ

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

3 Mayıs / May 3, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 6	**Assis. Prof. Imelda Smit**	1	A CO-WRITING DEVELOPMENT APPROACHTO WIKIS: PEDAGOGICALISSUES AND IMPLICATIONS	Said Hadjerrouit
		2	EFFECT OF TEACHING GAMES FOR UNDERSTANDING APPROACH ON STUDENTS- COGNITIVE LEARNING OUTCOME	Malathi Balakrishnan, Shabeshan Rengasamy, Mohd Salleh Aman
		3	EFFECTIVENESS AND USABILITY EVALUATION OF 'LI2D' COURSEWARE	Zuraini Hanim Zaini, Wan Fatimah Wan Ahmad
		4	FACULTY STRESS AT HIGHER EDUCATION: A STUDY ON THE BUSINESS SCHOOLS OF PAKISTAN	Aqsa Akbar, Waheed Akhter
		5	VIRTUAL LEARNING PROCESS ENVIRONMENT: COHORT ANALYTICS FOR LEARNING AND LEARNING PROCESSES	Ayodeji Adesina, Derek Molloy
		6	INNOVATIVE TEACHING IN SYSTEMS ANALYSIS AND DESIGN - AN ACTION RESEARCH PROJECT	Assis. Prof. Imelda Smit
		7	MEDIA PEDAGOGY - THE MEDIUM IS THE MESSAGE	Syed Sultan Ahmed
		8	STUDENTS' ACCEPTANCE OF INCORPORATING EMERGING COMMUNICATION TECHNOLOGIES IN HIGHER EDUCATION IN KUWAIT	Bashaiar Alsanaa

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

3 Mayıs / May 3, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 7	**Dr. Aaron Nwabude**	1	PILOT STUDY ON THE IMPACT OF VLE ON MATHEMATICAL CONCEPTS ACQUISITION WITHIN SECONDARY EDUCATION IN ENGLAND	Dr. Aaron Nwabude
		2	THE DIRECT AND INDIRECT EFFECTS OF THE ACHIEVEMENT MOTIVATION ON NURTURING INTELLECTUAL GIFTEDNESS	Al-Shabatat, M. Ahmad, Abbas, M., Ismail, H. Nizam
		3	THE USING OF RASCH-MODEL IN VALIDATING THE ARABIC VERSION OF MULTIPLE INTELLIGENCE DEVELOPMENT ASSESSMENT SCALE (MIDAS)	Saher Ali Al-Sabbah, See Ching Mey, Ong Saw Lan
		4	MODALITY AND REDUNDANCY EFFECTS ON MUSIC THEORY LEARNING AMONG PUPILS OF DIFFERENT ANXIETY LEVELS	Soon Fook Fong, Aldalalah, M. Osamah
		5	PROMOTING COMPLEX SYSTEMS LEARNING THROUGH THE USE OF COMPUTER MODELING	Dr. Kamel Hashem, Assis. Prof. DR. David Mioduser
		6	E-LEARNING METHODOLOGY DEVELOPMENT USING MODELING	Assoc. Prof. Sarma Cakula, Dr. Maija Sedleniece
		7	VALIDATION OF BUILDING MAINTENANCE PERFORMANCE MODEL FOR MALAYSIAN UNIVERSITIES	AbdulLateef A. Olanrewaju, Mohd F. Khamidi, Dr.Arazi Idrus

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

3 Mayıs / May 3, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 8	**Nawsheen Bibi Jannnoo**	1	VIRTUAL LEARNING SETTINGS IN TRADITIONAL SPANISH UNIVERSITIES	Dr. Leire Urcola, Amaia Altuzarra
		2	OUTDOOR EDUCATION PROGRAM FOR ELEMENTARY SCHOOLS BASED ON WEB-GIS	Noriyoshi Hosoya, Dr. Lecture Kayoko Yamamoto
		3	REACTIVE FOCUS ON FORM THROUGH NEGOTIATION ON SPOKEN ERRORS: A CASE STUDY – DOES IT WORK FOR ALL LEARNERS?	Vahid Parvaresh, Zohre Kassaian, Saeed Ketabi, Masoud Saeedi
		4	EFFECTS OF INSTRUCTIONAL DESIGNS BASED ON COMPUTERS AMONG PUPILS WITH DIFFERENT LEVELS OF MUSIC INTELLIGENCE	Dr. Aldalalah, M. Osamah, Soon Fook Fong
		5	ANALYSIS OF MOTIVATION, ACHIEVEMENT, AND PUPIL-TEACHER INTERACTIONS IN ELEMENTARY SCHOOL BY INTEGRATING COMPUTER GAMES WITH MATHEMATICS INSTRUCTION	Kuo Hung Huang, Lecture Chong-Ji Ke
		6	PRELIMINARY INVESTIGATION OF A VIRTUAL LABORATORY FOR LEARNING BIOLOGY	Murniza Muhamad, Halimah Badioze Zaman, Azlina Ahmad
		7	SELF-STUDY OF MATHEMATICS FOR THE CPE EXAMINATION USING AN E-LEARNING TOOL	Sameerchand Pudaruth, Nawsheen Bibi Jannnoo

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

3 Mayıs / May 3, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 9	**Assoc. Prof. Dr. Kumiko Aoki**	1	FROM I.A RICHARDS TO WEB 3.0: PREPARING OUR STUDENTS FOR TOMORROW'S WORLD	Karen Armstrong
		2	FROM I.A RICHARDS TO THE ERA OF WEB 3.0: EQUIPPING OUR STUDENTS FOR THE FUTURE	Dr .Rishi Ruttun
		3	THE EFFECTS OF VISUAL ELEMENTS AND COGNITIVE STYLES ON STUDENTS LEARNING IN HYPERMEDIA ENVIRONMENT	Norazah Mohd Suki, Norbayah Mohd Suki
		4	IMPACT OF VISUAL COMPONENTS AND COGNITIVE PREFERENCES ON STUDENT LEARNING IN A HYPERMEDIA SETTING	Subramaniam Chandran
		5	ARE LECTURERS READY FOR USAGE OF MOBILE TECHNOLOGY FOR TEACHING?	Dr. Stuart Palmer, Dale Holt
		6	ARE INSTRUCTORS PREPARED FOR THE UTILIZATION OF MOBILE TECHNOLOGY IN EDUCATION?	Fereshteh Afkari, Davood Bagheri
		7	BETWEEN POLICY OPTIONS AND TECHNOLOGY APPLICATIONS: MEASURING THE SUSTAINABLE IMPACTS ON DISTANCE LEARNING	Assoc. Prof. Dr. Kumiko Aoki
		8	NAVIGATING POLICY CHOICES AND TECHNOLOGICAL IMPLEMENTATIONS: ASSESSING THE SUSTAINABLE EFFECTS ON REMOTE EDUCATION	Muhammad Ridhuan Tony Lim Abdullah, Saedah Siraj

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES ArtAsya 1st INTERNATIONAL GROUP EXHIBITION MAY 2 - 5, 2024 TBILISI Meeting ID: 816 0458 4722 Passcode: 202224				
3 Mayıs / May 3, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)				
Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 10	**As Dr. Ken Stevens**	1	COOPERATIVE PROFESSIONAL EDUCATION FOR E-TEACHING IN NETWORKED SCHOOLS	Dr. Ken Stevens
		2	VIRTUALIZATION TECHNOLOGY AS A MEANS FOR TEACHING COMPUTER NETWORKS	Dalibor Dobrilovic, Borislav Odadžic
		3	"A PLEA FOR SCHOOL DIVERSITY": A PRACTICAL REACTION TO THE SUPREME COURT DECISION ON RACE AND AMERICAN SCHOOLS	Assoc. Prof. Dr. Nathaniel Bryan
		4	A PROPOSED STRUCTURE FOR VISUALIZATION TO EDUCATE COMPUTER SCIENCE	Muhammed Yousoof, Mohd Sapiyan, Khaja Kamaluddin
		5	UTILIZING WEBLOG TO ENCOURAGE CRITICAL THINKING – AN INVESTIGATIVE STUDY	Huay Lit Woo, Qiyun Wang
		6	E/B-LEARNING ACTIVITIES AND HIGH SCHOOL TEACHING METHODS	Dr. Rui Antunes
		7	UTILIZING MULTIMEDIA IN COMPUTER-BASED LEARNING (CBL) A CASE STUDY: EDUCATING SCIENCE TO STUDENTS	Maryam Honarmand
		8	DEVELOPING THE PERSONAL, DISSOLVING THE POLITICAL	James Moir

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

3 Mayıs / May 3, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 11	**Assoc. Prof. Mikako Nishimuko**	1	DEVELOPMENT OF A SMART TUTOR USING A MULTIAGENT STRATEGY	Kamel Khoualdi, Radia Benghezal
		2	EMPLOYING VISUAL TECHNOLOGIES TO ENHANCE COMPUTER SCIENCE EDUCATION	Dr. Carol B. Collins, M. H. N Tabrizi
		3	EDULOGIC+ - KNOWLEDGE MANAGEMENT VIA DATA ANALYSIS IN EDUCATIONAL SETTINGS	Alok Sharma, Dr. Harvinder S. Saini, Raviteja Tiruvury
		4	APPLICATION OF VIRTUAL WORLDS IN EDUCATIONAL CONTEXT: RAMIFICATIONS FOR PRACTICE	Teresa Coffman, Mary Beth Klinger
		5	VIRTUAL OR VIRTUALLY U: ACADEMIC INSTITUTIONS IN SECOND LIFE	Nancy Jennings, Chris Collins
		6	THE IMPACT OF INSTRUCTIONAL IMMEDIACY ON COGNITION AND LEARNING IN ONLINE COURSES	Dr. Glenda A. Gunter
		7	FAITH-BASED ORGANIZATIONS' ROLE IN FOSTERING DEMOCRATIC PROCESSES: ATTAINING UNIVERSAL PRIMARY EDUCATION IN SIERRA LEONE	Assoc. Prof. Mikako Nishimuko
		8	ITALIANS - SOCIAL AND EMOTIONAL ISOLATION: FINDINGS FROM FIVE STUDIES	Vanda Lucia Zammuner
		9	APPROACHING CREATIVE THINKING SKILLS THROUGH PROBLEM-BASED LEARNING: TEACHING AND APPLICATION IN THE ENGINEERING CLASSROOM	Halizah Awang, Ishak Ramly

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

3 Mayıs / May 3, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 12	**Imola Katalin Kovács**	1	ENHANCING MATHEMATICS LEARNING ONLINE THROUGH OPEN EDUCATIONAL RESOURCES	Haohao Wang
		2	TOWARDS A MEANINGFUL REFORM IN GENERAL EDUCATION: INTEGRATING CORE CURRICULA WITH INSTITUTIONAL VALUES	Mahran Al-Ghayeb Nayef Jomaa Jomaa
		3	HARNESSING THE POWER OF BIG DATA IN EDUCATION: PRACTICAL APPLICATIONS AND IMPLICATIONS	Francis, A. JERO Edirin IKENGA
		4	EXPLORING FACEBOOK AS AN ALTERNATIVE LEARNING TOOL IN MALAYSIAN HIGHER EDUCATION: A STRUCTURAL EQUATION MODELING PERSPECTIVE	Imola Katalin Kovács
		5	LEVERAGING INFORMATION AND COMMUNICATION TECHNOLOGY TO ENHANCE CHILDREN'S POTENTIAL IN SCIENCE: ADDRESSING CHALLENGES FOR SUSTAINABLE DEVELOPMENT IN NIGERIA	Dr. Gabriella NAGY
		6	DEVELOPING A TRANSNATIONAL STUDENT SUCCESS FRAMEWORK FOR PRE-CLINICAL MEDICAL EDUCATION: AN ACTION RESEARCH INITIATIVE IN TRANSNATIONAL HIGHER EDUCATION	Ayesha Batool
		7	CASE STUDY: FACILITATING COLLABORATIVE TEAMWORK IN HIGHER EDUCATION	Dr. Farkhanda Iqbal
		8	EXAMINING TEACHER DISCOURSE IN LEARNER-CENTERED TEACHING PRACTICES	Assoc. Prof. Asif Anjum
		9	"EXPLORING ACCESS TO HIGHER EDUCATION: INSIGHTS FROM THE UNIVERSITY OF CALABAR PRE-DEGREE PROGRAM"	Eni I. Eni, James Okon, Ashang J. Ashang
		10	"FACILITATING COOPERATIVE LEARNING: PRINCIPLES OF MATHEMATICS INSTRUCTION FOR GRADUATE-LEVEL STUDENTS"	Abdulgaffar Muhammad Sunday Jones ANIEFOR

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 1	Prof. Dr. Sabit MENTEŞE	1	PARTİ DİSİPLİNİ VE TÜRKİYE'DEKİ BAZI PARTİLERİN PARTİ DİSİPLİNİ AÇISINDAN İNCELENMESİ	Hanife MÜDERRİSOĞLU Furkan ÇAPOĞLU
		2	NAMIK KEMALİN SİYASAL BİYOGRAFİSİ ÜZERİNE DEĞERLENDİRME	Hanife MÜDERRİSOĞLU Furkan ÇAPOĞLU
		3	DISASTER MANAGEMENT IN TURKEY AND AYDES	ÖZLEM BÖLÜKBAŞ
		4	BİT'LERİN KENTLERDE ULAŞTIRMA HİZMETLERİNİN SAĞLANMASINDAKİ ROLÜ VE BURULAŞ ÜZERİNE AMPRİK BİR UYGULAMA	Dr. Öğr. Üyesi MEHMET FATİH ASLANTAŞ Doç. Dr. TUNCER YILMAZ
		5	EXAMINING LOCAL GOVERNMENTS IN TERMS OF THE REASONS THAT MAKE THEM IMPORTANT AND THE VALUES THEY ARE BASED ON	Prof. Dr. Sabit MENTEŞE
		6	GÖÇ AKIMLARININ KAMU HARCAMALARI ÜZERİNDEKİ ETKİLERİ: TÜRKİYE ÖRNEĞİ	Yüksek Lisans Öğrencisi, Emsal CAN
		7	ÇİN'İN ORTA ASYA POLİTİKASI: ÇIKARLARININ GELİŞİMİ VE GÜNCEL BOYUTLARI	Doktora Öğrencisi Sedanur ŞEYBAN
		8	APPROACH OF THE PEOPLE'S REPUBLIC OF CHINA TO THE ISRAEL-PALESTINE CONFLICT	Dr. Öğrencisi Tuğçe AKÇABAŞ
		9	RUSYA'NIN TÜRKİSTAN'I İŞGALİNDE İRAN FAKTÖRÜ	İSMAİL YURDAKURBAN

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 2	**Doç. Dr. Zeynep BAŞKAN TAKAOĞLU**	1	Dershane Eğitimi Gören Öğrencilerin Spora Karşı Tutumları ve Boş Zaman Yönetimlerinin İncelenmesi	Mutlu AKBULUT Mehmet AYDOĞDU Doç. Dr. Hulusi ALP
		2	Spor Bilimleri Fakültesinde Okuyan Öğrencilerin Sporcu Öz Yeterlikleri	Özge KÖSE Doç. Dr. Hulusi ALP
		3	8. Sınıflarda Küresel İklim Değişikliği Konusunun Öğretimine Okul Dışı Öğrenme Ortamının Etkisinin İncelenmesi	Fen Bilimleri Öğretmeni, Nevriye DEMİRCİ Prof.Dr.Güldem Dönel AKGÜL
		4	FEN BİLGİSİ EĞİTİMİNDE DİJİTAL VE GELENEKSEL OYUN KULLANIMININ ÖĞRENCİ TUTUMUNA ETKİSİ	Prof. Dr. Güldem DÖNEL AKGÜL Fen Bilgisi Öğretmeni, Ogün KAYA Fen Bilgisi Öğretmeni, Nevriye DEMİRCİ
		5	ULUSLARARASI ÖĞRENCİLERİN TÜRK EĞİTİM SİSTEMİNE YÖNELİK GÖRÜŞLERİNİN İNCELENMESİ	Feyza Nur GÜVENÇ Prof. Dr. Mehmet GÜROL
		6	12. SINIF ÖĞRENCİLERİNİN KELİME İLİŞKİLENDİRME TESTİ İLE NÜKLEER ENERJİ HAKKINDAKİ GÖRÜŞLERİ	Doç. Dr. Zeynep BAŞKAN TAKAOĞLU
		7	COMPARATIVE ANALYSIS OF THE 2013 PRESCHOOL EDUCATION PROGRAM AND THE 2024 PRESCHOOL EDUCATION PROGRAM	Assist. Prof. Dr. Ahmet UYAR
		8	UMBERTO ECO'NUN AÇIK YAPIT ADLI ESERİNİN TÜRKÇE ÇEVİRİSİNDE TERİM ÇEVİRİLERİ	Prof. Dr. SÜNDÜZ ÖZTÜRK KASAR DİLARA DUYMAZ

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 3	**Prof. Dr. İsmail ŞIK**	1	YAHUDİLERİN KUTSAL KİTAPLARINI TAHRİFİNİN MAHİYETİ VE KAPSAMI	Doç. Dr. Mustafa TUNÇER
		2	KUR'ÂN PERSPEKTİFİNDEN YAHUDİLERİN AHİDLERİNİ BOZMALARI	Doç. Dr. Mustafa TUNÇER
		3	DÎVÂNU LUGÂTİ'T-TÜRK'TE MİTOLOJİK UNSURLAR	Doç. Dr. Şahin BÜTÜNER
		4	Babanzade Ahmet Naim'de Milliyetçilik Düşüncesi	Mücahit KIRCALI Doç. Dr. Emine TAŞÇİ YILDIRIM
		5	TODAY'S SHIA'S APPROACH TO TEACHING KALAM IN THE EXAMPLE OF MASTER ALI RABBANI GULPAYGANI'S WORK NAMED "FIRAQ AND MAZAHIB KALAM"	Prof. Dr. İsmail ŞIK
		6	AN EXAMPLE OF COMPARATIVE THEOLOGY TEACHING IN OUR AGE: H. AUSTRYN WOLFSON AND THE WORK OF THEAL PHILOSOPHIES	Prof. Dr. İsmail ŞIK

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 4	**Dr. İmran UZUNASLAN**	1	YERLİ TURİSTİN KÜLTÜR TURLARINA BAKIŞININ TURİZM SOSYOLOJİSİ KAPSAMINDA İNCELENMESİ	Yüksek Lisans Öğrencisi, BİHTER DÜK Prof. Dr. AHMET TALİMCİLER
		2	GEOGRAPHICAL INDICATIONS AND A TASTE IN TURKISH CULINARY CULTURE: BAFRA NOKULU	Yüksek lisans öğrencisi Tuğba DİNÇER ERGÜN, Prof. Dr. Cavit YAVUZ
		3	ALMANYA'DA YAŞAYAN 3. KUŞAK TÜRKİYE KÖKENLİ GÖÇMENLERİN AYRIMCILIĞA MARUZ KALIP KALMADIKLARI SORUNSALI	Esra Altan
		4	ERVİNG GOFFMAN'IN ÇALIŞMALARINDA GÖZLEMİN YERİ VE DRAMATURJİK YAKLAŞIM	Hüseyin Baysallı
		5	MADDE BAĞIMLILIĞI TEDAVİSİNDE SOSYAL HİZMET UYGULAMASI: AİLE MERKEZLİ YAKLAŞIMLAR	Dr. İmran UZUNASLAN
		6	ADULTHOOD AS THE LONGEST LIFE PERIOD AND ITS GENERAL CHARACTERISTICS	Dr. Fadime ŞIK
		7	WAYS TO GET RID OF SORRY (Yakub b. İshak el-Kindî)	Dr. Fadime ŞIK
		8	WORKER WELLBEING IN ALGORITHMIC MANAGEMENT SYSTEMS	Av. Begüm Erdoğan
		9	PANOPTİKON OLGUSU ÜZERİNE KISA BİR DEĞERLENDİRME	Başak Dülger

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 5	**Doç. Dr. Ümit AYATA**	1	AFET VE YER SEÇİMİ KARARLARI	Doç. Dr. Seçil Gül MEYDAN YILDIZ Yüksek Şehir ve Bölge Plancısı Hüsne TEMUR
		2	İSLAM KENTLERİNİN MEKÂNSAL YAPISININ SOSYO-EKONOMİK YAŞAMA ETKİSİ	Doç. Dr. Seçil Gül MEYDAN YILDIZ Yüksek Şehir ve Bölge Plancısı Hüsne TEMUR
		3	MONITORING ROCKFALL SURFACE CHANGE ON THE SLOPES OF ZIR VALLEY (ANKARA) USING UNMANNED AERIAL VEHICLE-DERIVED MULTI-TEMPORAL POINT CLOUDS	Assoc. Prof. Dr., NURGUL YESILOGLU-GULTEKIN Dr., MEHMET DOGRULUK
		4	Application of Some Varnish Types on Lodgepole Pine (Pinus contorta) Wood	Doç. Dr. Ümit AYATA Prof. Dr. Bekir Cihad BAL
		5	Investigation of Some Surface Properties on Composite Materials Produced with Waste Glass Powder and Recycled Polypropylene	Prof. Dr. Bekir Cihad BAL Doç. Dr. Ümit AYATA
		6	Comparison of Some Surface Properties of Composite Material Produced with Recycled Polypropylene and Wood Flour	Prof. Dr. Bekir Cihad BAL Doç. Dr. Ümit AYATA
		7	Basralocus (Dicorynia guianensis Amshoff) Wood Bleaching Applications	Doç. Dr. Ümit AYATA Prof. Dr. Bekir Cihad BAL
		8	THE PERFORMANCE OF REACTIVE ADDITIVES IN HOT MIXED ASPHALT COATINGS AND LABORATORY EXPERIMENTS	Onur Sahin Muhammet Can ZEYTİN
		9	ANALYSIS OF THE DECISION PROCESS OF ON-SITE CONVERSION AND STANDARD RENOVATION WORKS	Onur Sahin Muhammet Can ZEYTİN

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 6	Assoc. Prof. MUTLU SÖNMEZ ÇELEBİ	1	SÜLFONLU POLİMERLERİN HİDROJEN ÜRETİMİNDE KULLANILMASI	Doç. Dr. Levent SEMİZ
		2	STATIC ANALYSIS OF A TWO-LAYERED SEMI-INFINITE MEDIUM WITH POROSITY	Research Assistant, Yusuf Ziya YÜKSEL Prof. Dr., Şeref Doğuşcan AKBAŞ
		3	HARMONIC LOAD ANALYSIS OF A SEMI-INFINITE POROUS MEDIUM WITH RECTANGULAR CAVITY	Research Assistant, Yusuf Ziya YÜKSEL Prof. Dr., Şeref Doğuşcan AKBAŞ
		4	POROZİTENİN TABAKALI KOMPOZİT KİRİŞERİN TİTREŞİM DAVRANIŞINA ETKİSİNİN İNCELENMESİ	Research Assistant, Yusuf Ziya YÜKSEL Prof. Dr., Şeref Doğuşcan AKBAŞ
		5	CONDUCTING POLYMER SUPPORTED METAL NANOPARTICLES FOR ELECTROCATALYTIC PURPOSES	Assoc. Prof. MUTLU SÖNMEZ ÇELEBİ
		6	BIOMECHANICAL ANALYSIS AND IMPLANT DESIGN FOR TREATING METATARSAL FRACTURES	Researcher Dilan DEMIR Assoc. Prof. Dr. Talip ÇELİK Assoc. Prof. Dr. Hamid ASADI DERESHGI
		7	On the Performance of Different Data Augmentation Schemes for Wireless Capsule Image Classification based on the EfficientNET Deep Learning Paradigm	Assoc. Prof. Dr. Muzaffer KANAAN Mohamed AL-SHAIKH
		8	ALLOY ELEVATOR BRAKE DESIGN THAT CAN BE USED IN ELEVATORS	MELTEM KÜBRA YILDIRIM Prof.Dr. İBRAHİM CAN
		9	KEY PARAMETETERS TO OPTIMIZE THE THERMAL CONDUCTIVITY OF GRAPHENE BASED NANOFLUID	Dr. Fatma OFLAZ,
		10	COMPARATIVE INVESTIGATION OF THE VISCOSITY OF GRAPHENE AND ITS DERIVATIVES NANOFLUIDS	Dr. Fatma OFLAZ,

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:00 – 17:00 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 7	Doç. Dr. Bülent IŞIK	1	NURSING CARE OF A PATIENT WITH TUBERCULOUS SEREVASCULAR DISEASE AND HYPERTENSION ACCORDING TO KOLCABA COMFORT THEORY: A CASE REPORT	Seda YAĞMUR Prof. Dr. Şerife KARAGÖZOĞLU Dr. Öğr. Üyesi Fatma TOK YILDIZ
		2	KOAH VE KRONİK BÖBREK YETMEZLİĞİ TANILARINA SAHİP KONJETİNAL KALP YETMEZLİĞİ OLAN BİREYİN MYRA ESTRİN LEVİN KORUMA MODELİNE GÖRE HEMŞİRELİK BAKIMI: OLGU SUNUMU	Sema YILDIZ Prof. Dr. Şerife KARAGÖZOĞLU Dr. Öğr. Üyesi Fatma TOK YILDIZ
		3	THE ROLE OF GENETICS IN SKELETAL CLASS III ANOMALIES	Doktora Öğrencisi Diş Hekimi, DAMLA ÇARDAK Dr. Öğr. Üyesi, BERŞAN KARADEDE Ortodontist, RAFAEL ECIJA NAVARRO Doç. Dr. Beyza KARADEDE ÜNAL
		4	MULTIPL MİYELOMLU HASTANIN BETTY NEUMAN SİSTEM MODELİNE GÖRE HEMŞİRELİK BAKIMI: OLGU SUNUMU	Kübra KUZUCU Prof. Dr. Şerife KARAGÖZOĞLU Dr. Öğr. Üyesi Fatma TOK YILDIZ
		5	Investigation of the Effects of Regular Exercise on Muscle Strength and Some Motoric Skills in Adolescents in the 12-14 Age Group	MSc. Ayşe Nur MORBEL KAYNAK Doç. Dr. Kenan ERDAĞI Doç. Dr. Bülent IŞIK
		6	Investigation of the Effects of Power Snatch and Clean & Jerk Weightlifting Trainings with Different Weight Loads on Heart Rate and Pupil Diameter Changes in Well-Trained Turkish Female Weightlifting Athletes	Doç. Dr. Bülent IŞIK Doç. Dr. Kenan ERDAĞI Dr. Öğr. Üyesi Usame Ömer OSMANOĞLU Dr. Öğr. Üyesi Derviş DAŞDELEN

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 8	**Assis. Prof. Dr. Hooman Jafarabadi**	1	OPTIMAL CONTROL STRATEGIES FOR VELOCITY REGULATION OF PERMANENT-MAGNET SYNCHRONOUS MOTOR DRIVES	Dr. Roozbeh Molavi, Assis. Prof. Dr. Davood A. Khaburi
		2	NSGA-BASED OPTIMAL VOLTAGE/VAR MANAGEMENT IN DISTRIBUTION SYSTEM WITH SCATTERED GENERATION	P. N. Hrisheekesha, Jaydev Sharma
		3	HANDWRITING IDENTIFICATION USING CONJUGATE GRADIENT NEURAL NETWORKS SPECTRAL ANALYSIS OF SPEECH: A NOVEL TECHNIQUE	Assoc. Prof. Dr. Jamal Fathi Abu Hasna
		4	INVESTIGATION AND ENHANCEMENT OF FLASH EVAPORATION DESALINATION UTILIZING THE OCEAN THERMOCLINE AND RELEASED HEAT	Neeta Awasthy, J.P.Saini, D.S.Chauhan
		5	INTRODUCING AN IMAGE PROCESSING-BASED CONCEPT FOR OUTDOOR CHILDREN CARE	Ms. Sami Mutair, Dr. Yasuyuki Ikegami
		6	DEVICE DISCOVERY: A COMPONENT FOR NETWORK MANAGEMENT SYSTEM UTILIZING SIMPLE NETWORK MANAGEMENT PROTOCOL	Assis. Prof. Dr. Hooman Jafarabadi
		7	EXTRACTION OF THEMATIC ROLES USING SHALLOW PARSING	Garima Gupta, Daya Gupta
		8		

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 9	**Prof. Dr. N. K. Fuloria,**	1	A CRITICAL ANALYSIS OF CHITOSAN UTILIZATION AS A NATURAL ANTIMICROBIAL	F. Nejati Hafdani, N. Sadeghinia
		2	EXPLORING THE NEUROGENIC CAPACITY OF CLITORIA TERNATEA AQUEOUS ROOT EXTRACT – IMPLICATIONS FOR ENHANCING COGNITIVE FUNCTIONS	Dr. Kiranmai S.Rai
		3	DEVELOPMENT AND ASSESSMENT OF VAGINAL SUPPOSITORIES INCORPORATING LACTOBACILLUS	Sanae Kaewnopparat, Nattha Kaewnopparat
		4	EXTRACTION OF B-SİTOSTEROL DİARABİNOSİDE FROM RHİZOMES OF ALPİNİA GALANGA	Prof. Dr. N. K. Fuloria, S. Fuloria
		5	APPLICATION OF DATA MINING CLASSIFICATION TECHNIQUES IN DRUG DESIGN	Mária Stachová, Dr. Lukáš Sobíšek
		6	PHARMACOKINETIC STUDY OF SALBUTAMOL SULPHATE-ETHYLCELLULOSE TABLETTED MICROCAPSULES: UTILIZING A CONVOLUTION APPROACH	Assis . Prof. Ghulam Murtaza, Kalsoom Farzana
		7	EVALUATING THE ANTIMICROBIAL PROPERTIES OF ETHANOL EXTRACTS FROM SELECTED THAI MEDICINAL PLANTS AGAINST CAMPYLOBACTER JEJUNI	Achara Dholvitayakhun, Nathanon Trachoo

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 10	**Dr. Marco lee Hemmerling**	1	COLOR IMAGE EDGE DETECTION THROUGH PSEUDO-COMPLEMENT AND MATRIX OPERATIONS	T. N. Mouli , Janakiraman Chandra
		2	A NUMBER THEORETIC TRANSFORM APPROACH TO PUBLIC KEY CRYPTOSYSTEMS	Arumuganathan R. Porkodi
		3	EXPLORING A NOVEL CRITERION FOR CONFLICT IN BIFUZZY SETS THROUGH INTUITIONISTIC EVALUATION	Assoc. Prof. Dr. Imran Syibrah, Mohd Lazim
		4	HOW ANTS ORGANIZE TRAFFIC FLOW: INSIGHTS FROM EXCLUSION PROCESS ANALYSIS	Ali Benmohamed , Mohamed Lemouari
		5	STOCHASTIC RESONANCE IN NONLINEAR SIGNAL DETECTION: AMPLIFYING WEAK SIGNALS WITH NOISE	Youguofo Wang, Lenanmo Wu Yo
		6	MODELING DENGUE DISEASE DYNAMICS INCORPORATING VIRUS INCUBATION PERIOD IN MATHEMATICAL FRAMEWORK	Penabe. Pongsumpun
		7	STUDY ON THE VIABILITY OF EMBEDDED REAL-TIME SYSTEMS	YongXia, JIN
		8	EXPLORING COMPUTATIONAL GEOMETRY THROUGH TWO SPATIAL EXPERIMENTS	Dr. Marco lee Hemmerling

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 11	**Assoc. Prof. Dr. Kenari Ganguly**	1	NONLINEAR REGULATION OF A CONTINUOUS BIOREACTOR UTILIZING A CELL POPULATION MODEL	Mahdi Sharifian, Mohammad Fanaei
		2	UTILIZATION OF FERRIC SULFIDE AND IRON POWDER FOR DIELDRIN CHEMICAL DECOMPOSITION	Junko Konar, Takeshi Kawabe Komai, Chihiro Inoune
		3	OXYGEN GAS EXPOSURE EFFECTS ON SULPHONIC ACID-DOPED POLYANILINE: SYNTHESIS AND FLUORESCENCE SPECTROSCOPY	S.F.S. Draman, R. Daik, A. Musa
		4	UTILIZING ACTIVATED CARBONS FOR ADSORPTIVE ELIMINATION OF TOXIC SULFUR COMPOUND VAPORS	Meenenda Goyal, Rashnam Dhawan
		5	HYDRODESULPHURIZATION KINETICS IN DIESEL: EXPLORING MASS TRANSFER DYNAMICS	Assoc. Prof. Dr. Kenari Ganguly
		6	THE IMPACT OF METHIONINE AND ACETATE LEVELS ON MYCOPHENOLIC ACID SYNTHESIS IN PENICILLIUM BERVICOMPACTUM MUCL 19011 UNDER SUBMERGED CONDITIONS	Ardestani Fatemi, Bahman Yakhchali, Manial Hosseyni, Gaffar Najafpour
		7	SIMULATING STRESS-TRIGGERED REGULATORY CASCADES USING ARTIFICIAL NEURAL NETWORKS	Dr. Emee. Manioudaki, Panayiota Poiri
		8	ENHANCING LIPASE CATALYTIC PROPERTIES VIA IMMOBILIZATION IN HYBRID MATRICES	Cevinka Zarcula, Roberto Croitoru, Lee Corîci, Csunderlik Peter

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 12	**Dr. Nor'Aini Yusof,**	1	THE HONG KONG LOW-FERTILITY DILEMMA: CAN MAINLANDERS' BIRTHS CONTRIBUTE TO REVITALIZING THE LOW-FERTILITY ISSUE?	Nancy Iri Dr. Ling Sze Leung
		2	AN AGENT-BASED APPROACH TO KNOWLEDGE MANAGEMENT AND E-LEARNING	Teodora Bakardjieva Galya Gercheva
		3	DOCTOR BRAIN DRAIN: CAUSES AND RAMIFICATIONS IN PAKISTAN	Muhammad Wajid Tahir Rubina Kauser Majid Ali Tahir
		4	EVOLVING FROM SEPARATISM TO COALITION: VARIATIONS IN LANGUAGE POLITICS AND LEADERSHIP PATTERNS IN THE DRAVIDIAN MOVEMENT	PHD Subramaniam Chandran
		5	A KNOWLEDGE MANAGEMENT MODEL FOR EFFECTIVELY MANAGING KNOWLEDGE AMONG INTERCONNECTED ORGANIZATIONS	Mahboubeh Molaei
		6	USERS' MOTIVATION AND SATISFACTION WITH INFORMATION SYSTEMS	Abbas Moshref Razavi, Rodina Ahmad
		7	THE IMPACTS OF HUMAN ACTIVITY ON THE HEALTH OF STREAM CITY IN YASUJ AREA	Jamalodin Alvani Fardin Boustani, Omid Tabiee, Masoud Hashemi
		8	EXTRACTING IMPLICIT KNOWLEDGE TO FORECAST POLITICAL RISK THROUGH A NOVEL FRAMEWORK UTILIZING BAYESIAN NETWORK	Assis. Prof. Dr. Siavash Asadi Ghajarloo
		9	THE ORGANIZATIONAL INNOVATIVENESS OF PUBLIC-LISTED HOUSING DEVELOPMENTS	Dr. Nor'Aini Yusof, Dr. Ismael Younis Abu-Jarad
		10	COMMUNITY INNOVATION IN SUSTAINABLE DEVELOPMENT: A CROSS-CASE STUDY	Tingan Tang, Kimmo Karhu, Matti Hamalainen

AVRASYA 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES
AVRASYA 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES
ArtAsya 1st INTERNATIONAL GROUP EXHIBITION
MAY 2 - 5, 2024
TBILISI
Meeting ID: 816 0458 4722 Passcode: 202224

4 Mayıs / May 4, 2024 / 15:30 – 17:30 Time zone in Turkey (GMT+3)

Salon	Moderator		Bildiri No ve Başlığı / Paper ID and Title	Authors
HALL / SALON 13	**Dr. Sirinthrar Wandee**	1	ANALYSIS OF CLUSTER MECHANISM OF ANTI-GREENHOUSE EFFECT USING COMPUTER TECHNOLOGY	A. Galashev
		2	UTILIZATION OF NANOFILTERS FOR PROVIDING POTABLE WATER IN THE WATERSHED BASIN OF PERSIAN GULF AND OMAN SEA	Sara Zamani, Mojtaba Fazeli, Abdollah Rashidi Mehrabadi
		3	EVALUATION OF EIA REPORTS ADEQUACY: EVIDENCE FROM PAKISTAN – A CRITICAL REVIEW	Dr. Obaidullah Nadeem, Assis. Prof . Dr. Rizwan Hameed
		4	EXAMINATION OF GROUNDWATER QUALITY AND IDENTIFICATION OF POLLUTION SOURCES IN BAGHAN WATERSHED, IRAN	Abolfazl Moeini, Elahe Alizadeh Paeenafrakaty
		5	APPRAISAL OF POLLUTION REDUCTION	Prof. Dr. Katarzyna Strzała-Osuch
		6	DEVELOPMENT OF ESTIMATION METHOD FOR CREATING A HYDROGEN SOCIETY UTILIZING VARIOUS BIOMASS RESOURCES IN JAPAN – PROJECT ON COST REDUCTIONS IN BIOMASS TRANSPORT AND FEASIBILITY OF HYDROGEN STATION WITH BIOMASS	Masaki Tajima, Kenji Imou, Shinya Yokoyama
		7	IMPACT OF CELLULOLYTIC MICROBIAL ACTIVATOR ON DECOMPOSITION OF COMPOSTED RUBBER FACTORY WASTE	Dr. Thaniya Kaosol, Dr. Sirinthrar Wandee
		8	INVESTIGATION INTO ENERGY-EFFICIENT TEMPERATURE CONTROL	Mitsuyuki Kawakami, Kimihiro Yamanaka

ISBN : 978-625-6283-10-7

Contents

ISBN : 978-625-6283-10-7

ISBN : 978-625-6283-10-7

ISBN : 978-625-6283-10-7

MULTİPL MİYELOMLU HASTANIN NEUMAN SİSTEM MODELİNE GÖRE HEMŞİRELİK BAKIMI: OLGU SUNUMU

Kübra KUZUCU

Cumhuriyet Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Esasları Anabilim Dalı

ORCID: 0009-0008-8669-0693

Şerife KARAGÖZOĞLU

Prof. Dr. Cumhuriyet Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Esasları Anabilim Dalı

ORCID:0000-0002-9558-0786

Fatma TOK YILDIZ

Dr. Öğr. Üyesi Cumhuriyet Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Esasları Anabilim Dalı

ORCID: 0000-0001-7543-2076

ÖZET

Hematolojik malignensiler arasında yer alan Multipl Miyelom, uygulanan tedaviler sonucunda sağ kalımı, yaşam kalitesini, fiziksel, sosyal ve psikolojik durumu olumsuz yönde etkileyen önemli bir sağlık sorunudur. Multipl Miyelom hastalarının tedavisinde kemoterapi, immünomodülatör ajanlar ve kök hücre nakli gibi tedavi seçenekleri kombinasyonlar halinde bulunmaktadır. Multipl Miyelomda hiperkalsemi, böbrek yetmezliği, anemi ve kemik lezyonları en sık görülen semptomlar arasında yer almaktadır. Hastanın semptom yönetiminde; kan kalsiyum düzeyi izlemi, hiperkalsemi tedavisi, böbrek fonksiyonlarının izlemi, yeterli hidrasyonun sağlanması, ilaçların böbrek dozuna göre uygulanması, anemi izlemi ve tedavisi, beslenmenin desteklenmesi ve hastaların travma oluşturabilecek fiziksel aktivitelerden kaçınması önerilmektedir. Hemşirelik bakımının planlaması ve uygulamasında, Multipl Miyelom hastalarının maruz kaldığı çok yönlü stresörleri tanımlayabilme ve bütüncül bakış açısıyla hastayı çevresiyle birlikte değerlendirebilme imkânı sunmasından dolayı Neuman Sistemler Modeli olgu sunumu kapsamındaki çalışmamızda hasta bakımında rehber olarak alınmıştır. Bu bağlamda Z.E, 6 ay önce Multipl Miyelom tanısı almış olup bakımı, aile desteğiyle üniversite hastanesinde sürdürülmüştür. Çalışmamız kapsamında hemşirelik sürecinde Neuman Sistemler Modelini rehber almanın yararlı olduğu ve bakım kalitesini arttırdığı söylenebilir.

ANAHTAR KELİMELER: Multipl Miyelom, Neuman Sistem Modeli, Hemşirelik Bakımı, Hemşirelik

ISBN : 978-625-6283-10-7

ŞİFRELEME ALGORİTMALARI VE KUANTUM HESAPLAMA UYGULAMALARI

Arş. Gör. İLYA KUŞ
Karamanoğlu Mehmetbey Üniversitesi, 0000-0001-5850-949X
Prof. Dr. AYDIN ÇETİN
Gazi Üniversitesi, 0000-0002-8669-823X

ÖZET

Kuantum hesaplama, klasik bilgisayarların çözemediği karmaşık problemleri çözmek için geliştirilen bir teknolojidir. Bu teknoloji kullanılarak büyük ve karmaşık mimarilerin hesaplamaları yapılabilmektedir. Ayrıca bu teknolojinin gelişmesiyle birlikte ilerleyen zamanlarda tüm klasik simetrik şifrelerin kırılabileceği öngörülmektedir. Günümüzde kuantum hesaplama elektrikli arabalar, finans, askeri, sağlık ve yapay zekâ gibi alanlarda çeşitli fırsatlar sunmaktadır. Bununla birlikte, kuantum hesaplamanın kriptografi üzerinde etkisi de günümüz internet çağındaki son gelişmeler ile daha fazla olmuştur. Bu etkilerinin yanı sıra diğer teknolojilerde de olduğu gibi kuantum hesaplamanın da birtakım avantajları ve dezavantajları vardır. Bu amaçla, çalışmada öncelikle kuantum hesaplamaların artı ve eksileri ele alınmıştır. Daha sonra simetrik ve asimetrik şifreleme algoritmalarıyla birlikte modern kriptografide yaygın olarak kullanılan bazı kuantum algoritmaları incelenmiştir. Birden fazla kuantum bilgisayarın bir tür ağ üzerinde etkileşime girdiği dağıtılmış bir ortamın aksine tek bir kuantum bilgisayar ile neler yapılabileceği üzerinde incelemeler yapılmış, bu doğrultuda kuantum hesaplama modelleri ve bu hesaplamaların kriptografi üzerine olan etkileri detaylandırılmıştır.

Anahtar Kelimeler: Simetrik Şifreleme, Asimetrik Şifreleme, Kriptografi, Kuantum Hesaplama

ISBN : 978-625-6283-10-7

GÖKKUŞAĞI KÜTLE ÇEKİM KURAMI ÇERÇEVESİNDE VAIDYA-EINSTEIN-SCHWARZSCHILD KARADELİK MODELİ İÇİN MOLLER ENERJİ MOMENTUM GÖSTERİMİ

Prof. Dr., MURAT KORUNUR

Munzur Üniversitesi, mkorunur@munzur.edu.tr - 0000-0002-8311-9079

Dr. Öğr. Üyesi, SİBEL KORUNUR

Munzur Üniversitesi, skorunur@munzur.edu.tr - 0000-0003-0687-2400

ÖZET

Geçtiğimiz yüzyılda fizikte en çok merak edilen ve cevabı aranan en önemli problemlerden biri enerji momentum yerelleşme problemidir. Özellikle 21. yüzyılın başında genel görelilik kuramına alternatif kuram olarak sunulan teleparalel kuram ile fizikçilerin yerelleşme probleminin çözümüne olan inancı artmıştır. Yapılan çalışmalarda farklı birçok enerji momentum gösterimi için enerji momentum yoğunluğu kartezyen, silindirik ve küresel koordinatlarda hesaplanmıştır. Kütleçekim kuramının en önemli eksiklerinden biri kuantum katkılarını içeren bir yapıda olmamasıdır. Bu bağlamda kuantum katkılarını içeren "Gökkuşağı Kütleçekim Kuramı" bu eksikliğe ve enerji momentum probleminin çözümüne yeni bir bakış açısı kazandırmıştır. Bu modele göre ele alınan bir test parçacığının uzay zaman dokusunda oluşturduğu deformasyon araştırılmaktadır. Enerji momentum yerelleşme bulmacası çözümünde kullanılan gösterimlerden Moller enerji momentum gösteriminin dışında yazılan tüm gösterimlerin kartezyen koordinat bağımlılığı bulunmaktadır. Bu çalışmada, küresel koordinatlarda Moller'in enerji ve momentum gösterimi kullanılarak, Gökkuşağı kütle çekimi çerçevesinde Vaidya-Einstein-Schwarzschild uzay zamanı olarak adlandırılabilecek bir model için enerji momentum yoğunluğu hesaplanmaktadır. Ayrıca elde edilen sonuçlar için literatürde iyi bilinen gökkuşağı fonksiyonları kullanılarak analiz yapılmaktadır.

Anahtar Kelimeler: Enerji momentum, gökkuşağı kütleçekim kuramı, kara delikler.

ISBN : 978-625-6283-10-7

UZAYSAL ÖZ-BENZER, YEREL DÖNEL SİMETRİK MODEL İÇİN RAİNBOW KÜTLEÇEKİM KURAMI ÇERÇEVESİNDE TELEPARALEL ENERJİ YOĞUNLUĞU

Prof. Dr., MURAT KORUNUR
Munzur Üniversitesi, -0000-0002-8311-9079

Dr. Öğr. Üyesi, SİBEL KORUNUR
Munzur Üniversitesi, -0000-0003-0687-2400

ÖZET

Genel görelilik kuramının evrenimiz hakkında çok değerli cevapları verdiğini biliyoruz. Genel görelilik, uzayı, zamanı ve kütle-enerji etkileşimlerini açıklamak için kullanılırken, kuantum kuramı, mikroskobik parçacıkların davranışını ve etkileşimlerini açıklamak için kullanılır. Bu iki kuram arasındaki uçurum, birleşik bir teori olan "kuantum yerçekimi" teorisinin geliştirilmesi gerekliliğini ortaya koyar. Ancak, şu ana kadar bu çatışmayı tam olarak çözen evrensel bir teori henüz bulunamamıştır. Bu, fizikçilerin uzun zamandır üzerinde çalıştığı büyük bir bulmacadır ve bu iki kuramın uyumlu bir şekilde birleştirilmesi, modern fizikteki en büyük zorluklardan biridir. Bu amaca yönelik olarak ortaya konan kuramlardan birisi de “Gökkuşağı” kütleçekim kuramıdır. Bu çalışmada Gökkuşağı kütleçekim kuramı çerçevesinde teleparalel geometri kullanılarak uzaysal öz-benzer, yerel dönel simetrik model için Einstein, Bergmann-Thomson ve Landau-Liftshitz enerji yoğunlukları hesaplanmaktadır. Bununla birlikte elde edilen sonuçlar için literatürde iyi bilinen gökkuşağı fonksiyonları kullanılarak bir değerlendirme yapılmaktadır.

Anahtar Kelimeler : Teleparalel kuram, gökkuşağı kütleçekim kuramı, enerji-momentum.

ISBN : 978-625-6283-10-7

DETERMINING THE RANK OF A HOMOGENEOUS ELEMENT ON LEIBNIZ ALGEBRAS

Assoc.Prof.Dr. ZEYNEP ÖZKURT

Çukurova University, 0000-0001-9703-3463

ABSTRACT

In this research, we study on the rank of a homogenous element in free Leibniz algebras. We introduced the rank of an element u of a free Leibniz algebra as the minimal cardinality of a generating set upon which the image of u under any automorphism of the free Leibniz algebra may rely. Then, we devised an algorithmic procedure for determining the rank of a homogeneous element. Additionally, we make some applications.

Anahtar Kelimeler : Leibniz Algebras, Homogeneous element, Automorphism.

ISBN : 978-625-6283-10-7

BASES OF FIXED POINT SUBALGEBRAS ON FREE NILPOTENT LEIBNIZ ALGEBRAS

Assoc.Prof.Dr. ZEYNEP ÖZKURT

Çukurova University, 0000-0001-9703-3463

ABSTRACT

Let **K** be a field of characteristic zero and **F** be a finitely generated free left nilpotent Leibniz algebra . Let $K\left[R_m\right]$ be the commutative polynomial algebra generated by a set $R_m=\{r_1,...,r_m\}$ over **K**. The fixed point subalgebra of an automorphism ϕ is the subalgebra of F consisting of elements that are invariant under ϕ. In this study, we determine fixed point subalgebras of some automorphisms of F. Then, we find the bases of these fixed point subalgebras and, we get generators of these subalgebras as a free $K\left[R_m\right]$-module.

Anahtar Kelimeler : Leibniz algebras, Fixed point algebras, Automorphisms.

ISBN : 978-625-6283-10-7

ANALYTICAL METHODS USED IN THE DETERMINATION OF BCM-7 IN MILK A1

Assoc. Prof. Dr. ÖZCAN ŞAHİN

Selcuk University, Faculty of Agriculture, Department of Animal Science, Konya, Türkiye - ORCID ID: 0000-0003-2170-2055

Assoc. Prof. Dr. İBRAHİM AYTEKİN

Selcuk University, Faculty of Agriculture, Department of Animal Science, Konya, Türkiye - ORCID ID: 0000-0001-7769-0685

ABSTRACT

In recent years, structural changes of beta-casein protein, the milk protein in the composition of bovine milk, which is an important protein source in human nutrition, have been mentioned in some literature reports. Beta-casomorphin-7 (BCM-7), an opioid peptide produced during the digestion of A1 milk, is claimed to have some adverse effects on human health. In the face of this suspicious situation, over time, animal breeders have focused on breeding studies to determine the genotypes of cattle producing A1 or A2 milk with the help of some molecular methods and to reduce the A1 allele frequency in the population. Research on the detection of the presence of BCM-7 in A1 milk and its products has also increased momentum until today. In some literature reports regarding these effects of βCM-7, it was reported that some diseases such as Type 1 diabetes, cardiovascular diseases, autism, schizophrenia, sudden infant death syndrome, apnea, and constipation have negative effects on human health.Therefore, there were some analytical methods used in the detection of BCM-7, which harmed human health, and these are high-performance liquid chromatography (HPLC), liquid chromatography-mass spectrometry (LC-MS/MS), and enzyme-linked immunosorbent assay (ELISA) methods.

The aim of this study was to provide information about some analytical methods used in the detection of BCM-7.

Keywords: A1 milk, A2 milk, BCM-7, Molecular markers, Analytical methods

ISBN : 978-625-6283-10-7

THE IMPACT OF RHIZOBACTERIA ON THE AMINO ACID LEVELS IN SOME CITRUS ROOTSTOCKS GROWN IN SALINE SOILS

Assoc. Prof. Dr. Şeyma ARIKAN

University of Selçuk, Faculty of Agriculture, Department of Horticulture, Konya, Türkiye, , 0000-0002-4328-0263

Research Assist. Merve KARAKOYUN

University of Bilecik, Faculty of Agriculture and Natural Science, Department of Horticulture, Bilecik, Türkiye, .edu.tr, 0000-0001-7438-4738

Assoc. Prof. Dr. Muzaffer İPEK

University of Selçuk, Faculty of Agriculture, Department of Horticulture, Konya, Türkiye, , 0000-0002-5773-7236

ABSTRACT

Salinity poses a major environmental challenge that threatens the sustainable future of crop farming worldwide. Using plant growth-promoting bacteria (PGPB) is a successful method for enhancing plant growth and mitigating the adverse impacts of stress on plants cultivated in saline environments. PGPB is a sustainable strategy that enhances plant tolerance to salt stress through a mutually beneficial partnership with plants.

Plants respond to salt stress by modifying their metabolites and osmoprotectants through plant metabolism. During salt stress, the electron transport chain is anticipated to deteriorate, resulting in elevated levels of free amino acids in plant cells.

This study aimed to analyze the amino acid composition (Arginine, Asparagine, Glutamine, Glycine, Methionine, Phenylalanine, Proline, Tryptophan, Tyrosine, and Valine) of citrus rootstocks (*Citrus aurantium* L. and *Poncirus trifoliata*) inoculated with beneficial rhizobacteria strains (EY2, EY6, EY30, EY37, and EY43) growing in saline conditions.

The results of the study showed that some of the examined amino acids had higher values in the sour orange (Asparagine, Glycine, Phenylalanine, Proline, Tyrosine, and Tryptophan,) rootstock and some in the trifoliate rootstock (Arginine, Glutamine, Methionine, Valine). Analysis of amino acid content in leaves and roots revealed that arginine, asparagine, glutamine, proline, and valine were present in the roots, whereas tyrosine and tryptophan were primarily identified in the leaves.

The EY43 bacterial application had the highest value for all amino acids except proline. The EY37 bacterial application had the highest value for all amino acids except phenylalanine and tyrosine. The EY30 bacterial application had the highest value for arginine and glycine amino acids.

As a result, it can be thought that beneficial rhizobacteria have an effect on the amino acid contents of citrus rootstocks in salty conditions and may have imparted a tolerance to salt stress.

Keywords: amino acid content**,** *Citrus aurantium*, PGPR, *Poncirus trifoliata*, salinity

ISBN : 978-625-6283-10-7

VÜCUT KONDİSYON SKORUNUN DAMIZLIK SEÇİMİNDE KULLANIMI

Ayşe ŞEN **Levend COŞKUNTUNA**

ORCID ID: https://orcid.org/0000-0001-9486-1992
aysesen@nku.edu.tr
ORCID ID: https://orcid.org/0000-0001-7137-4198
lcoskuntuna@nku.edu.tr 05325630269

Özet

Başarılı ve karlı bir süt sığırı yetiştiriciliği için bir inekten yılda bir buzağı almak işletme devamlılığı ve karlılık için oldukça önemlidir. Süt sığırcılığı işletmelerinin devamlılığı ve gelecekte var olmaları sürdürebilmeleri döl verimi ve süt üretim potansiyeline bağlıdır. Süt sığırlarındaki vücut kondisyon skorunun laktasyon dönemi boyunca değişimi oldukça önemlidir. Süt sığırların enerji metabolizmasını gösteren ve aynı zamanda yem tüketimi, süt verimi arasındaki ilişkiyi tanımlamaya yarayan en önemli göstergelerden biridir. İşletmelerde, bulunulan bölgeye, amaca ve işletmedeki, bakım ve besleme, şartlara göre ırk tercihi yapılmalıdır. Damızlık seçimi; bir ırk tercihi olarak düşünülmemelidir. İşletme açısından tercih edilen ırktan daha çok verim kayıtları bulunan, sağlıklı hayvanların seçimi şeklinde düşünülmesi gerekmektedir. Sığır yetiştiriciliğinde başarılı olmanın öncelikli koşullarından birisi, işletme yapısına uygun ırkın ve yüksek verimli bireyleriyle çalışmakla mümkün olmaktadır. İşletme açısından, damızlıkların zayıf veya aşırı yağlı olması, hayvandan beklenen performansı düşürebileceği gibi metabolizma hastalıklarından, bağışıklık sistemi zayıflığına kadar birçok değişik sorunlarla karşılaşma durumunu da beraberinde getireceği düşünülmelidir. Söz konusu durumlarla karşılaşma ihtimali, işletmedeki hayvanların yaşına ve fizyolojik dönemine göre uygun olan vücut kondisyon skorlarından (VKS) sapmayla doğru orantılıdır. Bu açıdan bakıldığı zaman da VKS damızlık seçimi konusunda ne derece önemli olduğu anlaşılmaktadır. Bu nedenle süt sığırı işletmelerinde hayvanların gruplandırılmasında vücut kondisyon skoru 5 farklı gruba ayrılmaktadır. Bu şekilde süt sığırcılığı işletmelerinde bulunan hayvanlar sınıflandırarak damızlık değer bakımından da ayrılabilmektedirler. Puan cetvelinde 1: çok zayıf, 5: aşırı yağlı olarak belirtilmektedir. Vücut kondisyonu, canlı hayvanın vücudundaki yağın, yağ ve yağ olmayan madde miktarına oranıdır. Vücut kondisyon puanlaması ise, laktasyon ya da kuru dönemdeki ineklerin canlı ağırlık ile vücut ölçülerine bakılmaksızın vücutlarındaki yağ miktarının, elle dokunularak görsel olarak değerlendirilmesidir. Vücut kondisyon puanının bir işletmedeki düzenli takibi, gelecek nesillerin oluşturulması açısından da oldukça önemlidir.

Anahtar Kelimeler: Süt sığırı, Vücut kondisyon skoru, Laktasyon, Damızlık seçimi.

ISBN : 978-625-6283-10-7

USE OF BODY CONDITION SCORE IN BREEDER SELECTION

Abstract

For successful and profitable dairy cattle breeding, having one calf per year from a cow is very important for the continuity and profitability of the enterprise. The continuity of dairy cattle farms and their future existence depends on the potential of fertility and milk production. The change in the body condition score of dairy cattle during the lactation period is very important. It is one of the most important indicators that shows the energy metabolism of dairy cattle and also helps to define the relationship between feed intake and milk yield. In enterprises, breed preference should be made according to the region, purpose, and conditions in the enterprise, care, and feeding. Breeding selection should not be considered as a breed preference. It should be considered as the selection of healthy animals with yield records rather than the preferred breed for the enterprise. One of the primary conditions for being successful in cattle breeding is to work with high-yielding individuals of the breed suitable for the enterprise structure. In terms of the enterprise, it should be considered that if the breeders are underweight or excessively fat, it may reduce the expected performance of the animal, as well as the possibility of encountering many different problems ranging from metabolic diseases to immune system weakness. The possibility of encountering these situations is directly proportional to the deviation from the body condition scores (BCS) appropriate for the age and physiological period of the animals in the enterprise. From this point of view, it is understood how important VKS is in breeding selection. For this reason, the body condition score is divided into 5 different groups in the grouping of animals in dairy cattle farms. In this way, animals in dairy cattle farms can be classified and separated in terms of breeding value. On the score scale, 1: very thin, 5: extremely fat. Body condition is the ratio of fat in the body of the livestock to the amount of fat and non-fat substances. Body condition scoring is the visual evaluation of the amount of fat in the body of cows in lactation or dry periods, regardless of their body weight and body size. Regular follow-up of body condition scores in an enterprise is also very important for the creation of future generations.

Keywords: Dairy cattle, Body condition score, Lactation, Breeding selection.

ISBN : 978-625-6283-10-7

KUZU YÖNETİMİNDE YAPILAN BAZI HATALAR

Levend COŞKUNTUNA **Ayşe ŞEN**

ORCID ID: https://orcid.org/0000-0001-7137-4198
lcoskuntuna@nku.edu.tr, 05325630269
ORCID ID: https://orcid.org/0000-0001-9486-1992
aysesen@nku.edu.tr

Özet

Koyunculuk işletmelerinde, anaç ve yavrular için doğumdan sonraki ilk 24-48 saat en kritik ve önemli saatlerdir. Bu süreç içerisinde, ana ve yavru arasında kuvvetli bir bağ oluşmaktadır. Bu sırada, ana ve yavru birbirlerini yakından tanımaya çalışırlar. Genellikle, doğumlar doğum bölmesinde gerçekleşmektedir. Bazı durumlarda anaçlarda, merada otlama sırasında da doğum olayı gerçekleşebilmektedir. Doğum bölmesinde gerçekleşecek durumlarda önceden doğum bölmesine, altlık serilmeli, temiz ve kuru olmasına özen gösterilmesi gerekmektedir. Doğum bölmesinin olduğu yerin sıcaklığının ise 12-18°C olması arzu edilmektedir. Anaçların ve yeni doğan yavruların doğum bölmelerinde kalma süresi büyük ölçüde doğum yapan anaç koyunların doğum oranına bağlıdır. Ayrıca işletmedeki mevcut kuzu bölmelerin sayısına bağlı olabilmektedir. Sağlıklı tekiz doğan kuzular doğumdan sonraki 20-32 saat içerisinde, ikiz doğan kuzular ise 36-52 saat içinde bölmelerden çıkarılabilmektedirler. Kuzu bölmeleri, işletmede çalışanlar tarafından anaçların ve kuzuların rahat edebilecekleri şekilde düzenlenmesi gerekmektedir. İkiz doğumdan fazla ya da zayıf doğan kuzular daha dikkatli bakıma ihtiyaç duyabilmektedirler. Anaç ve yeni doğan kuzuların, bireysel bölmelerde kalma sürelerinin uzaması, yavruların ishal ve zatürreye yakalanma ihtimallerini arttırabilmektedir. Bu sebeple de, anaç ve kuzuların bölmelerden mümkün olduğunca en kısa zamanda çıkarılması gerekmektedir. Doğum bölmelerinden çıkarıldıktan sonra, koyun ve kuzuların gruplar halinde bir arada tutulması gerekmektedir. Bu durum, onların bulundukları ortama alışmalarına yardımcı olmaktadır. İlerleyen zamanlarda, koyunlar işletmedeki anaç sürüye katılabilirler. Yeni doğan kuzuların göbek kordonuna da işlem yapılması gerekmektedir. Göbek kordonundan enfeksiyon bulaşma riskini azaltmak ve kordonunu kurutmak için karın bölgesinin 4-5 cm altından kesilmesi gerekmektedir. Daha sonra göbek kordonunun %3-6 iyot çözeltisi içerisine daldırılıp dezenfekte edilmesi gerkmektedir. Ayrıca, kuzuların bireysel doğum bölmelerinden çıkarılmadan önce gerekli bilgilerin kaydedilmesi gerekmektedir. Kuzuların tanımlanması için gerekli işaretlemeler (kulak küpesi, boya vb.) bu zaman içinde yapılmış olması gerekmektedir. Ağız sütünün, yeni doğan kuzuya ilk 30 dakika içerisinde verilmesi gerekmektedir. Yeni doğan kuzular, enfeksiyonlara karşı da oldukça hassastırlar. Bu açıdan bakıldığı zaman, yeni doğan kuzuların yeterli yaşama direncini kazanması ve bağışıklık sisteminin oluşmaya başlaması için kolostrumu belirli oranlarda mutlak suretle almaları gerekmektedir. Kuzularda da işletme şartlarına göre en iyi yetiştirme sisteminin seçilip uygulanması gerkmektedir.

Anahtar Kelimeler: Kuzu, Koyun, Kolostrum, Hastalık, Büyütme yöntemi.

ISBN : 978-625-6283-10-7

SOME MISTAKES MADE IN LAMB MANAGEMENT

Abstract

In sheep farms, the first 24-48 hours after birth are the most critical hours for mothers and offspring. During this period, a strong bond is formed between mother and offspring. During this time, mother and offspring try to get to know each other closely. Generally, births take place in the calving pen. In some cases, births can also occur during grazing in the pasture. In cases where the birth takes place in the birth pen, litter should be laid in the birth pen beforehand, and care should be taken to ensure that it is clean and dry. The temperature of the birth chamber should be 12-18°C. The length of stay of the dams and newborn lambs in the birthing pens largely depends on the birth rate of the dams giving birth. It may also depend on the number of lamb pens available in the enterprise. Healthy singleton lambs can be removed within 20-32 hours after birth and twin lambs can be removed within 36-52 hours. The lamb pens should be arranged in such a way that the sires and lambs can be comfortable by the employees working in the enterprise. Lambs born with more than twin births or weak lambs may need more careful care. The prolonged stay of the dam and newborn lambs in individual pens may increase their chances of contracting diarrhea and pneumonia. For this reason, ewes and lambs should be removed from the pens as soon as possible. After being removed from the birthing pens, ewes, and lambs should be kept together in groups. This helps them to get used to their environment. Later on, ewes can join the mother flock in the enterprise. The umbilical cord of newborn lambs should also be treated. To reduce the risk of infection from the umbilical cord and to dry the cord, it should be cut 4-5 cm below the abdomen. The umbilical cord should then be immersed in a 3-6% iodine solution and disinfected. In addition, the necessary information must be recorded before the lambs are removed from the individual birth pens. The necessary markings (ear tags, paint, etc.) for identification of the lambs should be done at this time. Oral milk should be given to the newborn lamb within the first 30 minutes. Newborn lambs are also very susceptible to infections. From this point of view, newborn lambs should receive colostrum in certain ratios to gain sufficient life resistance and to start to form the immune system. In lambs, the best breeding system should be selected and applied according to the management conditions.

Keywords: Lamb, Sheep, Colostrum, Disease, Growth method.

ISBN : 978-625-6283-10-7

Pro-Oxidant Effect of *Olea europaea* L. Leaf Extract In Healthy Rats.

Sedat Baran DAĞ

Master Student, Department of Biology, Science and Literature Faculty,

Bursa Uludağ University,

Bursa, Türkiye, -ORCID ID: https://orcid.org/0009-0005-9978-462X

İpek TABAK

Master Student, Department of Biology, Science and Literature Faculty,

Bursa Uludağ University,

Bursa, Türkiye,. - ORCID ID: https://orcid.org/0000-0001-6258-816X

Prof. Dr. Melahat DİRİCAN

Department of Biochemistry, Medical Faculty, Bursa Uludag University, Bursa, Türkiye, - ORCID ID: https://orcid.org/0000-0002-4956-5278.

Prof. Dr. Sibel TAŞ

Department of Biology, Science and Literature Faculty, Bursa Uludağ University, Bursa,

Türkiye, - ORCID ID: https://orcid.org/0000-0001-8880-0771.

ABSTRACT

Herbal extracts are widely used among the public for the purpose of healthy living, improving the quality of life, and preventing diseases because they contain intense bioactive compounds. The aim of this study was to investigate the effect of *Olea europaea* L. leaf extract (OEL) supplementation on oxidant-antioxidant systems in healthy rats. Fourteen Wistar Albino rats were divided into two groups: control (C) and OEL extract supplemented control group (C+ OEL). OEL extract (600 mg/kg body weight) was administered in per orally for 4 weeks. Serum total cholesterol (TC), triglyceride (TG), high-density lipoprotein-cholesterol (HDL-C), aspartate aminotransferase (ALT), alanine aminotransferase (AST) levels were evaluated using an auto analyzer. Plasma and tissue (heart, kidney, liver and *Musculus gastrocnemius*) malondialdehyde (MDA) levels were measured by spectrophotometric methods. Serum paraoxonase (PON), arylesterase (ARE), superoxide dismutase (SOD) and glutathione peroxidase (GSH-Px) levels were determined using commercial kits.

A significant increase was detected in the AST level of rats in the C+OEL group compared to rats in the C group ($p<0.05$). Serum lipids and ALT levels were not different between the C and

ISBN : 978-625-6283-10-7

C+OEL groups. Significant reductions were observed in serum SOD, GSH-Px and PON levels in the C+OEL group, compared with those of the C group ($p<0.05$). In addition while a statistically significant increase in MDA levels in liver and kidney tissues was detected in the C+OEL group compared to the C group ($p<0.05$) and the increases in MDA levels in heart, muscle tissues and plasma were not statistically significant.

When the results of this study were evaluated, it was concluded that 600mg/kg of OEL extract given to supplementation exerted a pro-oxidative effect the C+OEL healthy rats group had a pro-oxidative effect.

Key words: *Olea europaea* L, health, bioactive compounds, oxidative stress, antioxidant.

ISBN : 978-625-6283-10-7

TRANSFORMATÖRLERDEKİ FARKLI KADEME DEĞİŞTİRME ORANLARININ GÜÇ AKIŞI VE KAYIPLARA ETKİSİ

Arş. Gör. Dr. Enes KAYMAZ
Düzce Üniversitesi, eneskaymaz@duzce.edu.tr - 0000-0002-4774-0773
Doç. Dr. M. Kenan DÖŞOĞLU
Düzce Üniversitesi, kenandosoglu@duzce.edu.tr - 0000-0001-8804-7070

ÖZET

Günümüz teknolojisindeki yeni yaklaşımlara bağlı olarak artan elektriksel güç talebi, güç sistemlerinde aşırı yüklenme problemlerine ve çeşitli arıza durumlarına yol açmaktadır. Beklenmeyen arıza durumlarına karşı güç sistemlerinde yer alan senkron generatörlerin çalışma koşullarının önceden belirlenmesi ve sistem güvenliğinin sağlanması amacıyla çeşitli planlamalar yapılması gerekmektedir. Bu planlamalar doğrultusunda, kararlı durum koşulları için güç akışı analizi gerçekleştirilerek sistemde mevcut olan baralara ait gerilim büyüklüğü, faz açısı, aktif güç veya reaktif güç gibi değerler hesaplanabilir. Genel olarak bu hesaplamaların yapılmasında Newton-Raphson (NR) matematiksel yöntemi kullanılmaktadır. Bu çalışmada, Uluslararası Elektrik Elektronik Mühendisliği (IEEE) 14-baralı güç sisteminde Güç Sistemleri Analizi Programı (PSAT) kullanılarak güç akışı analizi gerçekleştirilmiş ve sistemde yer alan transformatörlere ait farklı kademe değiştirme oranlarının güç akışı analizi açısından etkileri incelenmiştir. Test sisteminde, 4-9 numaralı baralar arasında mevcut olan Kademe Değiştirici Transformatörün (KDT) sabit faz açısı değişimi altında üç farklı kademe değiştirme oranı için elde edilen benzetim çalışması sonuçları aktif-reaktif güç kayıpları ile bara gerilim-açı profillerine bağlı olarak değerlendirilmiştir. Yapılan değerlendirme sonucunda, sabit faz açısı değişimi için üç farklı kademe değiştirme oranı arasından 0.969 kademe değiştirme oranının, toplam aktif-reaktif güç kaybı bakımından minimum değerler sağladığı ve bara gerilim-açı profilleri bakımından daha fazla iyileştirme sağladığı görülmektedir.

Anahtar Kelimeler: Güç Akışı, Kademe Değiştirme Oranı, Kademe Değiştirici Transformatör, Aktif ve Reaktif Güç Kayıpları.

ISBN : 978-625-6283-10-7

ÇBAG TABANLI RÜZGAR TÜRBİNİNDE MAKSİMUM GÜÇ NOKTASI TAKİBİ MODELLEMESİNİN GELİŞTİRİLMESİ

Muhammed ÖZDEMİR

Düzce Üniversitesi, 0009-0007-8437-6679

Doç. Dr. M. Kenan DÖŞOĞLU

Düzce Üniversitesi, 0000-0001-8804-7070

Dr. Öğr. Üyesi Mustafa DURSUN

Düzce Üniversitesi, 0000-0001-9952-9358

ÖZET

Son yıllarda yenilenebilir enerji kaynaklarının kullanımı giderek artmaktadır. Yenilenebilir enerji kaynaklarından rüzgâr enerjisi teknolojisi enerji talebinin karşılanması ve güç sistemlerinin çalışma koşullarını iyileştirmesi açısından kullanımı popüler olmaktadır. Rüzgâr türbinlerinde elektrik enerjisini üretmek için güç ve moment kontrolü diğer generatörlere göre daha iyi olan Çift Beslemeli Asenkron Generatör (ÇBAG) kullanılmaktadır. Şebekeye bağlı rüzgâr türbinlerinde rüzgâr hızından maksimum verim almak için ÇBAG'da çeşitli modeller geliştirilmektedir. Bunlardan en önemli olanlarından birisi de farklı çalışma koşulları altında tasarlanan maksimum güç noktası takibi modelidir. Yapılan bu çalışmada şebeke bağlı olarak çalışan ÇBAG tabanlı rüzgâr türbinlerinde maksimum güç noktası takibi modeli geliştirilmesi amaçlanmıştır. Bu çalışmada gerçekleştirilen analizler MATLAB/SIMULINK ortamında yapılmıştır. Yapılan çalışmada rüzgâr hızı sabit olarak alınırken, hız referansı değişken olarak alınmıştır. Rüzgâr hızı ÇBAG'da 8 m/s olarak kabul edilmiştir. Hız referansları 90, 153 ve 297 rad/sn. olarak alınmıştır. Çalışma iki aşamalı olarak oluşturulmuştur. Bu aşamalarda karşılaştırmalar Oransal Integral (PI) denetleyici ve maksimum güç noktası takibi modeli üzerinden yapılmıştır. ÇBAG tabanlı rüzgâr türbininde arka arkaya bağlı evirici devreleri bulunmaktadır. İlk adım olarak hem rotor tarafındaki evirici hem de şebeke tarafındaki evirici devresinde PI denetleyici modelleri adapte edilmiştir. İkinci adımda maksimum güç noktası takibi modeli rotor tarafındaki evirici devresinde tasarlanmıştır. Rotor tarafındaki evirici devresi ÇBAG'da üretilen gücü kontrol etmektedir. Şebeke tarafındaki evirici devresi DC link gerilimini kontrol etmektedir. Maksimum güç noktası takibi modelinde ise referans değere karşılık bir moment üretilmektedir. Bu üretilen moment rotor tarafındaki evirici devresine uygulanmıştır. Yapılan çalışma sonucunda maksimum güç noktası takibi modelinin klasik olarak kullanılan PI denetleyiciye göre daha iyi sonuçlar verdiği görülmüştür.

Anahtar Kelimeler: ÇBAG, maksimum güç noktası takibi modeli, PI denetleyici, rotor tarafındaki evirici, şebeke tarafındaki evirici

ISBN : 978-625-6283-10-7

AERODYNAMIC INVESTIGATION AND VALIDATION OF A UAV WING USING CFD AND VORTEX LATTICE METHODS

Res. Asst., Veysel EROL
[1] İskenderun Technical University, Faculty of Aeronautics and Astronautics, Aerospace Engineering Department, - 0009-0001-1290-079X

Assist. Prof. Dr., Ahmet ŞUMNU
[2] İskenderun Technical University, Faculty of Aeronautics and Astronautics, Aerospace Engineering Department, - 0000-0003-1514-6048

Assist. Prof. Dr., Yüksel ERASLAN
[3] İskenderun Technical University, Faculty of Aeronautics and Astronautics, Aerospace Engineering Department, - 0000-0002-5158-5171

ABSTRACT

Accurate prediction of the aerodynamic properties of an unmanned aerial vehicle (UAV) design has an important role in the preliminary design process. Achieving the properties such as lift and drag has fundamental importance in determining the flight performance of the aircraft. Computational methods must both provide accurate results and be computationally efficient. In this study, Vortex Lattice Method (VLM) and Computational Fluid Dynamics (CFD) tools have been used to determine the aerodynamic properties of a UAV main wing in comparison with the experimental results from the literature. ANSYS Fluent, a high-order method, was used together with XFLR5, a low-order calculation tool based on Vortex Lattice Method. The UAV used as a base model is a fixed-wing aerial vehicle with 0.4 meters wingspan that has been previously produced. Numerical results are presented in comparison with wind-tunnel tests already exist in the literature, and the performances of the methods are discussed.

Keywords: Unmanned aerial vehicle, Vortex Lattice Method, Computational Fluid Dynamics

ISBN : 978-625-6283-10-7

STABILITY ASSESSMENT OF UNMANNED AERIAL VEHICLE WITH TWIST-MORPHING WING

Assist. Prof. Dr., Yüksel ERASLAN

[1]İskenderun Technical University, Faculty of Aeronautics and Astronautics, Aerospace Engineering Department, - 0000-0002-5158-5171

Prof. Dr., Tuğrul OKTAY

[2]Erciyes University, Faculty of Aeronautics and Astronautics, Aircraft Engineering Department, - 0000-0003-4860-2230

ABSTRACT

Unmanned aerial vehicles (UAVs) are one of the most popular design issues among aircraft design enthusiasts and scientists around the world. Rather than the conventional concepts, modern design ideas on UAVs have evolved and expanded to the morphing applications by means of developments in material technology. Fixed-wing aircraft point of view, the main applications of morphing have been mainly focused on the main wing which is the lifting surface of the vehicle. Geometrically, wing geometry could be defined in various parameters such as sweep angle, taper ratio, span, aspect ratio, or twist angle. For a twist-morphing idea, there are two types of application that are “wash-in” and “wash-out”, which are related to the incidence angles of the root and tip of the wing design. The wash-out is the case when the tip airfoil is at a negative (nose-down) angle compared to the root airfoil, which is the most common application to prevent tip stall and revise the lift distribution to elliptical. In this study, the potential behind the wash-out twist-morphing wing design for the stability of a fixed-wing UAV is investigated. For that purpose, aerodynamical, geometrical and inertial changes on a base aerial vehicle with various twist angles are assessed to obtain and compare the stability coefficients with the base model. In conclusion, the variation in stability coefficients are presented and the potential for such a morphing idea is discussed for further studies.

Keywords: Morphing wing, twist, stability, aircraft design.

ISBN : 978-625-6283-10-7

DESIGN OF OPTIMAL PID CONTROLLER FOR LIQUID TANK SYSTEM USING PSO AND ABC ALGORITHMS

Şahin YILDIRIM

Erciyes University, Engineering Faculty, Department of Mechatronics Engineering, Kayseri, Turkey, s - ORCID ID: 0000-0002-7149-3274

Mehmet Safa BİNGÖL

Nigde Omer Halisdemir University, Engineering Faculty, Department of Mechatronics Engineering, Nigde, Turkey, - ORCID ID: 0000-0002-4188-2025

Sertaç SAVAŞ

Erciyes University, Engineering Faculty, Department of Mechatronics Engineering, Kayseri, Turkey, tr - ORCID ID: 0000-0001-8096-1140

ABSTRACT

Liquid tank systems are widely used in systems such as factory automation, agricultural irrigation system, chemical industry. Water, oil or various chemicals can be used in tank systems. Industrial process firstly need liquids to be pumped, stored in the tank and pumped again to another tank for certain desired level. It is desired that the filling of the tank system should be fast and there should be minimum overflow. In this study, Proportional–Integral–Derivative (PID) level control of a liquid tank system is implemented. The metaheuristic algorithms Particle Swarm Optimization (PSO) and Artificial Bee Colony (ABC) algorithms are used to optimize the PID parameters. In addition to these two optimization algorithms, MATLAB's PID tuning algorithm is also used. The PID parameters tuned by optimization algorithms are implemented on the liquid tank system and evaluated in terms of different error metrics such as maximum overshoot, rise time, settling time, steady-state error. The results obtained are given in graphs and tables.

Keywords: PID controller, particle swarm optimization algorithm, artificial bee colony optimization algorithm.

ISBN : 978-625-6283-10-7

MONITORING ROCKFALL SURFACE CHANGE ON THE SLOPES OF ZIR VALLEY (ANKARA) USING UNMANNED AERIAL VEHICLE-DERIVED MULTI-TEMPORAL POINT CLOUDS

Assoc. Prof. Dr., NURGUL YESILOGLU-GULTEKIN
Hacettepe University Baskent Chamber of Industry Organized Industrial Zone Vocational School, Department of Construction, Ankara, Turkey,
- 0000-0002-7007-2478

Dr., MEHMET DOGRULUK
Hacettepe University, Baskent Chamber of Industry Organized Industrial Zone Vocational School, Department of Architecture and Urban Planning, Ankara, Turkey,
- 0000-0001-6698-651X

ABSTRACT

Assessing the spatial distribution of rockfalls is crucial for identifying the susceptible zones and determining appropriate locations for implementing preventative measures. In this study, rockfall events that occurred on the Ankara Zir Valley slopes were studied using unmanned aerial vehicles (UAVs). In this context, two different aerial images were collected for time interval of more than a year with professional UAVs for three-dimensional (3D) change detection. Using these images, dense point clouds were extracted with the structure from motion (SfM) technique, and 3D change analysis was performed employing these point clouds with a multi-scale model-to-model comparison (M3C2) approach. Consequently, the aim was to determine the spatial distribution of susceptible rockfall areas. According to the results of the change analysis for the study area, no significant block movements were identified between 2022 and 2023. However, micro changes were observed. These changes are important data for the stability assessment of the study area. In order to effectively control the block movements on the Zir Valley slopes and mitigate potential damages, it has been revealed regular 3D change detection study. This analysis is essential in order to carry out an integrated protection approach within a continuous risk management plan.

Keywords: rockfall, three-dimensional change detection, photogrammetric point cloud, unmanned aerial vehicle

ISBN : 978-625-6283-10-7

İSVEÇ ÇAMI (*Pinus contorta*) AHŞABINDA BAZI VERNİK TÜRLERİNİN UYGULANMASI

Doç. Dr. Ümit AYATA[1] ve Prof. Dr. Bekir Cihad BAL[2]

[1]Bayburt Üniversitesi, Sanat ve Tasarım Fakültesi, İç Mimarlık ve Çevre Tasarımı Bölümü, Bayburt,ORCID NO: 0000-0002-6787-7822
[2]Kahramanmaraş Sütçü İmam Üniversitesi, Teknik Bilimler Meslek Yüksekokulu, Malzeme Bölümü, Kahramanmaraş,
ORCID NO: 0000-0001-7097-4132

Özet

İsveç çamı ahşabı maden kirişleri, demiryolu traversleri ve direkler için kullanılmaktadır. Bu çalışmada, İsveç çamı (*Pinus contorta*) ahşabında bazı vernik türlerinin (solvent bazlı yarı örtücü ahşap verniği, solvent bazlı akrilik reçine esaslı vernik ve solvent bazlı yat verniği) uygulanması sonrasında renk parametreleri kıyaslanmıştır. Belirlenmiş olan sonuçlara göre, varyans analizleri anlamlı olarak bütün renk parametrelerinde elde edilmiştir. Bütün vernik türlerinin ahşap malzemeye uygulanması ile *a**, *b** ve *C** parametrelerinde artışlar bulunurken, *L** parametresinde azalışlar tespit edilmiştir. Δ*E** değerleri solvent bazlı akrilik reçine esaslı verniğinde 5.93, yat verniğinde 4.16 ve şeffaf örtücü verniğinde 8.49 olarak elde edilmiştir. Bütün vernik türlerinde Δ*L** değerleri negatif olarak belirlenirken, Δ*a**, Δ*b** ve Δ*C** değerleri pozitif olarak bulunmuştur. *a**, *b** ve *C** parametrelerinde en düşük sonuçlar kontrol örneklerinde (vernik uygulaması yok) bulunmuştur.

Anahtar kelimeler: Solvent bazlı vernik, akrilik vernik, İsveç çamı, renk parametreleri

Application of Some Varnish Types on Lodgepole Pine (*Pinus contorta*) Wood

Abstract

Lodgepole pine wood is used for mine beams, railway sleepers, and poles. In this study, the color parameters of Lodgepole pine (*Pinus contorta*) wood were compared after the application of some types of varnishes (solvent-based semi-opaque wood varnish, solvent-based acrylic resin varnish, and solvent-based yacht varnish). According to the determined results, analysis of variance revealed significant differences in all color parameters. Increases in the *a**, *b**, and *C** parameters were found with the application of all types of varnishes to the wood material, while decreases were observed in the *L** parameter. The Δ*E** values were obtained as 5.93 for solvent-based acrylic resin varnish, 4.16 for yacht varnish, and 8.49 for clear topcoat varnish. In all types of varnishes, the Δ*L** values were determined to be negative, while the Δ*a**, Δ*b**, and Δ*C** values were found to be positive. The lowest results for the *a**, *b**, and *C** parameters were found in the control samples (without varnish application).

Keywords: Solvent-based varnish, acrylic varnish, Lodgepole pine, color parameters

ISBN : 978-625-6283-10-7

ATIK CAM UNU VE GERİ DÖNÜŞTÜRÜLMÜŞ POLİPROPİLEN İLE ÜRETİLEN KOMPOZİT MALZEMELER ÜZERİNDE BAZI YÜZEY ÖZELLİKLERİNİN ARAŞTIRILMASI

Prof. Dr. Bekir Cihad BAL[1] ve Doç. Dr. Ümit AYATA[2]

[1]Kahramanmaraş Sütçü İmam Üniversitesi, Teknik Bilimler Meslek Yüksekokulu, Malzeme Bölümü, Kahramanmaraş, ORCID NO: 0000-0001-7097-4132
[2]Bayburt Üniversitesi, Sanat ve Tasarım Fakültesi, İç Mimarlık ve Çevre Tasarımı Bölümü, Bayburt, ORCID NO: 0000-0002-6787-7822

Özet

Bu çalışmada, atık plastik sandalyelerden elde edilen geri dönüştürülmüş polipropilen (PP) ve atık cam unu ile üretilen kompozit malzemelerinde (grup 1: %100 PP + %0 atık cam unu, grup 2: %85 PP + %15 atık cam unu, grup 3: %70 PP + %30 atık cam unu ve grup 4: %55 PP + %45 atık cam unu ve grup 5: %40 PP + %60 atık cam unu) bazı yüzey özellikleri (beyazlık indeksi: *WI**, parlaklık değerleri ve renk parametreleri) üzerine karışım oranının etkileri araştırılmıştır. Cam unu miktarının artması ile bütün parlaklık derecelerinde, *b** ve h^o değerlerinde artışlar tespit edilirken, *WI**, *a** ve *C** değerlerinin azalmalar görülüştür. Δ*E** değerleri grup 2 ile 1.97, grup 3 ile 6.17, grup 4 ile 8.21 ve grup 5 ile 10.74 olarak tespit edilmiştir. Grup 2, 3, 4 ve 5 numaralı örnekler üzerinde Δ*L** ve Δ*C** değerleri negatif olarak tespit edilirken, Δ*b** değerleri pozitif olarak bulunmuştur. Cam unu miktarının artması ile Δ*H**, Δ*b** ve Δ*E** değerlerinde artışlar belirlenmiştir. Farklı karışım oranları ile farklı yüzey özelliklerine sahip malzemelerin üretildiği görülmüştür.

Anahtar kelimeler: Atık cam unu, atık plastik, renk, kompozit malzeme, parlaklık

Investigation of Some Surface Properties on Composite Materials Produced with Waste Glass Powder and Recycled Polypropylene

Abstract

This study investigates the effects of mixing ratios on certain surface properties (whiteness index: *WI**, glossiness values, and color parameters) of composite materials produced from recycled polypropylene (PP) obtained from waste plastic chairs and waste glass flour (sheet 1: 100% PP + 0% waste glass flour, sheet 2: 85% PP + 15% waste glass flour, sheet 3: 70% PP + 30% waste glass flour, sheet 4: 55% PP + 45% waste glass flour, and group 5: 40% PP + 60% waste glass flour). With the increase in the amount of glass flour, increases in all glossiness levels, *b** and h^o values are observed, while decreases in *WI**, *a**, and *C** values are seen. The Δ*E** values were determined as 1.97 for group 2 compared to group 1, 6.17 for group 3 compared to group 2, 8.21 for group 4 compared to group 3, and 10.74 for group 5 compared to group 4. Negative Δ*L** and Δ*C** values were observed for samples numbered 2, 3, 4, and 5, while positive Δ*b** values were found. With an increase in the amount of glass flour, increases have been determined in Δ*H**, Δ*b**, and Δ*E** values. It has been observed that materials with different surface properties are produced with different mixing ratios.

Keywords: Waste glass flour, waste plastic, color, composite material, glossiness

ISBN : 978-625-6283-10-7

GERİ DÖNÜŞTÜRÜLMÜŞ POLİPROPİLEN VE ODUN UNU İLE ÜRETİLEN KOMPOZİT MALZEMENİN BAZI YÜZEY ÖZELLİKLERİNİN KARŞILAŞTIRILMASI

Prof. Dr. Bekir Cihad BAL[1] ve Doç. Dr. Ümit AYATA[2]

[1]Kahramanmaraş Sütçü İmam Üniversitesi, Teknik Bilimler Meslek Yüksekokulu, Malzeme Bölümü, Kahramanmaraş, ORCID NO: 0000-0001-7097-4132
[2]Bayburt Üniversitesi, Sanat ve Tasarım Fakültesi, İç Mimarlık ve Çevre Tasarımı Bölümü, Bayburt, ORCID NO: 0000-0002-6787-7822

Özet

Bu çalışmada, farklı karışım oranları ile üretilen kompozit malzemelerin (grup 1: %100 PP + %0 atık odun unu, grup 2: %85 PP + %15 atık odun unu, grup 3: %70 PP + %30 atık odun unu ve grup 4: %55 PP + %45 atık odun unu) seçilmiş bazı yüzey özellikleri (beyazlık indeksi: *WI**, parlaklık değerleri ve renk parametreleri) araştırılmıştır. Bütün testler üzerinde karışım oranı faktörü için varyans analizlerinin anlamlı olarak elde edildikleri görülmüştür. Δ*E** değerleri grup 2 ile 3.64, grup 3 ile 2.63 ve grup 4 ile 4.15 olarak tespit edilmiştir. Grup 2, 3 ve 4 ile üretime sahip örneklerde grup 1'e kıyasla *WI** değerlerinde, *L**, *a**, *b** ve *C** değerlerinde azalışlar elde edilirken, 20 ve 60 derecelerde parlaklık değerlerinde ve h^o değerinde artışlar bulunmuştur. Grup 2, 3 ve 4 numaralı örnekler üzerinde Δ*b**, Δ*L**, Δ*a** ve Δ*C** değerleri negatif olarak elde edilmiştir. Farklı karışım oranları ile üretilen kompozit malzemeler üzerinde renk, parlaklık ve beyazlık indeksi testleri açısından farklı sonuçların elde edildiği belirlenmiştir.

Anahtar kelimeler: Atık odun unu, parlaklık, atık plastik, kompozit malzeme, renk

Comparison of Some Surface Properties of Composite Material Produced with Recycled Polypropylene and Wood Flour

Abstract

This study compares selected surface properties (whiteness index: *WI**, glossiness values, and color parameters) of composite materials produced at different ratios (sheet 1: 100% PP + 0% waste wood flour, sheet 2: 85% PP + 15% waste wood flour, sheet 3: 70% PP + 30% waste wood flour, and sheet 4: 55% PP + 45% waste wood flour). Across all tests, variance analyses for the mixture ratio factor have shown statistically significant results. In samples with plates 2, 3, and 4 in production, decreases were observed in the *WI**, *L**, *a**, *b**, and *C** values compared to plate 1, while increases were found in glossiness values at 20 and 60 degrees and in the h^o value. Δ*E** values were determined as 3.64 for sheet 2 compared to sheet 3, 2.63 for sheet 3 compared to sheet 4, and 4.15 for sheet 4 compared to sheet 2. Negative Δ*b**, Δ*L**, Δ*a**, and Δ*C** values were obtained for samples numbered 2, 3, and 4. It has been determined that different results are obtained in terms of color, glossiness, and whiteness index tests on composite materials produced in different proportions.

Keywords: Waste wood flour, glossiness, waste plastic, composite material, color

ISBN : 978-625-6283-10-7

BASRALOCUS (*Dicorynia guianensis* Amshoff) AHŞABINDA AĞARTMA UYGULAMALARI

Doç. Dr. Ümit AYATA[1] ve Prof. Dr. Bekir Cihad BAL[2]

[1]Bayburt Üniversitesi, Sanat ve Tasarım Fakültesi, İç Mimarlık ve Çevre Tasarımı Bölümü, Bayburt, ORCID NO: 0000-0002-6787-7822
[2]Kahramanmaraş Sütçü İmam Üniversitesi, Teknik Bilimler Meslek Yüksekokulu, Malzeme Bölümü, Kahramanmaraş, ORCID NO: 0000-0001-7097-4132

Özet

Basralocus odunu ağır inşaat işlerinde, köprüler, kaplamalar ve demiryolu köprü bağları yapımında kullanılmaktadır. Bu çalışmada, basralocus (*Dicorynia guianensis* Amshoff) ahşabında ağartma [oksalik asit ($C_2H_2O_4$) ve hidrojen peroksit (H_2O_2) + sodyum hidroksit (NaOH) kimyasalları] uygulamaları yapılmış olunup, meydana gelen bazı yüzey özelliklerindeki (beyazlık indeksi: *WI**, renk parametreleri ve parlaklık değerlerler) değişimler araştırılmıştır. Sonuçlara göre, varyans analiz testlerinde bütün test ölçümleri için ağartma kimyasalı türü anlamlı olarak belirlenmiştir. ΔE^* değerleri $C_2H_2O_4$ ile 3.41 ve H_2O_2 + NaOH ile 12.18 olarak elde edilmiştir. Her iki ağartma kimyasalları ile *L**, *C**, *b** ve h^o değerlerinde artışlar tespit edilmiştir. *a** değerlerinde $C_2H_2O_4$ ile artış ve H_2O_2 + NaOH ile azalış belirlenmiştir. 60 ve 85 derecelerde parlaklıklarda her iki ağartma kimyasalları ile azalışlar görülmüştür. *WI** değerlerinde ise $C_2H_2O_4$ ile azalış ve H_2O_2 + NaOH ile artış görülmüştür.

Anahtar kelimeler: Ağartma, beyazlık indeksi, basralocus, renk, parlaklık

Basralocus (*Dicorynia guianensis* Amshoff) Wood Bleaching Applications

Abstract

In construction heavy works, such as bridges, decking, and railway bridge ties, basralocus wood is used. In this study, bleaching treatments [using chemicals such as oxalic acid ($C_2H_2O_4$) and hydrogen peroxide (H_2O_2) + sodium hydroxide (NaOH)] were applied to basralocus (*Dicorynia guianensis* Amshoff) wood, and changes in some surface properties (whiteness index: *WI**, color parameters, and glossiness values) were investigated. According to the results, the type of bleaching chemical was found to be significant for all test measurements in the analysis of variance tests. The ΔE^* values are 3.41 for $C_2H_2O_4$ and 12.18 for H_2O_2 + NaOH. Increases in *L**, *C**, *b**, and h^o values were observed with both bleaching agents. An increase in *a** value was determined with $C_2H_2O_4$ and a decrease with H_2O_2 + NaOH. Decreases in glossiness were observed at 60 and 85 degrees with both bleaching agents. However, a decrease was observed in *WI** values with $C_2H_2O_4$ and an increase with H_2O_2 + NaOH.

Keywords: Bleaching, whiteness index, basralocus, color, glossiness

ISBN : 978-625-6283-10-7

SICAK KARIŞIMLI ASFALT KAPLAMALARINDA REAKTİF KATKILARIN PERFORMANSI VE LABORATUVAR DENEYLERİ

Muhammet Can ZEYTİN

Graduate School of Science and Engineering, Yıldız Technical University, Istanbul, Turkey
ORCID #0009-0002-9413-1417

Arş. Gör. Dr. Onur ŞAHİN

Civil Engineering Department, Transportation Department, Yıldız Technical University, Istanbul, Turkey, ORCID #0000-0002-4574-9272

ÖZET

Karayolu esnek üstyapılarında zamanla trafik yükü, iklim koşulları ve diğer çevresel faktörler nedeniyle deformasyonlar oluşmaktadır. Üst yapı rehabilitasyonu için birçok farklı metot ve teknikler geliştirilmiş ve çeşitli ülkelerde farklı uygulama tipleriyle bakım ve onarım işlemleri yapıldığı gözlemlenmektedir. Bakım süreci bazı durumlarda maliyet ve uygulama süresi açısından katlanılabilir düzeyin üzerine çıkmakta ve tıkanıklık oluşumuna öncül teşkil etmektedir. Genel uygulamada bozulmanın olduğu kısımda yol üstyapısı kazılarak, bitümlü sıcak karışımlar hazırlanmakta ve yeni karışım kazılan bölgeye serilerek üstyapı yeniden oluşturulmaktadır. Asfalt karışımlarının daha uzun hizmet ömrüne sahip olması ve aşınma direncinin arttırılması için bitüme ek olarak farklı katkı malzemeleri de kullanılmaktadır. Karışımda kullanılacak olan malzeme ve katkı maddesi tercihlerinin doğru yapılması, sıcak karışımlı asfalt kaplamaların aşınma direnimini artırma konusunda en önemli faktörlerdendir. Özellikle son zamanlarda, ilerleyen teknoloji ve deneysel araştırmalardaki gelişmeler ile birlikte asfalt kaplama tabakasının, geometrisinin bozulmasını önlemek amacıyla, farklı çeşitlerde katkı malzemeleri denenmiştir. Kullanılan bu malzemelerin etkilerini avantaj ve dezavantajlarını gözlemlemek üzere çeşitli performans testleri yapılmaktadır. Karışımlara Marshall deneyi, parlama noktası deneyi, bitüm penetrasyon deneyi, yumuşama noktası deneyi gibi deneyler uygulanmaktadır. Söz konusu maddelerin asfalt karışımında iyileştirici özellikleri gözlenmiş ancak maliyet açısından uygulanabilirlikleri aşamasında soru işaretleri devam etmektedir. Özel uygulama alanları dışında yaygın bir kullanım sürecine geçilmesi açısından halen maliyet en önemli faktör olarak görülmektedir. Bu durumda esnek üst yapı uygulayıcılarının karar verme aşamalarına doğrudan tesir etmektedir. Bu çalışmada kullanılan katkı maddeleri ve deneyler ile ilgili yapılan çalışmalar ele alınmıştır.

Anahtar Kelimeler: Sıcak karışımlı asfalt, Reaktif katkı, Asfalt kaplama

ISBN : 978-625-6283-10-7

THE PERFORMANCE OF REACTIVE ADDITIVES IN HOT MIXED ASPHALT COATINGS AND LABORATORY EXPERIMENTS

ABSTRACT

In flexible road pavements, deformations occur over time due to traffic load, climate conditions, and other environmental factors. Various methods and techniques have been developed for the rehabilitation of the pavement, and maintenance and repair processes are observed to be carried out with different application types in various countries. In some cases, the maintenance process may exceed a tolerable level in terms of cost and implementation time, leading to congestion. In general practice, in the area where damage occurs, the road pavement is excavated, bituminous hot mixtures are prepared, and the new mixture is spread in the excavated area to rebuild the pavement. In addition to bitumen, different additive materials are also used to increase the service life and wear resistance of asphalt mixtures. The correct selection of materials and additive preferences in the mixture is the most important factor in increasing the wear resistance of hot mix asphalt coatings. Especially in recent times, with advances in technology and experimental research, different types of additive materials have been tried to prevent the deformation of the asphalt coating layer. Various performance tests are conducted to observe the effects and advantages and disadvantages of these materials. Tests such as the Marshall test, flash point test, bitumen penetration test, softening point test are applied to the mixtures. The beneficial properties of these substances in asphalt mixtures have been observed, but questions remain about their applicability in terms of cost. Cost is still seen as the most important factor in transitioning to widespread use outside of special application areas. This situation directly affects the decision-making stages of flexible pavement applicators. This study discusses the use of additive materials and studies related to tests.

Keywords: hot mixed asphalt, reactive additive, asphalt pavement

ISBN : 978-625-6283-10-7

YERİNDE DÖNÜŞÜM VE STANDART YENİLEME ÇALIŞMALARI KARAR SÜRECİ ANALİZİ

Arş. Gör. Dr. Onur ŞAHİN

Civil Engineering Department, Transportation Department, Yıldız Technical University, Istanbul, Turkey, ORCID #0000-0002-4574-9272

Muhammet Can ZEYTİN

Graduate School of Science and Engineering, Yıldız Technical University, Istanbul, Turkey ORCID #0009-0002-9413-1417

ÖZET

Karayolu ulaşımı özellikle gelişmekte olan ülkelerin halen birinci derece öneme sahip ulaşım alternatifleri arasında yer almaktadır. Bu sebeple, bu ülkelerin bütçeleri oluşturulurken, karayolları hem inşa sürecinde hem de bakım onarım aşamasında ciddi ölçekte yer kaplamaktadır. Hizmete sunulan karayollarında üstyapı olağan kullanımdan kaynaklı yıpranma ve aşınmalar dışında, çevresel birçok faktör sebepli bozulmalar da gözlemlenmektedir. Karayollarının hesaplanan verimlerini kaybetmemeleri, mevcutta bulunan kalitenin iyileştirilmesi ve oluşan deformasyonların giderilmesi amacıyla farklı yöntemler denenmektedir. Oluşan bozulmaların giderilmesi aşamasında ilk olarak hasarlı bölgeler belirlenir. Planlanan onarım çalışmaları için gerekli test ve analizler yapılarak bir yol haritası oluşturulur. Onarım bazen malzemenin sökülmesi, üretim tesisine götürülmesi, işlenip uygulamaya hazır hale getirilmesi ve hasarlı bölgeye geri getirilmesi şeklinde gerçekleşmektedir. Ancak bu süreç hem uzun sürmekte hem maliyetli olması açısından, günümüzde sıklıkla yol tabakalarında zarar görmüş bölgelerden kazınarak elde edilen malzeme ile yerinde dönüşüm yapılmaktadır. Yapılan yerinde dönüşümün farklı çeşitleri ve yöntemleri bulunmaktadır. Yolun mevcut durumu, trafik hacmi, analiz sonuçları ve çıkarılan maliyet gibi birçok faktör değerlendirilerek, yenileme çalışması için en uygun yönteme karar verilir. Bu çalışma kapsamında yerinde dönüşüm ve standart yenileme çalışmalarının karar verme sürecinde yapılan hasar tespit aşaması, mühendislik değerlendirmeleri, maliyet analizleri, uygulama ve değerlendirme aşamaları ile ilgili uzman görüşleri alınmıştır. Çalışma sonuçlarının uygulayıcılar açısından rehberlik teşkil etmesi beklenmektedir.

Anahtar Kelimeler: Yerinde dönüşüm, Asfalt bakımı, Karar süreci

ANALYSIS OF THE DECISION PROCESS OF ON-SITE CONVERSION AND STANDARD RENOVATION WORKS

ABSTRACT

Road transportation still remains one of the primary transportation alternatives for developing countries. Therefore, when budgeting for these countries, highways take up a significant

ISBN : 978-625-6283-10-7

amount of space in both the construction and maintenance stages. In addition to the wear and tear caused by normal usage on highways, various environmental factors also cause deterioration. Different methods are tried in order to prevent highways from losing their calculated efficiencies, to improve the existing quality, and to repair the deformations. In the process of repairing the damages, first, the damaged areas are identified. Necessary tests and analyses are conducted for the planned repair works and a roadmap is created. Sometimes, repair involves dismantling the material, taking it to the production facility, processing it and preparing it for application, and bringing it back to the damaged area. However, this process is often time-consuming and costly, so nowadays, in-site recycling is frequently performed by using material obtained from excavated damaged areas in road layers. There are different types and methods of in-site recycling. Considering factors such as the current state of the road, traffic volume, analysis results, and cost estimates, the most suitable method for renewal works is decided upon. In this study, expert opinions on the damage detection stage, engineering evaluations, cost analyses, application, and evaluation stages in the decision-making process of in-situ recycling and standard renewal works were obtained. It is expected that the results of the study will serve as a guide for practitioners.

Keywords: in-site recycling, asphalt maintenance, decision Process

ISBN : 978-625-6283-10-7

SÜLFONLU POLİMERLERİN HİDROJEN ÜRETİMİNDE KULLANILMASI

Doç. Dr. Levent SEMİZ
Amasya Üniversitesi, levent.semiz@amasya.edu.tr - ORCID ID: 0000-0002-3218-4663

ÖZET

Bu çalışmada sülfonlanmış poly(1,4-phenylene ether-ether-sulfone) kopolimeri ile sodyum bor hidrürden hidrojen üretimi gerçekleştirilmiştir. Kopolimerdeki sülfon gruplarında bulunan protonlar sodyum bor hidrürün hidrolizini katalizlemiş ve hidrojen üretimini sağlamıştır. Hidrojen üretim performansının hem sodyum bor hidrür hem de sodyum bor hidrür konsantrasyonun bir fonksiyonu olduğu bulunmuştur. Hidrojen üretim hızı hem polimer miktarıyla hem de sodyum bor hidrür konsantrasyonuyla artış göstermiştir. Ayrıca, reaksiyon düşük aktivasyon enerjisine sahiptir ve Arrhenius grafiğinden değeri 20.05 kJ mol^{-1} bulunmuştur. Bunların yanı sıra kopolimerin uygun işlemlere tabi tutulduğunda tekrar kullanılabilir olduğu, 6 kullanım sonunda başlangıçtaki katalitik aktivitesinin %80'ini koruduğu ve %100 çevrim oranına sahip olduğu gözlenmiştir.

Anahtar Kelimeler: Hidrojen, katalizör, sodyum bor hidrür, polimer

ISBN : 978-625-6283-10-7

POROZİTENİN TABAKALI KOMPOZİT KİRİŞERİN TİTREŞİM DAVRANIŞINA ETKİSİNİN İNCELENMESİ

Araş. Gör., Yusuf Ziya YÜKSEL
Bursa Teknik Üniversitesi, - 0000-0002-2615-1590
Prof. Dr., Şeref Doğuşcan AKBAŞ
Bursa Teknik Üniversitesi, - 0000-0001-5327-3406

ÖZET

Bu çalışmada, tabakalı kompozit kirişlerin porozite etkisine bağlı serbest titreşim frekansları incelenmiştir. Fiber ile güçlendirilmiş 3 tabakadan oluşan kirişin, her bir tabakasında üniform porozite dağılımı göz önüne alınarak, farklı porozite oranlarına bağlı olarak doğal frekansları araştırılmıştır. Sınır şartları olarak, basit mesnetli kirişler incelenmiştir. Ele alınan problemin hareket denklemlerinde, enerji yöntemi kullanılarak, Langrange denkleminden elde edilmiştir. Bu denklemlerin çözümünde Ritz Yöntemi kullanılmıştır. Sınır koşullarına bağlı olarak bilinmeyen fonksiyonunda polinomlar kullanılmıştır. Çalışmada, farklı fiber doğrultuları, farklı tabaka dizilimleri ile farklı porozite oranlarının farklı modlardaki frekanslara etkisi incelenmiştir.

Anahtar Kelimeler: Porozite, Tabakalı Kompozitler, Kiriş, Serbest Titreşim.

ISBN : 978-625-6283-10-7

STATIC ANALYSIS OF A TWO-LAYERED SEMI-INFINITE MEDIUM WITH POROSITY

Research Assistant, Yusuf Ziya YÜKSEL
Bursa Technical University, - 0000-0002-2615-1590
Prof. Dr., Şeref Doğuşcan AKBAŞ
Bursa Technical University, - 0000-0001-5327-3406

ABSTRACT

In this study, effects of different porosity distributions on static displacements in an elastic, isotropic semi-infinite 2-layer semi-infinite medium are investigated. The semi- infinite medium is modeled with finite and infinite elements. Rectangular finite elements with 16 nodes and infinite elements with 8 nodes produced to solve the finite-infinite medium problem. The shape functions of infinite elements calculated separately for each direction. The region close to the load effect modeled with infinite elements, and the region far away from the load effect modeled with infinite elements. The finite-infinite element problem solved by the five-node Gauss Legendre integration method. A parametric study carried out on a semi-infinite medium with 2 layers, depending on different materials and porosity ratios. Numerical results and graphics were obtained with MATLAB.

Keywords: Porosity, Layered Media, Static Analysis, Infinite Elements.

ISBN : 978-625-6283-10-7

HARMONIC LOAD ANALYSIS OF A SEMI-INFINITE POROUS MEDIUM WITH RECTANGULAR CAVITY

Research Assistant, Yusuf Ziya YÜKSEL
Bursa Technical University, - 0000-0002-2615-1590
Prof. Dr., Şeref Doğuşcan AKBAŞ
Bursa Technical University, - 0000-0001-5327-3406

ABSTRACT

In this study, the dynamic analysis of the harmonic load effect in the cavity in a two-dimensional, elastic, isotropic porous semi-infinite medium with different porosity ratios was examined by using finite and infinite elements. The regions close to the surface are modeled with finite elements, and the region far from the surface is modeled with infinite elements. The shape functions of infinite elements are derived using a one-dimensional two-node infinite element and an 8-node finite element with respect to the direction. A finite element with 16 nodes used to solve the problem. Numerical solutions of finite-infinite elements obtained by the Gauss Legendre integration method. Newmark-Beta integration method used to solve the dynamic problem. A point harmonic load applied in the vertical direction through the cavity in the semi-infinite medium. The effects of different porosity ratios on dynamic displacements and accelerations in the time domain depending on different cavity sizes and positions investigated. The finite and infinite element model is coded in MATLAB.

Anahtar Kelimeler: Dynamic Analysis, Semi-Infinite Medium, Porosity, Cavity, Finite-Infinite Elements

ISBN : 978-625-6283-10-7

CONDUCTING POLYMER SUPPORTED METAL NANOPARTICLES FOR ELECTROCATALYTIC PURPOSES

Assoc. Prof. MUTLU SÖNMEZ ÇELEBİ

Ordu University, - 0000-0002-8816-6763

ABSTRACT

In the last few decades, interest in metal nanoparticles has greatly increased due to their roles in many fields such as catalysis, sensors, energy, and electronics. Synthesizing metal nanoparticles on a suitable support material generally result in improvement of the desired properties of the metal. The support materials should have characteristic features such as high surface area, electrical conductivity and corrosion resistance to achieve efficient and highly durable electrode materials for catalytic purposes. There exists a great variety of supports as carbon materials and composites utilizing special structures such as graphene or carbon nanotubes as well as non-carbon materials like silica and titanium. Conducting polymers, on the other hand, constitute a special class of support materials for metal nanoparticles due to their unique characteristics such as high specific area, stability and compatibility, and tolerance to poisoning during many catalytic reactions. These polymers serve as an excellent matrix for a number of metal nanoparticles ranging from platinum and palladium to silver and gold.

Herein, we describe preparation of conducting polymer supported metal nanoparticles immobilized on various electrode materials such as platinum, glassy carbon electrode and pencil graphite electrode. The prepared modified electrode systems were efficiently used for catalytic reactions such as electrocatalytic oxidation of methanol and ethanol. Also, electrochemical biosensor studies are mentioned in the study for application to hydrogen peroxide detection. The prepared modified electrode systems were characterized by electrochemical methods such as cyclic voltammetry and electrochemical impedance spectroscopy. Physical characterization of the electrodes was also done by recording scanning electron microscopy images and energy dispersive x-ray spectra.

Keywords : Conducting Polymer, Metal Nanoparticle, Electrocatalysis

ISBN : 978-625-6283-10-7

BIOMECHANICAL ANALYSIS AND IMPLANT DESIGN FOR TREATING METATARSAL FRACTURES

Researcher Dilan DEMIR

Kocaeli University, - 0000-0001-7413-1597

Assoc. Prof. Dr. Talip ÇELİK

Kocaeli University, - 0000-0003-0033-2454

Assoc. Prof. Dr. Hamid ASADI DERESHGI

Istanbul Arel University, - 0000-0002-8500-6625

ABSTRACT

Metatarsal fractures result from trauma such as sudden pressure, accidents, or sports injuries, affecting the bones of the forefoot. Fractures of the fifth metatarsal result from foot inversion, impacting the metatarsal bone around the little toe. This prevalent bone fracture often requires an extended healing period despite undergoing various treatment methods. In cases where bone fractures exhibit delayed healing, surgical intervention is considered as a treatment approach. Surgical interventions often involve fixation methods using screws and plates for stabilization of fractures. The healing process of the fracture involves an initial phase of up to 8 weeks with restricted weight-bearing, followed by a complete recovery period that may extend up to 6 months. However, fractures and failure of bone union can also result from material fatigue in these methods. The purpose of this study is to analyze the biomechanics of commonly used screws and plates in fifth metatarsal fractures and propose a novel product design for enhanced strength. Bone fractures are typically stabilized using screws and plates made from materials such as titanium and steel. These durable materials, while effective for stability, can also cause pain and tissue damage under pressure in small bones. Therefore, it is crucial to enhance implant design and develop designs that are specifically tailored to bone anatomy. It is important to design screws and plates that are anatomically compatible with bone structure to prevent tissue damage. The utilization of a proposed novel design made from biodegradable polymer material is important because it can dissolve in the body after bone healing has occurred. Implants composed of biodegradable materials circumvent the need for a subsequent surgery to extract plates and screws from the body, presenting a significant advantage. In this study, finite element analysis will be used to compare treatment methods and highlight the advantages of the proposed design. There exists a clear benefit in shortening the healing time of bone fractures, as this facilitates a prompt return to social activities and expedites the overall treatment process. In conclusion, it is anticipated that this study will advance the optimization of implant designs.

Keywords: Biomechanics, metatarsal fractures, implant designs, biodegradable materials

ISBN : 978-625-6283-10-7

ON THE PERFORMANCE OF DIFFERENT DATA AUGMENTATION SCHEMES FOR WIRELESS CAPSULE IMAGE CLASSIFICATION BASED ON THE EFFICIENTNET DEEP LEARNING PARADIGM

Assoc. Prof. Dr. Muzaffer KANAAN

Erciyes University, ORCID ID: 0000-0003-4510-8392

Mohamed AL-SHAIKH

Erciyes University, ORCID ID: 0000-0001-9581-1284

ABSTRACT

Wireless Capsule Endoscopy (WCE) provides a non-invasive method for visualizing the gastrointestinal (GI) tract, revolutionizing how GI diseases are diagnosed and treated. However, the scarcity of annotated medical data presents a challenge for training effective machine-learning models for Clinical Decision Support (CDS) systems. To address this issue, we investigate the impact of various data augmentation techniques on the performance of EfficientNet-based deep learning models for WCE image classification. Utilizing the diverse Kvasir V2 dataset, with eight classes of GI tract images, we compare four data augmentation scenarios: comprehensive augmentation, no augmentation, selective augmentation, and modified augmentation with adjusted parameters. Our results reveal a nuanced relationship between data augmentation and model performance. While data augmentation is generally beneficial, excessive augmentation can lead to overfitting and reduced generalization. Surprisingly, the absence of augmentation or the application of selective/modified augmentation strategies resulted in better performance compared to comprehensive augmentation in certain cases. This emphasizes the importance of tailoring data augmentation, carefully considering the specific dataset and task at hand. The findings of this study offer valuable insights for the development of accurate and reliable CDS systems for GI disease diagnosis. By optimizing data augmentation techniques, we can overcome data limitations and enhance the efficiency of deep learning models in WCE image analysis.

Keywords: Wireless Capsule Endoscopy, Image Classification, Data Augmentation, Classification, Deep Learning, EfficientNet, Gastrointestinal tract, Kvasir dataset

ISBN : 978-625-6283-10-7

ASANSÖRLERDE KULLANILABİLECEK ALAŞIM ASANSÖR FREN TASARIMI

MELTEM KÜBRA YILDIRIM
Sivas Cumhuriyet Üniversitesi,
- ORCID ID **0009-0002-9732-7853**

Prof.Dr. İBRAHİM CAN
Sivas Cumhuriyet Üniversitesi, - ORCID ID **0000-0003-4774-3744**

ÖZET

Günümüzde insanların büyük çoğunluğu şehirlerde çok katlı binalarda yaşamaktadır. İnsanları ve eşyaları bir kattan diğer kata taşımak için asansörler kullanmaktadır. Asansörler genellikle çekiş kablolarını veya vinç gibi karşı ağırlık sistemlerini tahrik eden elektrik motorlarıyla çalıştırılır. Yüksek binaların çoğalmasıyla asansör hızları ve taşıma kapasiteleri artarken, yerel ve ulusal otoriteler üretim ve işletme standartlarını arttırmaktadır. Asansörler insan veya yük taşımada kullanıldığından, taşıyıcı halatların kırılması sonucu olarak can ve maddi hasara neden olmaktadır. Sürekli değişen ve gelişen teknolojik şartların, emniyet ekipmanlarına duyulan ihtiyacı arttırdığı açıktır. Değişen teknolojik şartların yanında, aynı zamanda sosyal şartların da değişmesiyle beraber asansörlerde güvenliği arttırılmış emniyet ekipmanlarına olan ihtiyaç daha da artmaktadır. Bu nedenle önerilen sistem asansöre özel olarak tasarlanmıştır. Bu sistem, çekiş halatlarının kopması durumunda devreye girerek asansörün düşmesini durdurur. Önerilen yüksek hızlı asansörlerde kullanılabilecek kayma etkili mekanik fren sistemi, kabini herhangi bir düşme anında mevcut konumunda kilitleyerek durdurulmasını amaçlamaktadır. Kilitleme işlemi sistem elemanlarından çanak ve tırtıl arasında gerçekleştirmektedir. Normalde çanak 1040 imalat çeliğinden ve tırtıl ise 4140 malzemelerinden üretilmektedir. Birlikte çalışan karşıt parçaların her ikisinin de çelikten yapılmış olması, freninin çalışma esnasında tırtılın tahrip olmasına ve düşme anında frenleme yapıldığında yük ve sıcaklığın kırılmasına neden olabilir. Bu durumun önlenmesi için sık bakım ve parça değişimi gerekli olduğundan kullanım maliyetini arttırmaktadır. Önerilen çalışmada çanak pirinç malzemeden üretilmiş ve yapılan testlerde frenleme performansında düşme olmazken tırtılın ömrünün uzadığı tespit edilmiştir. Elde edilen sonuçlar doğrultusunda geliştirilen modelin standartlara uygun olduğu gözlemlenmiş, performans ve ömür açısından iyileştirmeler sağlandığı belirlenmiştir.

Anahtar Kelimeler: Asansör, Asansör Fren, Kayma Etkili Mekanik Fren

ISBN : 978-625-6283-10-7

ALLOY ELEVATOR BRAKE DESIGN THAT CAN BE USED IN ELEVATORS

ABSTRAC

Nowadays, the majority of people live in multi-story buildings in cities. Elevators are used to move people and goods from one floor to another. Elevators are generally powered by electric motors that drive traction cables or counterweight systems such as winches. While elevator speeds and carrying capacities increase with the proliferation of high-rise buildings, local and national authorities have increased production and operating standards. Since elevators are used to carry people or cargo, they cause loss of life and material damage as a result of the breakage of the carrier ropes. It is clear that constantly changing and developing technological conditions increase the need for safety equipment. In addition to changing technological conditions, as well as changing social conditions, the need for increased safety equipment in elevators is increasing. Therefore, the proposed system is designed specifically for elevators. This system is activated in case the traction ropes break and stops the elevator from falling. The mechanical brake system with sliding effect, which can be used in the proposed high-speed elevators, aims to stop the cabin in case of any fall by locking it in its current position. The locking process is carried out between the system elements, the bowl and the caterpillar. Typically, the cup is made of 1040 steel, and the worm is made of 4140 material. The fact that both of the opposing parts working together are made of steel may cause the caterpillar to be destroyed during the operation of the elevator and to breakage due to the effect of load and temperature when braking at the moment of falling. Frequent maintenance and parts replacement are required to prevent this situation, which increases the cost of use. In the proposed study, the bowl was made of brass material and in the tests performed, it was determined that the life of the caterpillar was extended while there was no decrease in braking performance. In line with the results obtained, it was observed that the developed model complies with the standards and it was determined that improvements in performance and life were achieved.

Keywords: Elevator, Elevator Brake, Mechanical Brake with Sliding Effect

ISBN : 978-625-6283-10-7

KEY PARAMETERS TO OPTIMIZE THE THERMAL CONDUCTIVITY OF GRAPHENE BASED NANOFLUID

Dr. Fatma OFLAZ, Firat University, Automotive Engineering

ORCID NO: 0000-0002-9636-5746

ABSTRACT

Graphene's exceptional thermal conductivity, stemming from its single-atom-thick carbon layers, enables it to enhance heat transfer at the nanoscale when mixed with nanofluids. Researchers have extensively studied how various factors, like dispersion quality, graphene concentration, base fluid properties, temperature, and specific application needs, affect the thermal conductivity of graphene-based nanofluids. Further investigation is necessary to fine-tune these parameters and fully exploit the potential of graphene-based nanofluids for real-world applications. This study aims to delve deeply into how each parameter influences thermal conductivity and its overall performance in nanofluids. Achieving a uniform dispersion of graphene nanoparticles can boost thermal conductivity, but too high concentrations or poor dispersion quality may not yield desired results. Other factors, such as the viscosity, pH, and chemical properties of the base fluid, also impact thermal conductivity. Moreover, temperature variations can affect thermal conductivity, making it a crucial parameter to consider. Ultimately, this research will play a vital role in enhancing our understanding and optimizing the thermal conductivity of graphene-based nanofluids, thereby advancing their use in thermal management, heat transfer, and industrial applications.

Keywords

Graphene, nanofluids, thermal conductivity, performance comparison

ISBN : 978-625-6283-10-7

COMPARATIVE INVESTIGATION OF THE VISCOSITY OF GRAPHENE AND ITS DERIVATIVES NANOFLUIDS

Dr. Fatma OFLAZ, Firat University, Automotive Engineering

ORCID NO: 0000-0002-9636-5746

Abstract

Graphene nanofluids are known to have many advantages over conventional fluids, such as high heat conduction, mechanical durability, chemical resistance and electrical conductivity. With these superior properties, graphene nanofluids create potential for many application areas, from cooling systems to thermal management of electronic devices. The viscosity of graphene and its derivatives nanofluids is of great importance for the potential applications of nanofluids. The viscosity of graphene nanofluids varies depending on the chemical composition, concentration, structural properties, temperature and solvent. As the concentration of nanoparticles in the nanofluid increases, the interactions between particles also increase, leading to an increase in viscosity. This phenomenon can result in higher pressure drops in flow channels and require more pump power, which may limit the efficiency and practicality of using nanofluids in certain applications. In the literature, numerous studies have been encountered regarding the enhancement of heat transfer and thermal conductivity by graphene nanofluids. However, due to the challenges in measurement and modeling, fewer studies have been observed on viscosity. In this study, the viscosity of graphene nanofluids and its derivatives has been comprehensively discussed, and models used for predicting nanofluid viscosity have been examined comparatively.

Keywords

Graphene nanofluids, dynamic viscosity, nanofluids, rheological properties

ISBN : 978-625-6283-10-7

TÜBERKÜLOZ SEREBROVASKÜLER HASTALIK VE HİPERTANSİYONU OLAN HASTANIN KOLCABA KONFOR KURAMINA GÖRE HEMŞİRELİK BAKIMI: OLGU SUNUMU

NURSING CARE OF A PATIENT WITH TUBERCULOUS SEREVASCULAR DISEASE AND HYPERTENSION ACCORDING TO KOLCABA COMFORT THEORY: A CASE REPORT

Seda YAĞMUR[1]

Cumhuriyet Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Esasları Anabilim Dalı

CumhuriyetUniversity, Faculty of HealthSciences, Department of Nursing Fundamentals

ORCID: 0009-0008-6360-0712

Şerife KARAGÖZOĞLU[2]

Prof. Dr. Cumhuriyet Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Esasları Anabilim Dalı

Prof. Dr.,CumhuriyetUniversity, Faculty of HealthSciences, Department of Nursing Fundamentals

ORCID:0000-0002-9558-0786

Fatma TOK YILDIZ[3]

Dr. Öğr. Üyesi, Cumhuriyet Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu

Dr. Lecturer, CumhuriyetUniversity, Vocational School of Health Services

ORCID: 0000-0001-7543-2076

ÖZET

GİRİŞ:

Tüberküloz, Mycobacterium tuberculosis bakterisinden kaynaklanır ve genellikle akciğerleri etkiler. DSÖ'ye göre, tüberküloz dünya genelinde önemli bir sağlık problemi ve ölüm nedenidir. Tüberküloz enfekte kişilerin öksürmesi, hapşırması veya tükürüğündeki bakterilerin havaya yayılması ile bulaşır. Enfekte olmak için sadece birkaç TB basili solumak yeterlidir. Serebrovasküler hastalık, hemorajik ve iskemik inme olarak sınıflandırılır. İskemik inme, serebral arterlerde tıkanıklık veya daralma sonucu oluşurken, hemorajik inme, arter yırtılması nedeniyle meydana gelir. Her iki durum da ciddi sonuçlara yol açabilir ve doğru tedavi gerektirir. Hipertansiyon, kan basıncının yüksek olmasıdır ve inme riskini artırır. Kan

ISBN : 978-625-6283-10-7

basıncının düzenlenmesi önemlidir ve erken tanı, etkili tedavinin anahtarıdır. Bu bağlamda kronik hastalıklarla mücadele önemli olup, bütüncül bir yaklaşımla bireylerin yaşam konforunu artırmaya temellenir.

Hemşirelikte önemli bir yere sahip olan konfor kavramı, farklı teorisyenler tarafından incelenmiş ve Katharine Kolcaba tarafından 1990'da bir hemşirelik kuramı olarak tanımlanmıştır. Kolcaba, konforu bireyin ihtiyaçlarını karşılama, huzur sağlama ve sorunlarla başa çıkma sürecinde karmaşık bir sonuç olarak açıklamış ve Genel Konfor Ölçeği'ni geliştirmiştir. Bu kuram, üç düzey ve dört boyuttan oluşmaktadır. Hemşirelik bakımında bu kuramın uygulanması, bireyin ihtiyaçlarına odaklanarak veri toplanması ve karşılanamayan gereksinimlere yönelik hemşirelik girişimlerinin planlanması ve uygulanmasıyla bütüncül bir bakım sağlamayı amaçlar. Bu çalışmada, tüberküloz, serebrovasküler hastalık ve hipertansiyonu olan yaşlı bir erkek hastanın sorunları ile mücadelede hemşirelik bakım planı Konfor Kuramına temellendirilmiş ve hastanın yaşam kalitesini artırmak amaçlanmıştır.

OLGU SUNUMU: 80 yaşındaki A.D., nefes almada zorlanma ve öksürük şikayetleriyle hastaneye başvurmuş ve Tüberküloz tanısı konularak göğüs hastalıkları servisine yatışı yapılmıştır. Güçsüzlük, denge kaybı, baş dönmesi, bulantı ve kusma belirtileri nedeniyle anestezi ve reanimasyon servisine devri yapılan hastada sol serebellar hemisferde iskemi saptanmış ve serebrovasküler hastalık tanısı konulmuştur. Yapılan muayene sonuçlarında Hipertansiyon regülasyonu için kardiyoloji servisine devri yapılan hasta kardiyoloji servisinde yatmaktadır. Toplanan veriler Kolcaba Konfor Kuramına göre değerlendirilmiş ve hemşirelik problemleri saptanarak Kuram doğrultusunda bakım planı ve hemşirelik girişimleri uygulanmıştır.

SONUÇ: Kolcaba'nın Konfor Kuramı doğrultusunda uygulanan hemşirelik bakımı hastanın gereksinimlerinin karşılanmasında etkili bulunmuş, bu doğrultuda bütüncül bakım verebilmek için Kolcaba'nın Konfor Kuramına dayalı hemşirelik bakım uygulamalarının arttırılması önerilmiştir.

ANAHTAR KELİMELER: Tüberküloz, Serebrovasküler Hastalık, Kolcaba Konfor Kuramı, Hemşirelik, Hemşirelik Bakımı

ABSTRACT

INTRODUCTION: Tuberculosis, It is caused by the bacterium Mycobacterium tuberculosis and usually affects the lungs. According to the WHO, Tuberculosis is a major health problem and cause of death worldwide. Tuberculosis is transmitted when infected people cough, sneeze or spit bacteria into the air. You only need to inhale a few TB bacilli to become infected. Cerebrovascular disease is classified into haemorrhagic and ischaemic stroke. Ischaemic stroke occurs as a result of occlusion or narrowing of the cerebral arteries, while haemorrhagic stroke occurs due to rupture of the artery. Both conditions can lead to serious consequences and require correct treatment. Hypertension is high blood pressure and increases the risk of stroke. Blood pressure regulation is important and early diagnosis is the key to effective treatment. In this context, the fight against chronic diseases is important and is based on increasing the comfort of life of individuals with a holistic approach.

ISBN : 978-625-6283-10-7

The concept of comfort, which has an important place in nursing, has been examined by different theorists and was defined as a nursing theory by Katharine Kolcaba in 1990. Kolcaba, explained comfort as a complex result in the process of meeting an individual's needs, providing peace of mind and coping with problems, and developed the General Comfort Scale. This is the theory, it consists of three levels and four dimensions. Application of this theory in nursing care, it aims to provide holistic care by focusing on the needs of the individual, collecting data and planning and implementing nursing interventions for unmet needs. In this study, tuberculosis, cerebrovascular disease and with hypertension in the struggle with the problems of an elderly male patient, the nursing care plan was based on the Comfort Theory and it was aimed to improve the patient's quality of life.

CASE REPORT: A 80-year-old male patient, A.D., difficulty breathing and he was admitted to hospital with complaints of coughing and Tuberculosis was diagnosed and she was hospitalised in the chest diseases ward. Powerlessness, loss of balance, vertigo, transferred to anaesthesia and reanimation service due to nausea and vomiting symptoms, ischemia was detected in the left cerebellar hemisphere and a diagnosis of cerebrovascular disease was made. The results of the examination, the patient who was transferred to the cardiology service for regulation of hypertension is hospitalised in the cardiology service. The collected data were evaluated according to Kolcaba Comfort Theory and nursing problems were determined and care plan and nursing interventions were applied in accordance with the theory.

RESULT: Nursing care applied in line with Kolcaba's Comfort Theory was found to be effective in meeting the needs of the patient, in this direction, it was recommended to increase nursing care practices based on Kolcaba's Comfort Theory in order to provide holistic care.

KEYWORDS: Tuberculosis, Cerebrovascular Disease, Kolcaba Comfort Theory, Nursing, Nursing Care

ISBN : 978-625-6283-10-7

KOAH VE KRONİK BÖBREK YETMEZLİĞİ TANILARINA SAHİP KONJETİNAL KALP YETMEZLİĞİ OLAN BİREYİN MYRA ESTRİN LEVİN KORUMA MODELİNE GÖRE HEMŞİRELİK BAKIMI: OLGU SUNUMU

Sema YILDIZ[1]

Cumhuriyet Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Esasları Anabilim Dalı

ORCID:0009-0008-4707-6594

Prof. Dr. Şerife KARAGÖZOĞLU[2]

Cumhuriyet Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Esasları Anabilim Dalı

ORCID:0000-0002-9558-0786

Fatma TOK YILDIZ[3]

Cumhuriyet Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu, Tıbbi Hizmetler Ve Teknikler, Anestezi

ORCID:0000-0001-7543-2076

ÖZET

Giriş

Kronik hastalığı bulunan kişilerin bedensel sıkıntıları onların gündelik yaşam aktivitelerini, yaşam biçimlerini, toplumsal kimliklerini ve benlik imgelerini değiştirebilmektedir. Bu tür hastalıklar bireylerin büyük finansal, psikolojik ve toplumsal, iletişimsel ve varoluşsal problemlerle karşı karşıya kalmalarına yol açmakta; akademik başarıda düşüşe, aile ve çevreden gelen sosyal desteğin azalmasına, sosyal uyum problemlerine, benlik saygısında düşüşe, iş bulma güçlüklerine, evlilik hayatının bozulmasına neden olabilmektedir. Bununla beraber kuram ve modeller hemşirelere bakım verdiği bireylerin sağlığını değerlendirme, bakım sürecinde elde ettiği birçok veriyi organize etme, analiz etme ve bu bilgileri kanıta dayalı açıklama olanağı sağlarlar. Kronik hastalığı olan bireylere verilen bakımda kuram ve modellerin kullanımı, bireye özgü bakımda farklılık yaratmakla beraber; hemşirelik bakımının sistematize edilmesine, birey ve ailesine bütüncül bakım verilmesine ve yaşam kalitelerinin arttırılmasına olanak sağlamaktadır.

Hemşirelik kuramlarına dayandırılmış bakım modelleri; bakım yönetimi sürecinin sürdürülmesine rehberlik ederken hemşirenin analitik düşünme becerisi geliştirmesine, amaç belirleme ve geliştirme yeteneği kazanmasına katkı sağlamaktadır. Bakım modellerinden Levine Koruma Modeli (KM); uyumu destekleyerek koruma ilkelerini kullanmayı ve bireyin bütünlüğünü sağlamayı amaçlamaktadır. Modelde hemşire enerjinin, yapının, bireysel ve sosyal bütünlüğün korunması yoluyla hedeflerine ulaşmaktadır. Aynı zamanda tepkiler üzerine odaklanmaktadır. Hemşirelik kuramları, hemşireliğe ait kavramları tanımlama, açıklama ve

ISBN : 978-625-6283-10-7

öngörme yoluyla hemşirelik uygulamalarına temel oluşturur, hemşirelik uygulamalarını destekleyen ilkeler sunar ve yaşam kalitesini yükseltir.

Olgu Sunumu

Özgeçmişinde 11 yıldır KOAH ve 3 yıldır kronik böbrek yetmezliği tanılarına sahip olan 61 yaşındaki erkek hasta B.K., aralıklı olarak göğsünde ağrı, sıkışma ve dispne şikayetleriyle devlet hastanesinde kardiyoloji servisine başvurmuş, hastaya yapılan tetkikler sonucunda atriyal septal defekt ve kardiyomegali (14 cm) tanısı konulmuştur. Toplanan veriler Myra Estrin Levine Koruma Modeli'ne göre değerlendirilmiş ve hemşirelik problemleri saptanarak Kuram doğrultusunda bakım planı ve hemşirelik girişimleri uygulanmıştır.

Sonuç

B.K.'nın hemşirelik bakım sürecinin bu modele dayalı olarak yürütülmesi sistematik bir yaklaşımı sağlamış, problemlerin görünürlüğünü sağlayarak, neden-sonuç ilişkisi doğrultusunda, bütüncül bakımın sunulmasını desteklemiştir. Kronik hastalıklara sahip bir bireyin hemşirelik bakım amaçlarına uygun bir model olan Levine Koruma Modeli bu hastaların bakımında hemşireler tarafından kolaylıkla kullanılabilir ve olumlu sonuçlar gözlemlenebilir. Bu bağlamda bütüncül bakım verebilmek için Levine 'in Koruma Modeline dayalı hemşirelik bakım uygulamalarının arttırılması önerilmiştir.

Anahtar Kelimeler: Konjenital Kalp Yetmezliği, KOAH, Kronik Böbrek Yetmezliği Koruma Modeli, Kuram, Hemşirelik, Hemşirelik Bakımı, Myra Estrin Levine, Koruma Modeli

ABSTRACT

Introduction

The physical distress of people with chronic diseases can change their daily life activities, lifestyles, social identities and self-image. Such illnesses cause individuals to face major financial, psychological, social, communicative and existential problems; they may lead to a decline in academic achievement, a decrease in social support from family and environment, social adjustment problems, a decrease in self-esteem, difficulties in finding a job, and disruption of marital life. However, theories and models provide nurses with the opportunity to evaluate the health of the individuals they care for, to organize and analyze many data obtained during the care process, and to explain this information based on evidence. The use of theories and models in the care given to individuals with chronic diseases makes a difference in individual-specific care; it enables systematization of nursing care, providing holistic care to the individual and his/her family and improving their quality of life.

Care models based on nursing theories guide the continuation of the care management process and contribute to the nurse's development of analytical thinking skills and the ability to set and develop goals. Levine Protection Model (PM), one of the care models, aims to use protection principles and ensure the integrity of the individual by supporting harmony. In the model, the nurse achieves her goals through the protection of energy, structure, individual and social

ISBN : 978-625-6283-10-7

integrity. It also focuses on reactions. Nursing theories form the basis for nursing practices by defining, explaining and predicting the concepts of nursing, provide principles that support nursing practices and improve the quality of life.

Case Report

B.K., a 61-year-old male patient with a history of COPD for 11 years and chronic renal failure for 3 years, was admitted to the cardiology service of a state hospital with complaints of intermittent chest pain, tightness and dyspnea. The patient was diagnosed with atrial septal defect and cardiomegaly (14 cm) as a result of the examinations. The collected data were evaluated according to the Myra Estrin Levine Protection Model and nursing problems were identified and a care plan and nursing interventions were implemented in line with the theory.

Conclusion

Carrying out the nursing care process of B.K. based on this model provided a systematic approach, provided visibility of the problems, and supported the provision of holistic care in line with the cause-effect relationship. The Levine Protection Model, which is a model suitable for the nursing care goals of an individual with chronic diseases, can be easily used by nurses in the care of these patients and positive results can be observed. In this context, it is recommended to increase nursing care practices based on Levine's Protection Model in order to provide holistic care.

Keywords: Congenital Heart Failure, COPD, Chronic Renal Failure Protection Model, Theory, Nursing, Nursing Care, Myra Estrin Levine, Protection Model

ISBN : 978-625-6283-10-7

THE ROLE OF GENETICS IN SKELETAL CLASS III ANOMALIES

PhD Student Dt., DAMLA ÇARDAK[1]

[1]Izmir Katip Celebi University

-https://orcid.org/0000-0002-1479-6703

Asst. Prof. Dr., BERŞAN KARADEDE[2]

[2] Yalova University

https://orcid.org/0000-0001-9500-2188

Orthodontist Dr., RAFAEL ECIJA NAVARRO[3]

[3]Central Military University Hospital "Gomez Ulla"

https://orcid.org/0000-0002-0072-4709

Assoc. Prof. Dr. Dr., Beyza KARADEDE ÜNAL[4]

[4]Izmir Katip Celebi University

https://orcid.org/0000-0002-0035-0444

ÖZET

Ortodontik maloklüzyonlar diş, çene ve yüz sistemindeki büyüme ve gelişim sürecinde mevcut dengenin bozulmasıyla meydana gelmektedir. Maloklüzyon, dünyada popülasyonları etkileyen, ağız fonksiyonlarının bozulmasına, dental travmaya, periodontal hastalığa ve dentofasiyal estetiğin azalmasına neden olan yaygın bir diş ve/veya çene düzensizliğidir. Moss'un Fonksiyonel Matriks Teorisine göre büyüme, kas fonksiyonu ve hava yolu gereksinimleri gibi fonksiyonel ihtiyaçlara cevap olarak gerçekleşmektedir. Kas kompozisyonunu veya kas aktivitesiyle ilgili özellikleri etkileyen genetik varyasyonlar, iskelet konfigürasyonunu da etkileyecektir. Çiğneme kasları ve temporomandibular eklemi etkileyen mekanizmaların ve genlerin tanımlanması iskeletsel varyasyonlar için teşhis ve tedaviye yardımcı olacaktır.

İskeletsel Sınıf 3 anomaliler morfolojik olarak; maksiller yetersizlik, mandibular prognatizm veya her ikisinin kombinasyonu şeklinde olabilir. Bununla birlikte, sefalometrik incelemeler doğrultusunda, yapılan analizde çenelerin birbirleri ve kafa kaidesi ile olan ilişkilerinin normal olduğu fakat üst keserlerin retruze olduğu, alt keserlerin ise protruze olduğu yanlış ya da Sınıf III maloklüzyon olarak sınıflandırılabilirler. İskeletsel Sınıf 3 anomalilerin gelişimine çok çeşitli çevresel faktörler katkıda bulunmasına rağmen genellikle ailesel kümelenme ve kalıtsal eğilim ile genetik önemli bir etiyolojiye sahiptir. Genetik kalıtım ile ilgili yapılan ilk çalışmalar soyağacı araştırmalarına dayanmaktadır. Avrupa'nın soylu ailelerinden biri olan Habsburg ailesine ait soy ağacı incelendiğinde dokuz nesil boyunca kayıtlarına ulaşılabilen 40 bireyden 33'ünde mandibular prognati görülmüştür. Yapılan diğer Sınıf 3 fenotipli ailelerin genetik analizleri ile beraber poligenik kalıtım hipotezi desteklenmiştir. Literatürde yer alan çeşitli

ISBN : 978-625-6283-10-7

çalışmalarda EPB41, MATN1, SSX2IP, PLXNA2, COL2A1, MYO1H, TGFB3, LTBP2, DUSP6, HOX3, ERLEC1, FGF ailesi ve IGF1 genlerinin iskeletsel sınıf 3 anomalilerle ilişkili olduğu tespit edilmiştir. İlgili genler ve kromozom bölgelerinin daha iyi belirlenebilmesi amacıyla güncel çalışmalar devam etmektedir.

Bu çalışmada tüm yönleriyle iskeletsel sınıf 3 anomalilerde genetiğin rolü incelenecektir.

Anahtar kelimeler: Genetik, Anomaliler, Maloklüzyon

ABSTRACT

Orthodontic malocclusions occur when the existing balance in the growth and development process of the teeth, jaw and facial system is disrupted. Malocclusion is a common tooth and/or jaw irregularity that affects populations around the world, causing impaired oral function, dental trauma, periodontal disease and decreased dentofacial aesthetics. According to Moss's Functional Matrix Theory, growth occurs in response to functional needs such as muscle function and airway requirements. Genetic variations that affect muscle composition or traits related to muscle activity will also affect skeletal configuration. Identification of the mechanisms and genes affecting the masticatory muscles and temporomandibular joint will aid in the diagnosis and treatment of skeletal variations.

Skeletal Class 3 anomalies are morphologically; It may be in the form of maxillary insufficiency, mandibular prognathism, or a combination of both. However, in line with cephalometric examinations, the analysis shows that the relations of the jaws with each other and with the skull base are normal, but the upper incisors are retruded and the lower incisors are protruded, which can be classified as false or Class III malocclusion. Although a wide variety of environmental factors contribute to the development of skeletal Class 3 anomalies, genetics generally have an important etiology with familial clustering and hereditary predisposition. The first studies on genetic inheritance were based on pedigree research. When the family tree of the Habsburg family, one of the noble families of Europe, was examined, mandibular prognathia was observed in 33 of the 40 individuals whose records were available for nine generations. The polygenic inheritance hypothesis was supported by genetic analyzes of other Class 3 phenotype families. Various studies in the literature have found that EPB41, MATN1, SSX2IP, PLXNA2, COL2A1, MYO1H, TGFB3, LTBP2, DUSP6, HOX3, ERLEC1, FGF family and IGF1 genes are associated with skeletal class 3 anomalies. Current studies continue to better identify relevant genes and chromosome regions.

In this study, the role of genetics in all aspects of skeletal class 3 anomalies will be examined.

Key words: Genetics, Anomalies, Malocclusion

ISBN : 978-625-6283-10-7

İYİ ANTRENE TÜRK KADIN HALTER SPORCULARINDA FARKLI AĞIRLIK YÜKLENMELİ SABİT KOPARMA VE SİLKME HALTER ANTRENMANLARININ KALP HIZI VE PUPİL ÇAPI DEĞİŞİMLERİ ÜZERİNE ETKİLERİNİN İNCELENMESİ

Doç. Dr. Bülent IŞIK

Karamanoğlu Mehmetbey Üniversitesi Tıp Fakültesi, Fizyoloji Departmanı Karaman/Türkiye, - https://orcid.org/0000-0001-8753-8302

Doç. Dr. Kenan ERDAĞI

Necmettin Erbakan Üniversitesi, Ahmet Keleşoğlu Eğitim Fakültesi, Beden Eğitimi ve Spor Bölümü, Konya, Türkiye, - https://orcid.org/0000-0002-2338-6546

Dr. Öğr. Üyesi Usame Ömer OSMANOĞLU

Karamanoğlu Mehmetbey Üniversitesi Tıp Fakültesi, Biyoistatistik Departmanı Karaman/Türkiye, Karaman/Turkey, - http://orcid.org/0000-0002-1198-2447

Dr. Öğr. Üyesi Derviş DAŞDELEN

Karamanoğlu Mehmetbey Üniversitesi Tıp Fakültesi, Fizyoloji Departmanı Karaman/Türkiye, r - http://orcid.org/0000-0002-2378-8780

ÖZET

Amaç: Bu araştırmanın amacı, iyi antrene Türk kadın halter sporcularında % 75 ve % 100 maksimum ağırlık yüklenmeli sabit koparma ve sabit silkme teknikleriyle yapılan brim halter antrenmanlarının oluşturduğu kalp hızı ve pupil çapı değişimlerini incelemektir.

Gereç ve Yöntem: Araştırmaya, iyi antrene 20 kadın halter sporcusu dâhil edildi. Haltercilere % 75 ve % 100 maksimum ağırlık yüklenmeli antrenmanlar farklı günlerde 90 dakika olarak uygulandı. Antrenmanların dinlenme, sabit koparma, sabit silkme ve soğuma evrelerinde kalp atım hızı (KH) ve pupil çapı (PÇ) değişkenleri ölçüldü. Veriler SPSS programında Shapiro Wilk normalite testi, Friedman'ın iki yönlü varyans ve Sperman korelasyon analizleriyle değerlendirildi. $p < 0.05$ değeri anlamlı olarak kabul edildi.

Bulgular: % 75 ve % 100 maksimum ağırlık yüklenmeli antrenman gruplarında KH ve PÇ değişkenleri en az bir ölçüm zamanında diğer ölçüm zamanlarından anlamlı düzeyde farklıydı ($p < 0.001$). KH ve Ortalama PÇ (OPÇ) değişkenleri gruplarda power koparma antrenmanı evresinde, dinlenme ve soğuma evrelerinden anlamlı düzeyde yüksekti ($p < 0.001$, sırasıyla). Ayrıca, % 75 ve % 100 ağırlık yüklenmeli antrenman grubunda sabit silkme evresi OPÇ ile KH değerleri arasında orta düzeyde pozitif ilişki olduğu gösterildi ($r=0.32$, $r=0.31$, sırasıyla).

Sonuç: İyi antrene Türk kadın halter sporcularında farklı maksimum ağırlık yüklenmeyle uygulanan olimpik stil power koparma ve silkme halter antrenmanlarının kalp hızı ve pupil çapını olağan düzeylerde etkilediği kabul edilebilir. Ayrıca, sonuçlar literatürde bir referans değer olabilir.

ISBN : 978-625-6283-10-7

Anahtar Kelimeler: İyi antrene kadın halter sporcusu**,** Olimpik stil halter antrenmanı, Kalp hızı, pupil çapı

Investigation of the Effects of Power Snatch and Clean &Jerk Weightlifting Trainings with Different Weight Loads on Heart Rate and Pupil Diameter Changes in Well-Trained Turkish Female Weightlifting Athletes

ABSTRACT

Aim: The aim of this research is to examine the heart rate and pupil diameter changes caused by weightlifting trainings performed with power snatch and power clean & jerk techniques with 75% and 100% maximum weight load in well-trained Turkish female weightlifters.

Materials and Methods: 20 well-trained female weightlifters were included in the study. Trainings with 75% and 100% maximum weight loads were applied to weightlifters for 90 minutes on different days. Pulse (HR) and pupil diameter (PD) variables were measured during the rest, power snatch, clean & jerk and cool-down phases of the training. The data were evaluated using the Shapiro Wilk normality test, Friedman's two-way variance and Sperman correlation analysis in the SPSS program. $p < 0.05$ was considered significant.

Results: Variables of HR and MPD were significantly different in at least one measurement time from the other measurement times in the 75% and 100% maximum weight-loading training groups ($p \leq 0.001$). In the power snatch phase, the HR and MPD variables were different from the rest and cool-down phases in both training groups ($p < 0.001$, respectively). Additionally, it was shown that there was a moderate positive relationship between power jerk phase MPD and HR values in the 75% and 100% weight-loading training groups ($r=0.32$, $r=0.31$, respectively).

Conclusion: It can be accepted that Olympic style power snatch and clean & jerk weightlifting training performed with different maximum weight loads affects heart rate and pupil diameter at usual levels in well-trained Turkish female weightlifters. Additionally, the results can serve as a reference value in the literature.

Key Words: Well-trained female weightlifter, Olympic style weightlifting training, Heart rate, pupil diameter

ISBN : 978-625-6283-10-7

12-14 YAŞ GRUBUNDAKİ ADÖLESANLARDA DÜZENLİ SPOR YAPMANIN KAS KUVVETİ VE BAZI MOTORİK BECERİLER ÜZERİNE ETKİLERİNİN İNCELENMESİ

Uzm. Ayşe Nur MORBEL KAYNAK

Ankara, Türkiye, - https://orcid.org/0000-0001-5102-4967

Doç. Dr. Kenan ERDAĞI

Necmettin Erbakan Üniversitesi, Ahmet Keleşoğlu Eğitim Fakültesi, Beden Eğitimi ve Spor Bölümü, Konya, Türkiye, - https://orcid.org/0000-0002-2338-6546

Doç. Dr. Bülent IŞIK

Karamanoğlu Mehmetbey Üniversitesi Tıp Fakültesi, Fizyoloji Departmanı Karaman/Türkiye, - https://orcid.org/0000-0001-8753-8302

ÖZET

Amaç: Mevcut araştırma ile 12-14 yaş grubundaki kadın ve erkek adölesanlarda düzenli spor yapmanın el kavarama kuvveti, kas kuvveti ve bazı motorik beceriler üzerine etkilerinin incelenmesi amaçlanmıştır.

Materyal ve Metot: Mevcut araştırma, 2022-2023 eğitim öğretim döneminde Konya ilinde öğrenim gören ve en az iki yıldır düzenli spor yapan 12-14 yaş grubundaki kadın ve erkek 60 sporcu (farklı branşlardan) ile 60 sedanter adölesan öğrenci üzerinde gerçekleştirildi. Araştırma ile katılımcıların el dinamometresi ile kas kuvvetleri ölçüldü ve mekik, şınav, yatay sıçrama ve 20 metre sürat koşusunu kapsayan motorik beceri ölçümleri gerçekleştirildi. İstatistiksel analizler için SPSS 25.0 paket programı kullanıldı. Grup içi karşılaştırmalarda 'paired sample t test', gruplar arası karşılaştırmalarda ise 'Independent sample t test' kullanılmıştır. Sonuçlar aritmetik ortalama ± standart hata olarak verilmiştir. Anlamlılık düzeyi $p < 0.05$ kabul edildi.

Bulgular: Araştırma sonuçlarına göre, sol el kavrama kuvveti kadın sporcularda kadın sedanterlerden daha yüksek bulunurken, sağ diz fleksiyon ve ekstansiyon kuvveti erkek sporcularda erkek sedanterlerden daha yüksek bulundu ($p= 0.020$, $p=0.017$, sırasıyla). Mekik, şınav ve Yatay sıçrama ölçüm parametreleri erkek sporcularda erkek sedanterlerden daha yüksek bulundu (verilen sırayla, $p=0.003$, $p < 0.001$, $p < 0.001$).

Sonuç: 12-14 yaş grubu adölesanlarda düzenli sportif aktivitenin belirli kas kuvveti parametreleri ve bazı motorik becerileri olumlu etkilediği söylenebilir. Bu etkilenme erkek cinsiyette daha belirgin olabilir.

Anahtar kelimeler: Adölesanlar, Düzenli sportif aktivite, Kas kuvveti, Motorik beceriler

Not: Bu çalışma Ayşe Nur MORBEL KAYNAK'ın Necmettin Erbakan Üniversitesi Eğitim Bilimleri Enstitüsü'nde yapılmış olan "Spor Yapan ve Yapmayan 12-14 Yaş Grubu

ISBN : 978-625-6283-10-7

Öğrencilerde Bazı Antropometrik Ve Motorik Özelliklerin Araştırılması" başlıklı Yüksek Lisans Tez çalışmasının verilerinden uyarlanmıştır.

Investigation of the Effects of Regular Exercise on Muscle Strength and Some Motoric Skills in Adolescents in the 12-14 Age Group

ABSTARCT

Aim: The current study aimed to examine the effects of regular sports on hand grip strength, muscle strength and some motor skills in male and female adolescents aged 12-14.

Materials and Methods: This study was conducted on 60 female and male athletes (from different branches), who had been doing regular sports for at least two years and 60 sedentary adolescent students in the 12-14 age group, who were studying in Konya in the 2022-2023 academic year. In the study, participants' hand grip and muscle strength were measured with hand dynamometers and motor skills were measured including sit-ups, push-ups, horizontal jumps and 20-meter sprints. SPSS 25.0 package program was used for statistical analysis. 'paired sample t test' was used for intra-group comparisons and 'independent sample t test' was used for inter-group comparisons. Results are given as arithmetic mean ± standard error. The significance level was accepted as $p < 0.05$.

Results: According to the research results, while left hand grip strength was found to be higher in female athletes than in female sedentaries, right knee flexion and extension strength was found to be higher in male athletes than in male sedentaries ($p = 0.020$, $p = 0.017$, respectively). Sit-up, push-up and horizontal jump measurement parameters were found to be higher in male athletes than in male sedentaries ($p = 0.003$, $p < 0.001$, $p < 0.001$, in the given order).

Conclusion: It can be said that regular sports activity positively affects certain muscle strength parameters and some motor skills in adolescents aged 12-14. This effect may be more pronounced in the male gender.

Key words: Adolescents, Regular sports activity, Muscle strength, Motor skills

Note: This study was adapted from the data of Ayşe Nur MORBEL KAYNAK's Master's Thesis titled " Investigation of some Anthropometric and Motoric Features in 12-14 Age Group Students Who Do And Not Do Sports" conducted at Necmettin Erbakan University, Institute of Educational Sciences.

ISBN : 978-625-6283-10-7

OPTIMAL CONTROL STRATEGIES FOR SPEED CONTROL OF PERMANENT-MAGNET SYNCHRONOUS MOTOR DRIVES

Roozbeh Molavi, Davood A. Khaburi

Abstract:

The permanent magnet synchronous motor (PMSM) is very useful in many applications. Vector control of PMSM is popular kind of its control. In this paper, at first an optimal vector control for PMSM is designed and then results are compared with conventional vector control. Then, it is assumed that the measurements are noisy and linear quadratic Gaussian (LQG) methodology is used to filter the noises. The results of noisy optimal vector control and filtered optimal vector control are compared to each other. Nonlinearity of PMSM and existence of inverter in its control circuit caused that the system is nonlinear and time-variant. With deriving average model, the system is changed to nonlinear time-invariant and then the nonlinear system is converted to linear system by linearization of model around average values. This model is used to optimize vector control then two optimal vector controls are compared to each other. Simulation results show that the performance and robustness to noise of the control system has been highly improved.
Keywords: Kalman filter, Linear quadratic Gaussian (LQG), Linear quadratic regulator (LQR), Permanent-Magnet synchronousmotor (PMSM).

ISBN : 978-625-6283-10-7

NSGA BASED OPTIMAL VOLT / VAR CONTROL IN DISTRIBUTION SYSTEM WITH DISPERSED GENERATION

P. N. Hrisheekesha, Jaydev Sharma

Department of Electrical Engineering, Manipal Institute of Technology,Manipal-576104, Karnataka, India

Abstract:

In this paper, a method based on Non-Dominated Sorting Genetic Algorithm (NSGA) has been presented for the Volt / Var control in power distribution systems with dispersed generation (DG). Genetic algorithm approach is used due to its broad applicability, ease of use and high accuracy. The proposed method is better suited for volt/var control problems. A multi-objective optimization problem has been formulated for the volt/var control of the distribution system. The non-dominated sorting genetic algorithm based method proposed in this paper, alleviates the problem of tuning the weighting factors required in solving the multi-objective volt/var control optimization problems. Based on the simulation studies carried out on the distribution system, the proposed scheme has been found to be simple, accurate and easy to apply to solve the multiobjective volt/var control optimization problem of the distribution system with dispersed generation.
Keywords: Dispersed Generation, Distribution System, Non-Dominated Sorting Genetic Algorithm, Voltage / Reactive powercontrol.

ISBN : 978-625-6283-10-7

SIGNATURE RECOGNITION USING CONJUGATE GRADIENT NEURAL NETWORKS

Jamal Fathi Abu Hasna

Near East University, Electrical & Electronics Engineering Department, North Cyprus,

Abstract:

There are two common methodologies to verify signatures: the functional approach and the parametric approach. This paper presents a new approach for dynamic handwritten signature verification (HSV) using the Neural Network with verification by the Conjugate Gradient Neural Network (NN). It is yet another avenue in the approach to HSV that is found to produce excellent results when compared with other methods of dynamic. Experimental results show the system is insensitive to the order of base-classifiers and gets a high verification ratio.

Keywords: Signature Verification, MATLAB Software, Conjugate Gradient, Segmentation, Skilled Forgery, and Genuine.

ISBN : 978-625-6283-10-7

SPECTRAL ENTROPY EMPLOYMENT IN SPEECH ENHANCEMENT BASED ON WAVELET PACKET

Talbi Mourad, Salhi Lotfi, Chérif Adnen

Signal Processing Laboratory - Science Faculty of Tunis, 1060 Tunis, Tunisia

Abstract:

In this work, we are interested in developing a speech denoising tool by using a discrete wavelet packet transform (DWPT). This speech denoising tool will be employed for applications of recognition, coding and synthesis. For noise reduction, instead of applying the classical thresholding technique, some wavelet packet nodes are set to zero and the others are thresholded. To estimate the non stationary noise level, we employ the spectral entropy. A comparison of our proposed technique to classical denoising methods based on thresholding and spectral subtraction is made in order to evaluate our approach. The experimental implementation uses speech signals corrupted by two sorts of noise, white and Volvo noises. The obtained results from listening tests show that our proposed technique is better than spectral subtraction. The obtained results from SNR computation show the superiority of our technique when compared to the classical thresholding method using the modified hard thresholding function based on u-law algorithm.

Keywords: Enhancement, spectral subtraction, SNR, discrete wavelet packet transform, spectral entropy Histogram

ISBN : 978-625-6283-10-7

STUDY AND ENHANCEMENT OF FLASH EVAPORATION DESALINATION UTILIZING THE OCEAN THERMOCLINE AND DISCHARGED HEAT

Sami Mutair, Yasuyuki Ikegami

Institute of Ocean Energy, Saga University, Saga city, Japan

Abstract:

This paper reports on the results of experimental investigations of flash evaporation from superheated jet issues vertically upward from a round straight nozzle of 81.3 mm diameter. For the investigated range of jet superheat degree and velocity, it was shown that flash evaporation enhances with initial temperature increase. Due to the increase of jet inertia and subsequently the delay of jet shattering, increase of jet velocity was found to result in increase of evaporation "delay period". An empirical equation predicts the jet evaporation completion height was developed, this equation is thought to be useful in designing the flash evaporation chamber. In attempts for enhancement of flash evaporation, use of steel wire mesh located at short distance downstream was found effective with no consequent pressure drop.
Keywords: Enhancement; Flash Evaporation; OTEC; superheated jet

ISBN : 978-625-6283-10-7

INTRODUCING AN IMAGE PROCESSING BASE IDEA FOR OUTDOOR CHILDREN CARING

Hooman Jafarabadi

Electrical Engineering Department, University of Arak Islamic Azad, Member of young Researchers Club of Arak Islamic Azad University

Abstract:

In this paper application of artificial intelligence for baby and children caring is studied. Then a new idea for injury prevention and safety announcement is presented by using digital image processing. The paper presents the structure of the proposed system. The system determines the possibility of the dangers for children and babies in yards, gardens and swimming pools or etc. In the presented idea, multi camera System is used and receiver videos are processed to find the hazardous areas then the entrance of children and babies in the determined hazardous areas are analyzed. In this condition the system does the programmed action capture, produce alarm or tone or send message.
Keywords: Baby and children Care and Nursing, Intelligent Control Systems for Nursing, Electronic Care and Nursing, Dangers and safety for children and babies, Motion detection, Expert danger alarm systems.

ISBN : 978-625-6283-10-7

DEVICE DISCOVER: A COMPONENT FOR NETWORK MANAGEMENT SYSTEM USING SIMPLE NETWORK MANAGEMENT PROTOCOL

Garima Gupta, Daya Gupta

Maharaja Agrasen Institute of Technology, Delhi as a lecturer. She is also a final year student of M.E., Delhi College of Engineering, India.

Abstract:

Virtually all existing networked system management tools use a Manager/Agent paradigm. That is, distributed agents are deployed on managed devices to collect local information and report it back to some management unit. Even those that use standard protocols such as SNMP fall into this model. Using standard protocol has the advantage of interoperability among devices from different vendors. However, it may not be able to provide customized information that is of interest to satisfy specific management needs. In this dissertation work, different approaches are used to collect information regarding the devices attached to a Local Area Network. An SNMP aware application is being developed that will manage the discovery procedure and will be used as data collector.

Keywords: ICMP Scanner, Network Discovery, NetworkManagement, SNMP Scanner.

ISBN : 978-625-6283-10-7

A REVIEW ON APPLICATION OF CHITOSAN AS A NATURAL ANTIMICROBIAL

F. Nejati Hafdani, N. Sadeghinia

Young Researchers Club of Islamic Azad University- Ardestan Branch, Iran.

Abstract:

In recent years application of natural antimicrobials instead of conventional ones, due to their hazardous effects on health, has got serious attentions. On the basis of the results of different studies, chitosan, a natural bio-degradable and non-toxic biopolysaccharide derived from chitin, has potential to be used as a natural antimicrobial. Chitosan has exhibited high antimicrobial activity against a wide variety of pathogenic and spoilage microorganisms, including fungi, and Gram-positive and Gramnegative bacteria. The antimicrobial action is influenced by intrinsic factors such as the type of chitosan, the degree of chitosan polymerization and extrinsic factors such as the microbial organism, the environmental conditions and presence of the other components. The use of chitosan in food systems should be based on sufficient knowledge of the complex mechanisms of its antimicrobial mode of action. In this article we review a number of studies on the investigation of chitosan antimicrobial properties and application of them in culture and food mediums.

Keywords: Antimicrobial, Chitosan, Preservative

ISBN : 978-625-6283-10-7

NEUROGENIC POTENTIAL OF CLITORIA TERNATEA AQUEOUS ROOT EXTRACT–A BASIS FOR ENHANCING LEARNING AND MEMORY

Kiranmai S.Rai

Corresponding author is with Kasturba Medical College, Manipal University, Manipal, INDIA

Abstract:

The neurogenic potential of many herbal extracts used in Indian medicine is hitherto unknown. Extracts derived from Clitoria ternatea Linn have been used in Indian Ayurvedic system of medicine as an ingredient of “Medhya rasayana", consumed for improving memory and longevity in humans and also in treatment of various neurological disorders. Our earlier experimental studies with oral intubation of Clitoria ternatea aqueous root extract (CTR) had shown significant enhancement of learning and memory in postnatal and young adult Wistar rats. The present study was designed to elucidate the in vitro effects of 200ng/ml of CTR on proliferation, differentiation and growth of anterior subventricular zone neural stem cells (aSVZ NSC-s) derived from prenatal and postnatal rat pups. Results show significant increase in proliferation and growth of neurospheres and increase in the yield of differentiated neurons of aSVZ neural precursor cells (aSVZNPC-s) at 7 days in vitro when treated with 200ng/ml of CTR as compared to age matched control. Results indicate that CTR has growth promoting neurogenic effect on aSVZ neural stem cells and their survival similar to neurotrophic factors like Survivin, Neuregulin 1, FGF-2, BDNF possibly the basis for enhanced learning and memory.

Keywords: Anterior subventricular zone (aSVZ) neural stemcell, Clitoria ternatea, Learning and memory, Neurogenesis.

ISBN : 978-625-6283-10-7

FORMULATION AND EVALUATION OF VAGINAL SUPPOSITORIES CONTAINING LACTOBACILLUS

Sanae Kaewnopparat, Nattha Kaewnopparat

Faculty of Pharmaceutical Sciences,Prince of Songkla University, Songkla, 90110 Thailand

Abstract:

The objective of this study was to develop vaginal suppository containing lactobacillus. Four kinds of vaginal suppositories containing Lactobacillus paracasei HL32 were formulated: 1) a conventional suppository with Witepsol H-15 as a base, 2) a conventional suppository with mixed polyethylene glycols (PEGs) as a base, 3) a hollow-type suppository with Witepsol H-15 as a base and 4) a hollow-type suppository with mixed PEGs as a base. The release studies demonstrated that the hollow-type suppository with mixed PEGs as the base gave the highest release of L. paracasei HL32 and was microbiological stable after storage at 2- 8°C over the period of 3 months.

Keywords: Lactobacillus paracasei HL32, vaginal suppository, release study, hollow-type, viability.

ISBN : 978-625-6283-10-7

DATA MINING CLASSIFICATION METHODS APPLIED IN DRUG DESIGN

Mária Stachová, Lukáš Sobíšek

Departmentof Statistics and Probability, Faculty of Informatics and Statistics, University of Economics, Prague Czech Republic

Abstract:

Data mining incorporates a group of statistical methods used to analyze a set of information, or a data set. It operates with models and algorithms, which are powerful tools with the great potential. They can help people to understand the patterns in certain chunk of information so it is obvious that the data mining tools have a wide area of applications. For example in the theoretical chemistry data mining tools can be used to predict moleculeproperties or improve computer-assisted drug design. Classification analysis is one of the major data mining methodologies. The aim of thecontribution is to create a classification model, which would be able to deal with a huge data set with high accuracy. For this purpose logistic regression, Bayesian logistic regression and random forest models were built using R software. TheBayesian logistic regression in Latent GOLD software was created as well. These classification methods belong to supervised learning methods. It was necessary to reduce data matrix dimension before construct models and thus the factor analysis (FA) was used. Those models were applied to predict the biological activity of molecules, potential new drug candidates.

Keywords: data mining, classification, drug design, QSAR

ISBN : 978-625-6283-10-7

SALBUTAMOL SULPHATE-ETHYLCELLULOSE TABLETTED MICROCAPSULES: PHARMACOKINETIC STUDY USING CONVOLUTION APPROACH

Ghulam Murtaza, Kalsoom Farzana

Department of Pharmaceutical Sciences, COMSATS Institute of Information Technology, Pakistan

Abstract:

The aim of this article is to narrate the utility of novel simulation approach i.e. convolution method to predict blood concentration of drug utilizing dissolution data of salbutamol sulphate microparticulate formulations with different release patterns (1:1, 1:2 and 1:3, drug:polymer). Dissolution apparatus II USP 2007 and 900 ml double distilled water stirrd at 50 rpm was employed for dissolution analysis. From dissolution data, blood drug concentration was determined, and in return predicted blood drug concentration data was used to calculate the pharmacokinetic parameters i.e. Cmax, Tmax, and AUC. Convolution is a good biwaiver technique; however its better utility needs it application in the conditions where biorelevant dissolution media are used.

Keywords: Convolution, Dissolution, Pharmacokinetics, Salbutamol sulphate

ISBN : 978-625-6283-10-7

NTIBACTERIAL ACTIVITY OF ETHANOL EXTRACT FROM SOME THAI MEDICINAL PLANTS AGAINST CAMPYLOBACTER JEJUNI

Achara Dholvitayakhun, Nathanon Trachoo

Faculty of Science and Agricultural Technology, Rajamangala University of Technology Lanna Tak Thailand.

Abstract:

In this study, the forty Thai medicinal plants were used to screen the antibacterial activity against Campylobacter jejuni. Crude 95% ethanolic extracts of each plant were prepared. Antibacterial activity was investigated by the disc diffusion assay, and MICs and MBCs were determined by broth microdilution. The results of antibacterial screening showed that five plants have activity against C.jejuni including Adenanthera pavonina L., Moringa oleifera Lam., Annona squamosa L., Hibiscus sabdariffa L. and Eupotorium odortum L. The extraction of A. pavonina L. and A. squamosa L. produced an outstanding against C. jejuni, inhibiting growth at 62.5-125 and 250-500 μg/mL, respectively. The MBCs of two extracts were just 4-fold higher than MICs against C. jejuni, suggesting the extracts are bactericidal against this species. These results indicate that A. pavonina and A. squamosa could potentially be used in modern applications aimed at treatment or prevention of foodborne disease from C. jejuni.

Keywords: Antibacterial activity, Thai medicinal plants, Campylobacter jejuni

ISBN : 978-625-6283-10-7

COLOR IMAGE EDGE DETECTİON THROUGH PSEUDO-COMPLEMENT AND MATRİX OPERATİONS

T. N. Mouli , Janakiraman Chandra

Federal University of Recôncavo da Bahia- Brazil

Abstract:

A color image edge detection algorithm is proposed in this paper using Pseudo-complement and matrix rotation operations. First, pseudo-complement method is applied on the image for each channel. Then, matrix operations are applied on the output image of the first stage. Dominant pixels are obtained by image differencing between the pseudo-complement image and the matrix operated image. Median filtering is carried out to smoothen the image thereby removing the isolated pixels. Finally, the dominant or core pixels occurring in at least two channels are selected. On plotting the selected edge pixels, the final edge map of the given color image is obtained. The algorithm is also tested in HSV and YCbCr color spaces. Experimental results on both synthetic and real world images show that the accuracy of the proposed method is comparable to other color edge detectors. All the proposed procedures can be applied to any image domain and runs in polynomial time.

Keywords: Color edge detection, dominant pixels, matrixrotation/shift operations, pseudo-complement.

ISBN : 978-625-6283-10-7

A NUMBER THEORETIC TRANSFORM APPROACH TO PUBLIC KEY CRYPTOSYSTEMS

Arumuganathan R. Porkodi

University of Hasanuddin- Indonesia

Abstract:

In this paper a Public Key Cryptosystem is proposed using the number theoretic transforms (NTT) over a ring of integer modulo a composite number. The key agreement is similar to ElGamal public key algorithm. The security of the system is based on solution of multivariate linear congruence equations and discrete logarithm problem. In the proposed cryptosystem only fixed numbers of multiplications are carried out (constant complexity) and hence the encryption and decryption can be done easily. At the same time, it is very difficult to attack the cryptosystem, since the cipher text is a sequence of integers which are interrelated. The system provides authentication also. Using Mathematica version 5.0 the proposed algorithm is justified with a numerical example.

Keywords: Cryptography, decryption, discrete logarithm problem encryption, Integer Factorization problem

ISBN : 978-625-6283-10-7

EXPLORING A NOVEL CRITERION FOR CONFLICT IN BIFUZZY SETS THROUGH INTUITIONISTIC EVALUATION

Imran Syibrah, Mohd Lazim

Capital University of Science & Technology- Pakistan

Abstract:

Fuzzy sets theory affirmed that the linguistic value for every contraries relation is complementary. It was stressed in the intuitionistic fuzzy sets (IFS) that the conditions for contraries relations, which are the fuzzy values, cannot be greater than one. However, complementary in two contradict phenomena are not always true. This paper proposes a new idea condition for conflicting bifuzzy sets by relaxing the condition of intuitionistic fuzzy sets. Here, we will critically forward examples using triangular fuzzy number in formulating a new condition for conflicting bifuzzy sets (CBFS). Evaluation of positive and negative in conflicting phenomena were calculated concurrently by relaxing the condition in IFS. The hypothetical illustration showed the applicability of the new condition in CBFS for solving non-complement contraries intuitionistic evaluation. This approach can be applied to any decision making where conflicting is very much exist.

Keywords: Conflicting bifuzzy set, conflicting degree, fuzzy sets, fuzzy numbers.

ISBN : 978-625-6283-10-7

HOW ANTS ORGANIZE TRAFFIC FLOW: INSIGHTS FROM EXCLUSION PROCESS ANALYSIS

Ali Benmohamed , Mohamed Lemouari

College of Banking and Financial Studies- Oman

Abstract:

Biological evolution has generated a rich variety of successful solutions; from nature, optimized strategies can be inspired. One interesting example is the ant colonies, which are able to exhibit a collective intelligence, still that their dynamic is simple. The emergence of different patterns depends on the pheromone trail, leaved by the foragers. It serves as positive feedback mechanism for sharing information. In this paper, we use the dynamic of TASEP as a model of interaction at a low level of the collective environment in the ant-s traffic flow. This work consists of modifying the movement rules of particles “ants" belonging to the TASEP model, so that it adopts with the natural movement of ants. Therefore, as to respect the constraints of having no more than one particle per a given site, and in order to avoid collision within a bidirectional circulation, we suggested two strategies: decease strategy and waiting strategy. As a third work stage, this is devoted to the study of these two proposed strategies- stability. As a final work stage, we applied the first strategy to the whole environment, in order to get to the emergence of traffic flow, which is a way of learning.

Keywords: Ants system, emergence, exclusion process, pheromone.

ISBN : 978-625-6283-10-7

STUDY ON THE VİABİLİTY OF EMBEDDED REAL-TİME SYSTEMS

Yong Xia, JIN

Changsusan University- North Korea

Abstract:

Introducing survivability into embedded real-time system (ERTS) can improve the survivability power of the system. This paper mainly discusses about the survivability of ERTS. The first is the survivability origin of ERTS. The second is survivability analysis. According to the definition of survivability based on survivability specification and division of the entire survivability analysis process for ERTS, a survivability analysis profile is presented. The quantitative analysis model of this profile is emphasized and illuminated in detail, the quantifying analysis of system was showed helpful to evaluate system survivability more accurate. The third is platform design of survivability analysis. In terms of the profile, the analysis process is encapsulated and assembled into one platform, on which quantification, standardization and simplification of survivability analysis are all achieved. The fourth is survivability design. According to character of ERTS, strengthened design method is selected to realize system survivability design. Through the analysis of embedded mobile video-on-demand system, intrusion tolerant technology is introduced in whole survivability design.

Keywords: ERTS (embedded real-time system), survivability, quantitative analysis, survivability specification, intrusion tolerant

ISBN : 978-625-6283-10-7

EXPLORING COMPUTATIONAL GEOMETRY THROUGH TWO SPATIAL EXPERIMENTS

Marco lee Hemmerling

University of Da Nang- Vietnam

Abstract:

The paper outlines the relevance of computational geometry within the design and production process of architecture. Based on two case studies, the digital chain - from the initial formfinding to the final realization of spatial concepts - is discussed in relation to geometric principles. The association with the fascinating complexity that can be found in nature and its underlying geometry was the starting point for both projects presented in the paper. The translation of abstract geometric principles into a three-dimensional digital design model – realized in Rhinoceros – was followed by a process of transformation and optimization of the initial shape that integrated aesthetic, spatial and structural qualities as well as aspects of material properties and conditions of production.

Keywords: Architecture, Computer Aided Architectural Design, 3D-Modeling, Rapid Prototyping, CAD/CAM.

ISBN : 978-625-6283-10-7

ENHANCING LIPASE CATALYTIC PROPERTIES VIA IMMOBILIZATION IN HYBRID MATRICES

Cevinka Zarcula, Roberto Croitoru, Lee Corîci, Csunderlik Peter

Bahrain Institute of Banking and Finance- Bahrain

Abstract:

Lipases are enzymes particularly amenable for immobilization by entrapment methods, as they can work equally well in aqueous or non-conventional media and long-time stability of enzyme activity and enantioselectivity is needed to elaborate more efficient bioprocesses. The improvement of Pseudomonas fluorescens (Amano AK) lipase characteristics was investigated by optimizing the immobilization procedure in hybrid organic-inorganic matrices using ionic liquids as additives. Ionic liquids containing a more hydrophobic alkyl group in the cationic moiety are beneficial for the activity of immobilized lipase. Silanes with alkyl- or aryl nonhydrolizable groups used as precursors in combination with tetramethoxysilane could generate composites with higher enantioselectivity compared to the native enzyme in acylation reactions of secondary alcohols. The optimal effect on both activity and enantioselectivity was achieved for the composite made from octyltrimethoxysilane and tetramethoxysilane at 1:1 molar ratio (60% increase of total activity following immobilization and enantiomeric ratio of 30). Ionic liquids also demonstrated valuable properties as reaction media for the studied reactions, comparable with the usual organic solvent, hexane.

Keywords: Ionic liquids, lipase, enantioselectivity, sol-gelimmobilization

ISBN : 978-625-6283-10-7

SIMULATING STRESS-TRIGGERED REGULATORY CASCADES USING ARTIFICIAL NEURAL NETWORKS

Emee. Manioudaki, Panayiota Poiri

Andijan State University- Uzbekistan

Abstract:

Yeast cells live in a constantly changing environment that requires the continuous adaptation of their genomic program in order to sustain their homeostasis, survive and proliferate. Due to the advancement of high throughput technologies, there is currently a large amount of data such as gene expression, gene deletion and protein-protein interactions for S. Cerevisiae under various environmental conditions. Mining these datasets requires efficient computational methods capable of integrating different types of data, identifying inter-relations between different components and inferring functional groups or 'modules' that shape intracellular processes. This study uses computational methods to delineate some of the mechanisms used by yeast cells to respond to environmental changes. The GRAM algorithm is first used to integrate gene expression data and ChIP-chip data in order to find modules of coexpressed and co-regulated genes as well as the transcription factors (TFs) that regulate these modules. Since transcription factors are themselves transcriptionally regulated, a three-layer regulatory cascade consisting of the TF-regulators, the TFs and the regulated modules is subsequently considered. This three-layer cascade is then modeled quantitatively using artificial neural networks (ANNs) where the input layer corresponds to the expression of the up-stream transcription factors (TF-regulators) and the output layer corresponds to the expression of genes within each module. This work shows that (a) the expression of at least 33 genes over time and for different stress conditions is well predicted by the expression of the top layer transcription factors, including cases in which the effect of up-stream regulators is shifted in time and (b) identifies at least 6 novel regulatory interactions that were not previously associated with stress-induced changes in gene expression. These findings suggest that the combination of gene expression and protein-DNA interaction data with artificial neural networks can successfully model biological pathways and capture quantitative dependencies between distant regulators and downstream genes.

Keywords: gene modules, artificial neural networks, yeast, stress

ISBN : 978-625-6283-10-7

THE IMPACT OF METHIONINE AND ACETATE LEVELS ON MYCOPHENOLIC ACID SYNTHESIS IN PENICILLIUM BERVICOMPACTUM MUCL 19011 UNDER SUBMERGED CONDITIONS

Ardestani Fatemi, Bahman Yakhchali, Manial Hosseyni, Gaffar Najafpour

American University in the Emirates- United Arab Emirates

Abstract:

Mycophenolic acid “MPA" is a secondary metabolite of Penicillium bervicompactum with antibiotic and immunosuppressive properties. In this study, fermentation process was established for production of mycophenolic acid by Penicillium bervicompactum MUCL 19011 in shake flask. The maximum MPA production, product yield and productivity were 1.379 g/L, 18.6 mg/g glucose and 4.9 mg/L.h respectively. Glucose consumption, biomass and MPA production profiles were investigated during fermentation time. It was found that MPA production starts approximately after 180 hours and reaches to a maximum at 280 h. In the next step, the effects of methionine and acetate concentrations on MPA production were evaluated. Maximum MPA production, product yield and productivity (1.763 g/L, 23.8 mg/g glucose and 6.30 mg/L. h respectively) were obtained with using 2.5 g/L methionine in culture medium. Further addition of methionine had not more positive effect on MPA production. Finally, results showed that the addition of acetate to the culture medium had not any observable effect on MPA production.

Keywords: Penicillium bervicompactum, Methionine, Mycophenolic acid, Submerged culture

ISBN : 978-625-6283-10-7

HYDRODESULPHURIZATION KINETICS IN DIESEL: EXPLORING MASS TRANSFER DYNAMICS

Kenari Ganguly

Al-Nasser University - Yemen

Abstract:

In order to meet environmental norms, Indian fuel policy aims at producing ultra low sulphur diesel (ULSD) in near future. A catalyst for meeting such requirements has been developed and kinetics of this catalytic process is being looked into. In the present investigations, effect of mass transfer on kinetics of ultra deep hydrodesulphurization (UDHDS) to produce ULSD has been studied to determine intrinsic kinetics over a pre-sulphided catalyst. Experiments have been carried out in a continuous flow micro reactor operated in the temperature range of 330 to 3600C, whsv of 1 hr-1 at a pressure of 35 bar, and its parameters estimated. Based on the derived rate expression and estimated parameters optimum operation range has been determined for this UDHDS catalyst to obtain ULSD product.

Keywords: Diesel, hydrodesulphurization, kinetics, mass transfer.

ISBN : 978-625-6283-10-7

UTİLİZİNG ACTİVATED CARBONS FOR ADSORPTİVE ELİMİNATİON OF TOXİC SULFUR COMPOUND VAPORS

Meenenda Goyal, Rashnam Dhawan

Rajiv Gandhi University of Science and Technology- Guyana

Abstract:

Adsorption of CS2 vapors has been studied on different types of activated carbons obtained from different source raw materials. The activated carbons have different surface areas and are associated with varying amounts of the carbon-oxygen surface groups. The adsorption of CS2 vapors is not directly related to surface area, but is considerably influenced by the presence of carbonoxygen surface groups. The adsorption decreases on increasing the amount of carbon-oxygen surface groups on oxidation and increases when these surface groups are eliminated on degassing. The adsorption is maximum in case of the 950°-degassed carbon sample which is almost completely free of any associated oxygen. The kinetic data as analysed by Empirical diffusion model and Linear driving force mass transfer model indicate that the adsorption does not involve Fickian diffusion but may be considered as a pseudo first order mass transfer process. The activation energy of adsorption and isosteric enthalpies of adsorption indicate that the adsorption does not involve interaction between CS2 and carbon-oxygen surface groups, but hydrophobic interactions between CS2 and C-C atoms in the carbon lattice.

Keywords: Adsorption, surface groups, adsorption kinetics, isosteric enthalpy of adsorption.

ISBN : 978-625-6283-10-7

OXYGEN GAS EXPOSURE EFFECTS ON SULPHONİC ACİD-DOPED POLYANİLİNE: SYNTHESİS AND FLUORESCENCE SPECTROSCOPY

S.F.S. Draman, R. Daik, A. Musa

University of Las Tunas - Cuba

Abstract:

Three sulphonic acid-doped polyanilines were synthesized through chemical oxidation at low temperature (0-5 oC) and potential of these polymers as sensing agent for O2 gas detection in terms of fluorescence quenching was studied. Sulphuric acid, dodecylbenzene sulphonic acid (DBSA) and camphor sulphonic acid (CSA) were used as doping agents. All polymers obtained were dark green powder. Polymers obtained were characterized by Fourier transform infrared spectroscopy, ultraviolet-visible absorption spectroscopy, thermogravimetry analysis, elemental analysis, differential scanning calorimeter and gel permeation chromatography. Characterizations carried out showed that polymers were successfully synthesized with mass recovery for sulphuric aciddoped polyaniline (SPAN), DBSA-doped polyaniline (DBSA-doped PANI) and CSA-doped polyaniline (CSA-doped PANI) of 71.40%, 75.00% and 39.96%, respectively. Doping level of SPAN, DBSAdoped PANI and CSA-doped PANI were 32.86%, 33.13% and 53.96%, respectively as determined based on elemental analysis. Sensing test was carried out on polymer sample in the form of solution and film by using fluorescence spectrophotometer. Samples of polymer solution and polymer film showed positive response towards O2 exposure. All polymer solutions and films were fully regenerated by using N2 gas within 1 hour period. Photostability study showed that all samples of polymer solutions and films were stable towards light when continuously exposed to xenon lamp for 9 hours. The relative standard deviation (RSD) values for SPAN solution, DBSA-doped PANI solution and CSA-doped PANI solution for repeatability were 0.23%, 0.64% and 0.76%, respectively. Meanwhile RSD values for reproducibility were 2.36%, 6.98% and 1.27%, respectively. Results for SPAN film, DBSAdoped PANI film and CSA-doped PANI film showed the same pattern with RSD values for repeatability of 0.52%, 4.05% and 0.90%, respectively. Meanwhile RSD values for reproducibility were 2.91%, 10.05% and 7.42%, respectively. The study on effect of the flow rate on response time was carried out using 3 different rates which were 0.25 mL/s, 1.00 mL/s and 2.00 mL/s. Results obtained showed that the higher the flow rate, the shorter the response time.

Keywords: conjugated polymer, doping, fluorescence quenching, oxygen gas.

ISBN : 978-625-6283-10-7

UTILIZATION OF FERRIC SULFIDE AND IRON POWDER FOR DIELDRIN CHEMICAL DECOMPOSITION

Junko Konar, Takeshi Kawabe Komai, Chihiro Inoune

Universidad Tecnológica Metropolitana- Chile

Abstract:

The chemical degradation of dieldrin in ferric sulfide and iron powder aqueous suspension was investigated in laboratory batch type experiments. To identify the reaction mechanism, reduced copper was used as reductant. More than 90% of dieldrin was degraded using both reaction systems after 29 days. Initial degradation rate of the pesticide using ferric sulfide was superior to that using iron powder. The reaction schemes were completely dissimilar even though the ferric ion plays an important role in both reaction systems. In the case of metallic iron powder, dieldrin undergoes partial dechlorination. This reaction proceeded by reductive hydrodechlorination with the generation of H+, which arise by oxidation of ferric iron. This reductive reaction was accelerated by reductant but mono-dechlorination intermediates were accumulated. On the other hand, oxidative degradation was observed in the reaction with ferric sulfide, and the stable chemical structure of dieldrin was decomposed into water-soluble intermediates. These reaction intermediates have no chemical structure of drin class. This dehalogenation reaction assumes to occur via the adsorbed hydroxyl radial generated on the surface of ferric sulfide.

Keywords: Dieldrin, kinetics, pesticide residue, soil remediation

ISBN : 978-625-6283-10-7

AN AGENT-BASED APPROACH TO KNOWLEDGE MANAGEMENT AND E-LEARNING

Teodora Bakardjieva, Galya Gercheva

Varna Free University, Bulgaria

Abstract:

In this paper an open agent-based modular framework for personalized and adaptive curriculum generation in e-learning environment is proposed. Agent-based approaches offer several potential advantages over alternative approaches. Agent-based systems exhibit high levels of flexibility and robustness in dynamic or unpredictable environments by virtue of their intrinsic autonomy. The presented framework enables integration of different types of expert agents, various kinds of learning objects and user modeling techniques. It creates possibilities for adaptive e-learning process. The KM e-learning system is in a process of implementation in Varna Free University and will be used for supporting the educational process at the University.

Keywords: agents, e-Learning, knowledge management, knowledge sharing, artificial intelligence

ISBN : 978-625-6283-10-7

DOCTOR BRAIN DRAIN: CAUSES AND RAMIFICATIONS IN PAKISTAN

Muhammad Wajid Tahir, Rubina Kauser, Majid Ali Tahir

University of Gujrat, Pakistan

Abstract:

Pakistani doctors (MBBS) are emigrating towards developed countries for professional adjustments. This study aims to highlight causes and consequences of doctors- brain drain from Pakistan. Primary data was collected from Mayo Hospital, Lahore by interviewing doctors (n=100) through systematic random sampling technique. It found that various socio-economic and political conditions are working as push and pull factors for brain drain of doctors in Pakistan. Majority of doctors (83%) declared poor remunerations and professional infrastructure of health department as push factor of doctors- brain drain. 81% claimed that continuous instability in political situation and threats of terrorism are responsible for emigration of doctors. 84% respondents considered fewer opportunities of further studies responsible for their emigration. Brain drain of doctors is affecting health sector-s policies / programs, standard doctor-patient ratios and quality of health services badly.

Keywords: Brain Drain, Emigration, Remuneration, Politicalinstability, MBBS doctors

ISBN : 978-625-6283-10-7

EVOLVING FROM SEPARATISM TO COALITION: VARIATIONS IN LANGUAGE POLITICS AND LEADERSHIP PATTERNS IN THE DRAVIDIAN MOVEMENT

Subramaniam Chandran

Vinayaka Missions University, Salem, India

Abstract:

This paper describes the evolution of language politics and the part played by political leaders with reference to the Dravidian parties in Tamil Nadu. It explores the interesting evolution from separatism to coalition in sustaining the values of parliamentary democracy and federalism. It seems that the appropriation of language politics is fully ascribed to the DMK leadership under Annadurai and Karunanidhi. For them, the Tamil language is a self-determining power, a terrain of nationhood, and a perennial source of social and political powers. The DMK remains a symbol of Tamil nationalist party playing language politics in the interest of the Tamils. Though electoral alliances largely determine the success, the language politics still has significant space in the politics of Tamil Nadu. Ironically, DMK moves from the periphery to centre for getting national recognition for the Tamils as well as for its own maximization of power. The evolution can be seen in two major phases as: language politics for party building; and language politics for state building with three successive political processes, namely, language politics in the process of separatism, representative politics and coalition. The much pronounced Dravidian Movement is radical enough to democratize the party ideology to survive the spirit of parliamentary democracy. This has secured its own rewards in terms of political power. The political power provides the means to achieve the social and political goal of the political party. Language politics and leadership pattern actualized this trend though the movement is shifted from separatism to coalition.

Keywords: Language politics, cultural nationalism, leadership, social justice

ISBN : 978-625-6283-10-7

A KNOWLEDGE MANAGEMENT MODEL FOR EFFECTIVELY MANAGING KNOWLEDGE AMONG INTERCONNECTED ORGANIZATIONS

Mahboubeh Molaei

National University of Malaysia

Abstract:

Transferring information developed by other peoples is an ordinary event that happens during daily conversations, for example when employees sea each other in the organization, or when they are having lunch together, or attending a meeting, they use to talk about their experience, and discuss about their current projects, and talk about their successes over some specific problems. Despite the potential value of leveraging organizational memory and expertise by using OMS and ER, still small organizations haven-t been able to capitalize on its promised value. Each organization has its internal knowledge management system, in some of organizations the system face the lack of expert people to save their experience in the repository and in another hand on some other organizations there are lots of expert people but the organization doesn-t have the maximum use of their knowledge.

Keywords: Knowledge, knowledge management.

ISBN : 978-625-6283-10-7

USERS' MOTIVATION AND SATISFACTION WITH INFORMATION SYSTEMS

Abbas Moshref Razavi, Rodina Ahmad

University of Malaya

Abstract:

To motivate users to adopt and use information systems effectively, the nature of motivation should be carefully investigated. People are usually motivated within ongoing processes which include a chain of states such as perception, stimulation, motivation, actions and reactions and finally, satisfaction. This study assumes that the relevant motivation processes should be executed in a proper and continuous manner to be able to persistently motivate and re-motivate people in organizational settings and towards information systems. On this basis, the study attempts to propose possible relationships between this process-nature view of motivation in terms of the common chain of states and the nearly unique properties of information systems as is perceived by users in the sense of a knowledgeable and authoritative entity. In the conclusion section, some guidelines for practitioners are suggested to ease their tasks for motivating people to adopt and use information systems.

Keywords: Information Systems, Satisfaction, Motivation

ISBN : 978-625-6283-10-7

THE IMPACTS OF HUMAN ACTIVITY ON THE HEALTH OF STREAM CITY IN YASUJ AREA

Jamalodin Alvani, Fardin Boustani, Omid Tabiee, Masoud Hashemi

Islamic Azad University

Abstract:

The Yasuj city stream named the Beshar supply water for different usages such as aquaculture farms , drinking, agricultural and industrial usages. Fish processing plants ,Agricultural farms, waste water of industrial zones and hospitals waste water which they are generate by human activity produce a considerable volume of effluent and when they are released in to the stream they can effect on the water quality and down stream aquatic systems. This study was conducted to evaluate the effects of outflow effluent from different human activity and point and non point pollution sources on the water quality and health of the Beshar river next to Yasuj. Yasuj is the biggest and most important city in the Kohkiloye and Boyerahmad province . The Beshar River is one of the most important aquatic ecosystems in the upstream of the Karun watershed in south of Iran which is affected by point and non point pollutant sources . This study was done in order to evaluate the effects of human activities on the water quality and health of the Beshar river. This river is approximately 190 km in length and situated at the geographical positions of 51° 20' to 51° 48' E and 30° 18' to 30° 52' N it is one of the most important aquatic ecosystems of Kohkiloye and Boyerahmad province in south-west Iran. In this research project, five study stations were selected to examine water pollution in the Beshar River systems. Human activity is now one of the most important factors affecting on hydrology and water quality of the Beshar river. Humans use large amounts of resources to sustain various standards of living, although measures of sustainability are highly variable depending on how sustainability is defined. The Beshar river ecosystems are particularly sensitive and vulnerable to human activities. The water samples were analyzed, then some important water quality parameters such as pH, dissolve oxygen (DO), Biochemical Oxygen Demand (BOD5), Chemical Oxygen Demand (COD), Total Suspended Solids (TDS),Turbidity, Temperature, Nitrates (NO3) and Phosphates (PO4) were estimated at the two stations. The results show a downward trend in the water quality at the down stream of the city. The amounts of BOD5,COD,TSS,T,Turbidity, NO3 and PO4 in the down stream stations were considerably more than the station 1. By contrast the amounts of DO in the down stream stations were less than to the station 1. However when effluent discharge consequence of human activities are released into the Beshar river near the city, the quality of river are decreases and the environmental problems of the river during the next years are predicted to rise.

Keywords: Health, Human activities, Water pollution, Yasuj , Iran

ISBN : 978-625-6283-10-7

EXTRACTING IMPLICIT KNOWLEDGE TO FORECAST POLITICAL RISK THROUGH A NOVEL FRAMEWORK UTILIZING BAYESIAN NETWORK

Siavash Asadi Ghajarloo

Multimedia University, Malaysia

Abstract:

Nowadays predicting political risk level of country has become a critical issue for investors who intend to achieve accurate information concerning stability of the business environments. Since, most of the times investors are layman and nonprofessional IT personnel; this paper aims to propose a framework named GECR in order to help nonexpert persons to discover political risk stability across time based on the political news and events. To achieve this goal, the Bayesian Networks approach was utilized for 186 political news of Pakistan as sample dataset. Bayesian Networks as an artificial intelligence approach has been employed in presented framework, since this is a powerful technique that can be applied to model uncertain domains. The results showed that our framework along with Bayesian Networks as decision support tool, predicted the political risk level with a high degree of accuracy.

Keywords: Bayesian Networks, Data mining, GECRframework, Predicting political risk.

ISBN : 978-625-6283-10-7

THE ORGANIZATIONAL INNOVATIVENESS OF PUBLIC-LISTED HOUSING DEVELOPMENTS

Nor'Aini Yusof, Ismael Younis Abu-Jarad

Universiti Sains Malaysia

Abstract:

This paper investigated the organizational innovativeness of public listed housing developers in Malaysia. We conceptualized organizational innovativeness as a multi-dimensional construct consisting of 5 dimensions: market innovativeness, product innovativeness, process innovativeness, behavior innovativeness and strategic innovativeness. We carried out questionnaire survey with all accessible public listed developers in Malaysia and received a 56 percent response. We found that the innovativeness of public listed housing developers is low. The paper ends by providing some explanations for the results.

Keywords: innovativeness, housing industry, measurement of innovativeness, public listed housing developers

ISBN : 978-625-6283-10-7

COMPUTER STUDY OF CLUSTER MECHANISM OF ANTI-GREENHOUSE EFFECT

A. Galashev

Institute of Industrial Ecology, Yekaterinburg, GSP-594, Sofia Kovalevskaya Russia

Abstract:

Absorption spectra of infra-red (IR) radiation of the disperse water medium absorbing the most important greenhouse gases: CO2 , N2O , CH4 , C2H2 , C2H6 have been calculated by the molecular dynamics method. Loss of the absorbing ability at the formation of clusters due to a reduction of the number of centers interacting with IR radiation, results in an anti-greenhouse effect. Absorption of O3 molecules by the (H2O)50 cluster is investigated at its interaction with Cl- ions. The splitting of ozone molecule on atoms near to cluster surface was observed. Interaction of water cluster with Cl- ions causes the increase of integrated intensity of emission spectra of IR radiation, and also essential reduction of the similar characteristic of Raman spectrum. Relative integrated intensity of absorption of IR radiation for small water clusters was designed. Dependences of the quantity of weight on altitude for vapor of monomers, clusters, droplets, crystals and mass of all moisture were determined. The anti-greenhouse effect of clusters was defined as the difference of increases of average global temperature of the Earth, caused by absorption of IR radiation by free water molecules forming clusters, and absorption of clusters themselves. The greenhouse effect caused by clusters makes 0.53 K, and the antigreenhouse one is equal to 1.14 K. The increase of concentration of CO2 in the atmosphere does not always correlate with the amplification of greenhouse effect.

Keywords: Greenhouse gases, infrared absorption and Raman spectra, molecular dynamics method, water clusters.

ISBN : 978-625-6283-10-7

THE POTENTIAL USE OF NANOFILTERS TO SUPPLY POTABLE WATER IN PERSIAN GULF AND OMAN SEA WATERSHED BASIN

Sara Zamani, Mojtaba Fazeli, Abdollah Rashidi Mehrabadi

Water University of Tehran

Abstract:

In a world worried about water resources with the shadow of drought and famine looming all around, the quality of water is as important as its quantity. The source of all concerns is the constant reduction of per capita quality water for different uses. Iran With an average annual precipitation of 250 mm compared to the 800 mm world average, Iran is considered a water scarce country and the disparity in the rainfall distribution, the limitations of renewable resources and the population concentration in the margins of desert and water scarce areas have intensified the problem. The shortage of per capita renewable freshwater and its poor quality in large areas of the country, which have saline, brackish or hard water resources, and the profusion of natural and artificial pollutant have caused the deterioration of water quality. Among methods of treatment and use of these waters one can refer to the application of membrane technologies, which have come into focus in recent years due to their great advantages. This process is quite efficient in eliminating multi-capacity ions; and due to the possibilities of production at different capacities, application as treatment process in points of use, and the need for less energy in comparison to Reverse Osmosis processes, it can revolutionize the water and wastewater sector in years to come. The article studied the different capacities of water resources in the Persian Gulf and Oman Sea watershed basins, and processes the possibility of using nanofiltration process to treat brackish and non-conventional waters in these basins.

Keywords: Membrane processes, saline waters, brackish waters, hard waters, zoning water quality in the Persian Gulf and the Oman Sea Watershed area, nanofiltration.

ISBN : 978-625-6283-10-7

A CRITICAL REVIEW OF THE ADEQUACY OF EIA REPORTS-EVIDENCE FROM PAKISTAN

Assist. Prof. Dr. Obaidullah Nadeem, Rizwan Hameed

University of Engineering & Technology, Pakistan.

Abstract:

The preparation of good-quality Environmental Impact Assessment (EIA) reports contribute to enhancing overall effectiveness of EIA. This component of the EIA process becomes more important in situation where public participation is weak and there is lack of expertise on the part of the competent authority. In Pakistan, EIA became mandatory for every project likely to cause adverse environmental impacts from July 1994. The competent authority also formulated guidelines for preparation and review of EIA reports in 1997. However, EIA is yet to prove as a successful decision support tool to help in environmental protection. One of the several reasons of this ineffectiveness is the generally poor quality of EIA reports. This paper critically reviews EIA reports of some randomly selected projects. Interviews of EIA consultants, project proponents and concerned government officials have also been conducted to underpin the root causes of poor quality of EIA reports. The analysis reveals several inadequacies particularly in areas relating to identification, evaluation and mitigation of key impacts and consideration of alternatives. The paper identifies some opportunities and suggests measures for improving the quality of EIA reports and hence making EIA an effective tool to help in environmental protection.

Keywords: Environmental Impact Assessment, EIA Guidelines, EIA Reports, Pakistan.

ISBN : 978-625-6283-10-7

GROUNDWATER QUALITY AND THE SOURCES OF POLLUTION IN BAGHAN WATERSHED, IRAN

Abolfazl Moeini, Elahe Alizadeh Paeenafrakaty

Islamic Azad University, Iran

Abstract:

The protection of groundwater resources is the great important many semiarid and arid environments. Baghan watershed is located in the north of Kangan in the Boshehr province in Iran. The groundwater resources have a vital role in supplying agricultural, drinking, domestic and industrial water demand in Baghan watershed. For our investigation into the water quality we collected 30 samples to chemical and physical analysis. The result showed the marl and evaporation deposits that contain anhydrite and gypsum is the main source of groundwater pollution, and one part of the groundwater was polluted by oil and gas industrial. Another part of the groundwater was contaminated by urban waste water. The electrical conductivity and captions and anions increased around of towns and gas refinery. Although the negative impact of untreated domestic wastewater is relatively low but the results showed strongly the negative impact of wastewater refinery is very considerable. This negative impact increased in downstream due to shallow aquifer. Additionally, the agents that adversely affect the quality of groundwater come from a variety of sources, including geology, domestic wastewater and the Jam refinery in Baghan watershed.

Keywords: Baghan watershed, Chemical quality, Groundwater, Pollution sources.

ISBN : 978-625-6283-10-7

ASSESSMENT OF POLLUTION REDUCTION

Katarzyna Strzała-Osuch

University of Gdańsk, Poland

Abstract:

Environmental investments, including ecological projects, relating to the protection of atmosphere are today a need. However, investing in the environment should be based on rational management rules. This comes across a problem of selecting a method to assess substances reduced during projects. Therefore, a method allowing for the assessment of decision rationality has to be found. The purpose of this article is to present and systematise pollution reduction assessment methods and illustrate theoretical analyses with empirical data. Empirical results confirm theoretical considerations, which proved that the only method for judging pollution reduction, free of apparent disadvantages, is the Eco 99-ratio method. To make decisions on environmental projects, financing institutions should take into account a rationality rule. Therefore the Eco 99-ratio method could be applied to make decisions relating to environmental investments in the area of air protection.

Keywords: Assessment of pollution reduction, costs of environmental protection, efficiency of environmental investments.

ISBN : 978-625-6283-10-7

ESTIMATION METHOD FOR THE CONSTRUCTION OF HYDROGEN SOCIETY WITH VARIOUS BIOMASS RESOURCES IN JAPAN-PROJECT OF COST REDUCTIONS IN BIOMASS TRANSPORT AND FEASIBILITY FOR HYDROGEN STATION WITH BIOMASS-

Masaki Tajima, Kenji Imou, Shinya Yokoyama

The University of Tokyo

Abstract:

It was determined that woody biomass and livestock excreta can be utilized as hydrogen resources and hydrogen produced from such sources can be used to fill fuel cell vehicles (FCVs) at hydrogen stations. It was shown that the biomass transport costs for hydrogen production may be reduced the costs for co-generation. In the Tokyo Metropolitan Area, there are only a few sites capable of producing hydrogen from woody biomass in amounts greater than 200 m3/h-the scale required for a hydrogen station to be operationally practical. However, in the case of livestock excreta, it was shown that 15% of the municipalities in this area are capable of securing sufficient biomass to be operationally practical for hydrogen production. The differences in feasibility of practical operation depend on the type of biomass.

Keywords: Biomass Resources, Hydrogen Production, Hydrogen Station, Transport Cost.

ISBN : 978-625-6283-10-7

CELLULOLYTIC MICROBIAL ACTIVATOR INFLUENCE ON DECOMPOSITION OF RUBBER FACTORY WASTE COMPOSTING

Thaniya Kaosol, Sirinthrar Wandee

Prince of Songkla University, Hat-Yai, Songkhla, Thailand,

Abstract:

In this research, an aerobic composting method is studied to reuse organic waste from rubber factory waste as soil fertilizer and to study the effect of cellulolytic microbial activator (CMA) as the activator in the rubber factory waste composting. The performance of the composting process was monitored as a function of carbon and organic matter decomposition rate, temperature and moisture content. The results indicate that the rubber factory waste is best composted with water hyacinth and sludge than composted alone. In addition, the CMA is more affective when mixed with the rubber factory waste, water hyacinth and sludge since a good fertilizer is achieved. When adding CMA into the rubber factory waste composted alone, the finished product does not achieve a standard of fertilizer, especially the C/N ratio. Finally, the finished products of composting rubber factory waste and water hyacinth and sludge (both CMA and without CMA), can be an environmental friendly alternative to solve the disposal problems of rubber factory waste. Since the C/N ratio, pH, moisture content, temperature, and nutrients of the finished products are acceptable for agriculture use.

Keywords: composting, rubber waste, C/N ratio, sludge, cellulolytic microbial activator

ISBN : 978-625-6283-10-7

A STUDY ON ENERGY-EFFICIENT TEMPERATURE CONTROL

Mitsuyuki Kawakami, Kimihiro Yamanaka

Tokyo Metropolitan University, Tokyo

Abstract:

The top-heavy demographic of low birth-rate and longer lifespan is a growing social problem, and one of its expected effects will be a shortage of young workers and a growing reliance on a workforce of middle-aged and older people. However, the environment of today's industrial workplace is not particularly suited to middle-aged and older workers, one notable problem being temperature control. Higher temperatures can cause health problems such as heat stroke, and the number of cases increases sharply in people over 65. Moreover, in conditions above 33°C, older people can develop circulatory system disorders, and also have a higher chance of suffering a fatal heart attack. We therefore propose a new method for controlling temperature in the indoor workplace. In this study two different verification experiments were conducted, with the proposed temperature control method being tested in cargo containers and conventional houses. The method's effectiveness was apparent in measurements of temperature and electricity consumption

Keywords: CO2 reduction, Energy saving, Temperature control