ABSTRACTS BOOK

TOKYO SUMMIT - VI

6TH INTERNATIONAL CONFERENCE ON INNOVATIVE STUDIES OF CONTEMPORARY SCIENCES

Edited by: **Tolga Ozbilen**
ISBN: **978-625-8323-84-9**

6TH INTERNATIONAL CONFERENCE ON INNOVATIVE STUDIES OF CONTEMPORARY SCIENCES

ABSTRACTS BOOK

Editors
Tolga ÖZBİLEN

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CONFERENCE ID

CONFERENCE TITLE

6TH INTERNATIONAL CONFERENCE ON INNOVATIVE STUDIES OF CONTEMPORARY SCIENCES

DATE and PLACE

AUGUST 1-2, 2022 / Tokyo - Japan

ORGANIZATION

IKSAD-Institute of Economic Development and Social Research, Turkey

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NUMBER of ACCEPTED PAPERS- **93**
NUMBER of REJECTED PAPERS- **38**
TOTAL NUMBER OF PAPERS FROM TURKEY- **43**
TOTAL NUMBER OF INTERNATIONAL PARTICIPANTS- **50**

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Turkey, Romania , India , Azerbaijan , Saudi Arabia , Hırvatistan , ABD , Filipinler , Pakistan, Fas , Litvanya , Ethiopia , Cezayir, Özbekistan , Vietnam , Georgia , Serbia , Spain , Dubai

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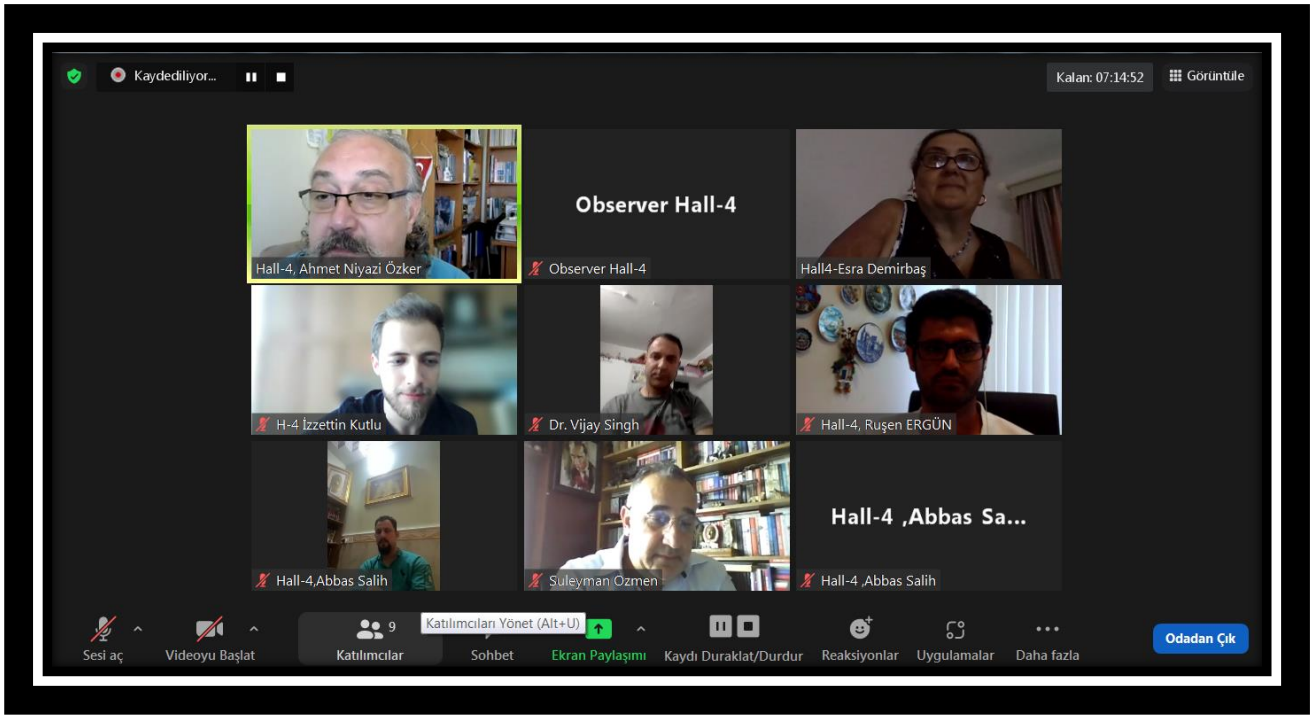

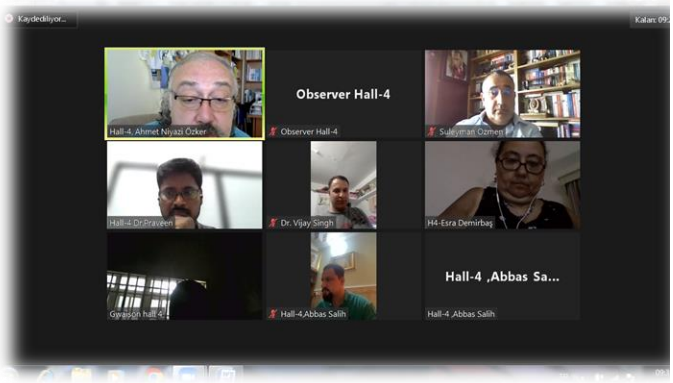

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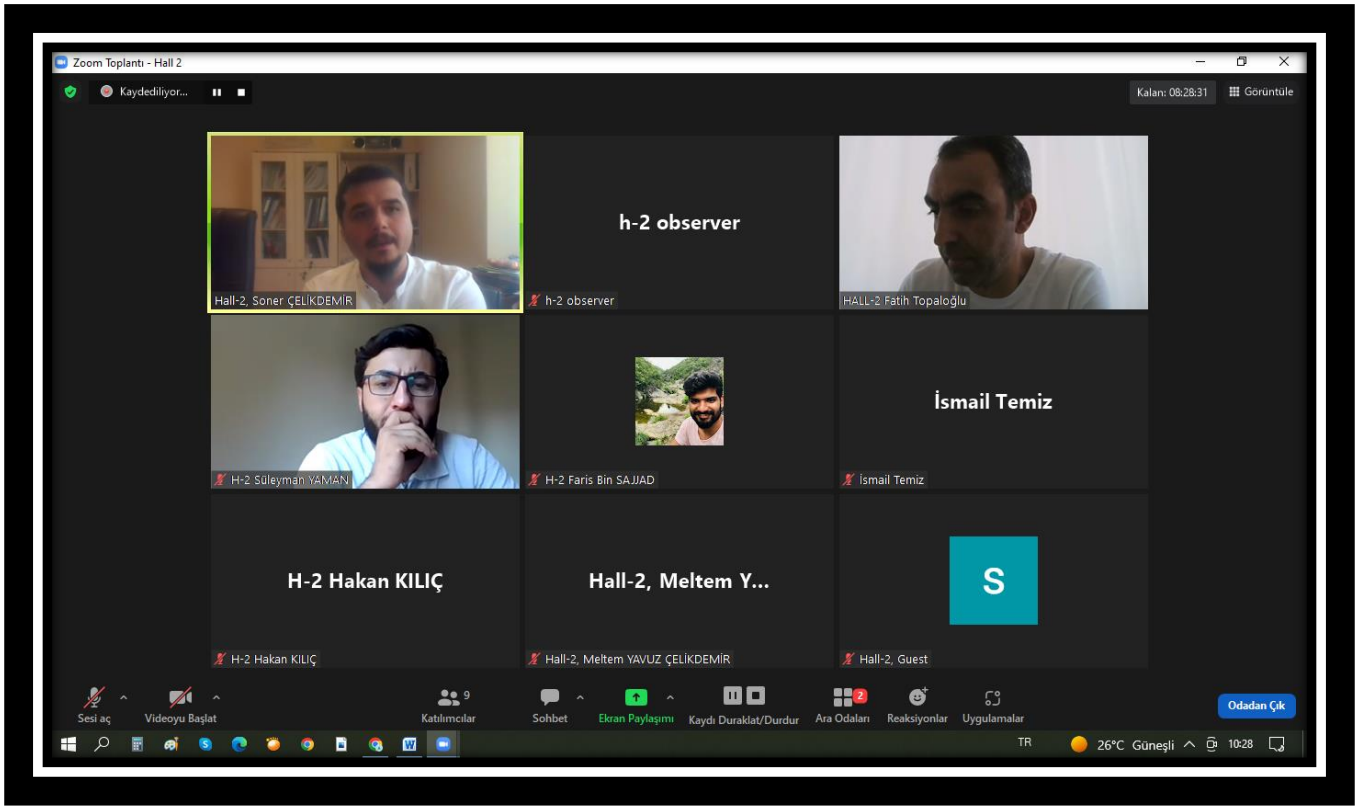

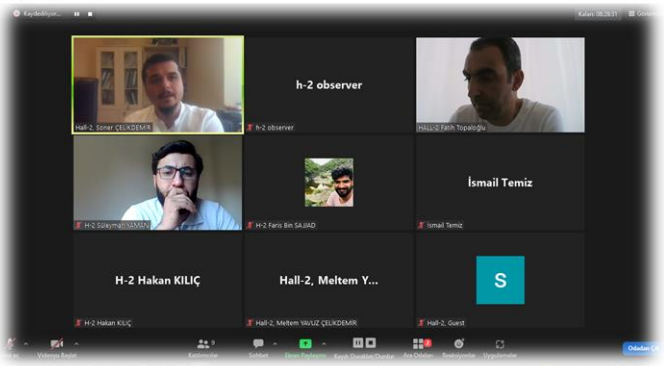

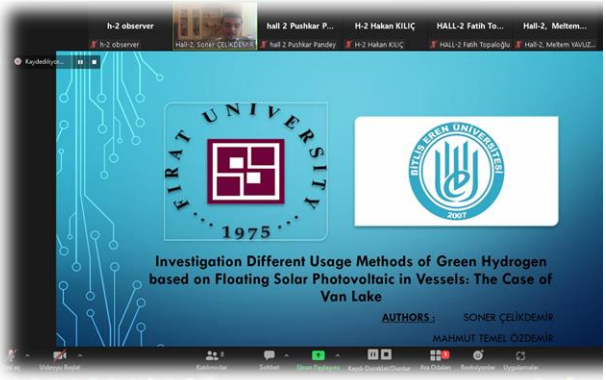

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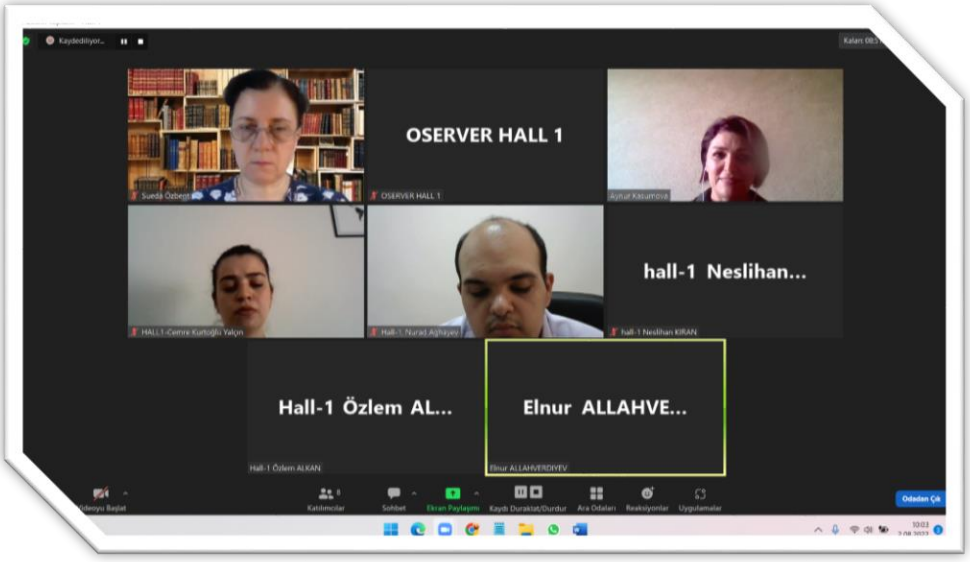

TOKYO SUMMIT

6th International Conference on Innovative Studies of Contemporary Sciences

August 1-2, 2022 / Tokyo - Japan

CONFERENCE PROGRAM

Meeting ID: 812 4927 8517
Passcode: 006006

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exp. H-1 Koray Karabulut

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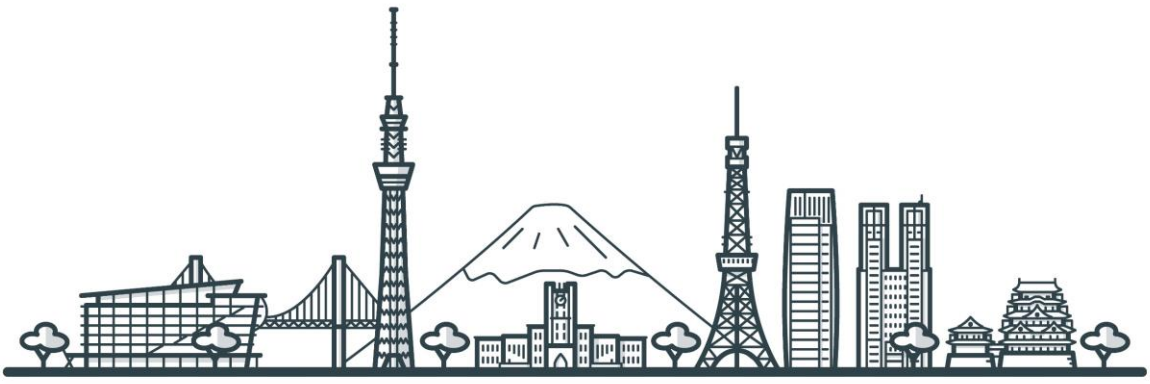


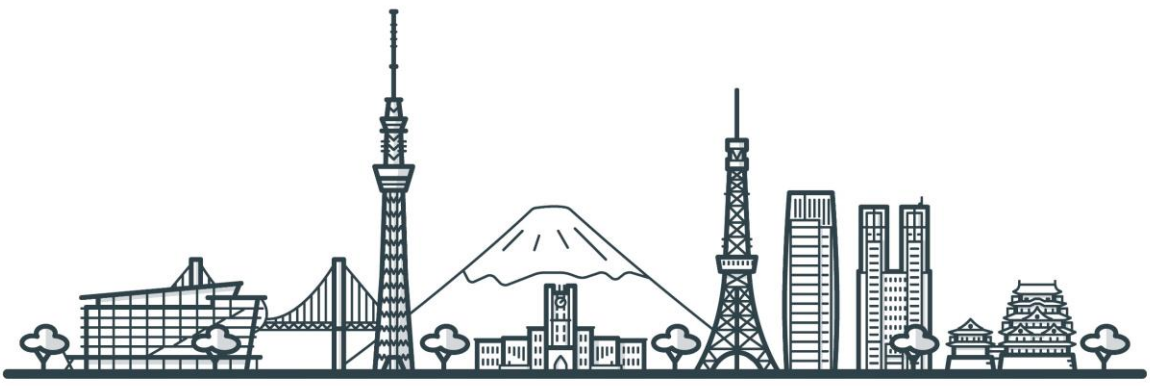
01.08.2022 | HALL-1

Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Assoc. Prof. Dr. Koray Karabulut

Mai Duc Nghia Doan Cong Thang	Faculty of Mechanical Engineering, Air Force Officer's College, Nhatrang City, Vietnam	DESIGN AND MANUFACTURING RESEARCH OF THE INFORMATION PROCESSING EQUIPMENT FOR APPLICABLE IN TECHNICAL SAFELY SUPERVISION OF THE FISHING VESSEL'S DIESEL ENGINES
Sandeep Bandarwadkar	Kaunas University of Technology	INVESTIGATION OF THERMAL ENERGY ACCUMULATION USING SOIL LAYER FOR BUILDINGS' ENERGY EFFICIENCY
Assoc. Prof. Dr. Koray Karabulut Nihat Ocak	Sivas Cumhuriyet University	INVESTIGATION OF ENTROPY GENERATION AND EXERGY GAIN OF GO-WATER NANOFLUID DEPENDING ON WORKING CONDITIONS
Hamid Zamanlou Filiz Karabudak	Ataturk University Gumushane University	INVESTIGATING THE COMBINED MODE FAILURE MECHANISM IN HONEYCOMB PANELS AND CALCULATING ENERGY ABSORPTION IN DYNAMIC LOADS
Selma Akçay	Cankiri Karatekin University, Engineering Faculty, Mechanical Engineering Department, Cankiri, Turkey.	EFFECT ON FLOW AND HEAT TRANSFER OF TURBULATORS IN A TRAPEZOIDAL CORRUGATED CHANNEL
Ibrahim Yildiz Prof. Dr. Hakan Caliskan Prof. Kazutoshi Mori	Usak University Usak University Teikyo University	THE COMPARISON OF THE CHANGE IN SOOT EMISSION CONCENTRATION OF A DIESEL ENGINE ACCORDING TO FUEL TYPE AND ENGINE LOAD
Assist. Prof. Dr. Tuna AYDOĞMUŞ	Hitit University	PRODUCTION AND CHARACTERIZATION OF BORON-REINFORCED MULTICOMPONENT ALLOYS
Cansu DİRİL Seyfi ŞEVİK Tuna AYDOĞMUŞ Bünyamin ÇİÇEK	Hitit University	A NEW SHIELDING PRODUCT AND AUTOMATIC RADIATION PREVENTION MECHANISM FOR RADIATION ROOMS
Assoc. Prof. Dr. Seyfi ŞEVİK	Hitit University	IMPACT OF MAINTENANCE ON PUMP PERFORMANCE



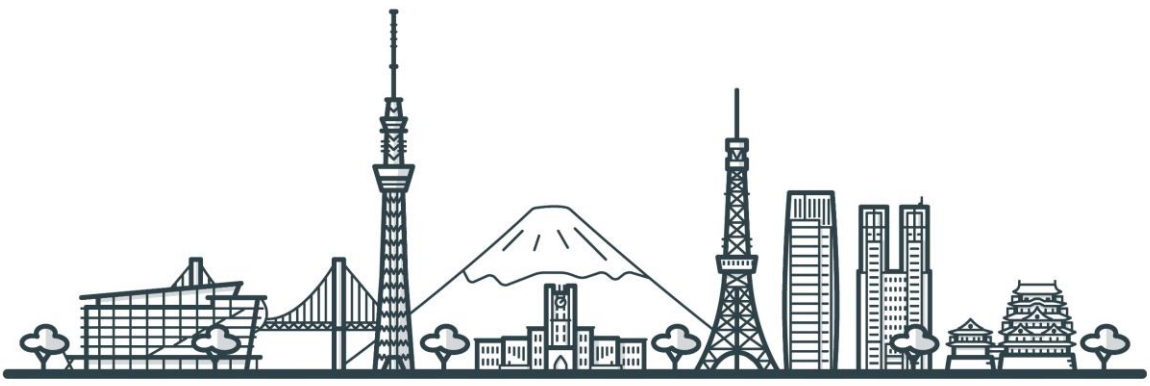
01.08.2022 | HALL-2

Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Soner ÇELİKDEMİR

Nour El Houda Benharkat Souad Bentaalla Kaced Chergui Abdelmalek	National Polytechnic School of Algiers Elharrach, Algeria	DIGITAL TWINS AND ITS MANIFOLD APPLICATIONS
Pushkar Pandey Renu Kundu	Indian Institute of Technology, Department of Design, India	UX STUDY ON HANDHELD AUGMENTED REALITY GAMES BY APPLYING SPRADLEY'S NINE DIMENSIONS DESIGN PRINCIPLE
Soner ÇELİKDEMİR Mahmut Temel ÖZDEMİR	Bitlis Eren University Fırat University	DEVELOPMENT OF MAINTENANCE COST ESTIMATION FOR SMALL HYDRO POWER PLANTS
Soner ÇELİKDEMİR Mahmut Temel ÖZDEMİR	Bitlis Eren University Fırat University	TECHNO-ECONOMIC ANALYSIS OF THE CONVERSION OF VESSELS TO GREEN: THE CASE OF VAN LAKE
Meltem YAVUZ ÇELİKDEMİR Ayhan AKBAL	Bitlis Eren University Fırat University	BRAIN ANEURYSYM DETECTION USING IMAGE PROCESSING TECHNIQUES
Meltem YAVUZ ÇELİKDEMİR Ayhan AKBAL	Bitlis Eren University Fırat University	EXAMINATION OF PRE-OP AND POST-OP SEREBRAL ANEURYSM IMAGES
Hakan Kılıç Merve Temizer Ersoy	Nisantasi University, Istanbul	AUTOMATIC SQL TUNING ADVISOR FOR POSTGRESQL
Faris Bin SAJJAD ALI SHAH Dr. İsmail TEMİZ	Marmara University	AKILLI SENSÖRÜN TASARIMI VE OTOMASYON SİSTEMLERİNDEKİ ETKİSİ
Asst. Prof. Dr. Fatih TOPALOĞLU	Malatya Turgut Özal University	CYBERATTACK RISKS AND POTENTIAL THREATS FOR AUTONOMOUS VEHICLES
Süleyman Yaman Hasan Guler	Firat University	A NEW DEEP LEARNING-BASED APPROACH FOR AUTOMATED KIDNEY STONE DETECTION FROM CT SCANS



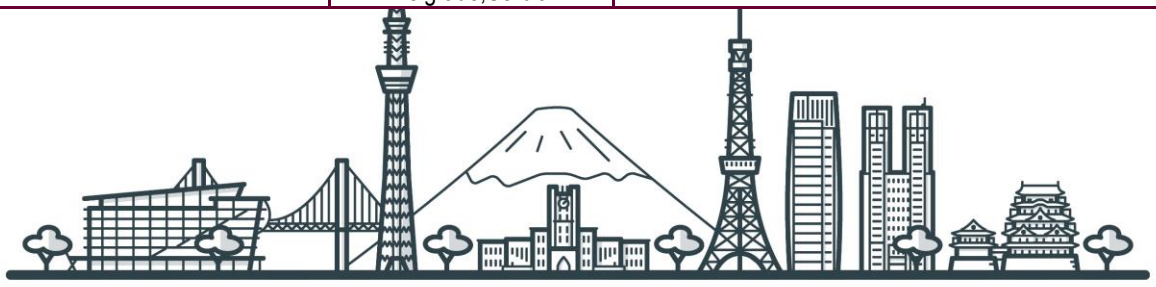
01.08.2022 | HALL-3

Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Dr. Lali Tsivilashvili

Lali Tsivilashvili Giorgi Ghambashidze Medea Burjanadze Zaira Tkebuchava	LEPL Scientific-Research Centre of Agriculture, Department of IPM researchTbilisi, Georgia	MONITORING AND MANAGEMENT OF WEEDS IN HAZELNUT ORCHARDS
Elnur ALLAHVERDIYEV	Director of Baku Business and Cooperation College, Baku, Azerbaijan	THE AGRICULTURAL POTENTIAL OF LIBERATED TERRITORIES OF AZERBAIJAN
Gideon Danso-Abbeam Maxwell Anamdare Asale	Department of Agribusiness, University for Development Studies, Tamale, Ghana	DETERMINANTS OF HOUSEHOLD FOOD SECURITY AND COPING STRATEGIES IN NORTHERN GHANA
Sait TAN Pelin DEMİR Cemil KÜREKCİ Ali ARSLAN	Fırat University	DETERMİNATİON OF BİSPHENOL A (BPA) MİGRATİON DURİNG RİPENİNG AND PRESERVATİON PROCESS İN BRİNE WHİTE CHEESE RİPENED İN POLYETHYLENE TEREPHTHALATE (PET) PACKAGES
Zahit Kutalmış KAYA Orhan ÇETİN	Selcuk University	DIFFERENT BREEDING SYSTEMS EFFECTS ON BLOOD, FATTY ACID AND AMINO ACID PROFILES IN NATIVE TURKISH GEESE
Zahit Kutalmış KAYA Mustafa Çam Serdar GÜLER	Selcuk University	GROWTH PERFORMANCE AND METABOLIC PROFILES IN THE EARLY PERIOD OF HOLSTEIN CALVES FEEDING WITH TRANSITION MILK
Milivoje Urošević Radomir Mandić Panče Dameski Goran Stanišić	Metropolitan University	BIRTH RATE OF EUROPEAN BISON (Bison bonasus bonasus L. 1758) IN ROMANIA IN THE 2004 – 2020
Bilal Ahmad M.I. Khan M.A. Naeem Aiyeshah Alhodaib Mahvish Fatima Mongi Amami Eman A. Al-Abbad Abida Kausar Norah Alwadai Arif Nazir Munawar Iqbal	The University of Lahore	GREEN SYNTHESIS OF NIO NANOPARTICLES USING ALOE VERA GEL EXTRACT AND EVALUATION OF ANTIMICROBIAL ACTIVITY
Ivan Pavlovic Milan Stevanovic Nemanja Zdravkovic Aleksandra Tasic Nada Plavsa	Scientific Veterinary Institute of Serbia, Belgrade, Serbia Academy of Beekeeping and Apitherapy of Serbia, Belgrade,Serbia	SACBROOD VIRUS INFECTION OF BEES IN SERBIA



Tokyo

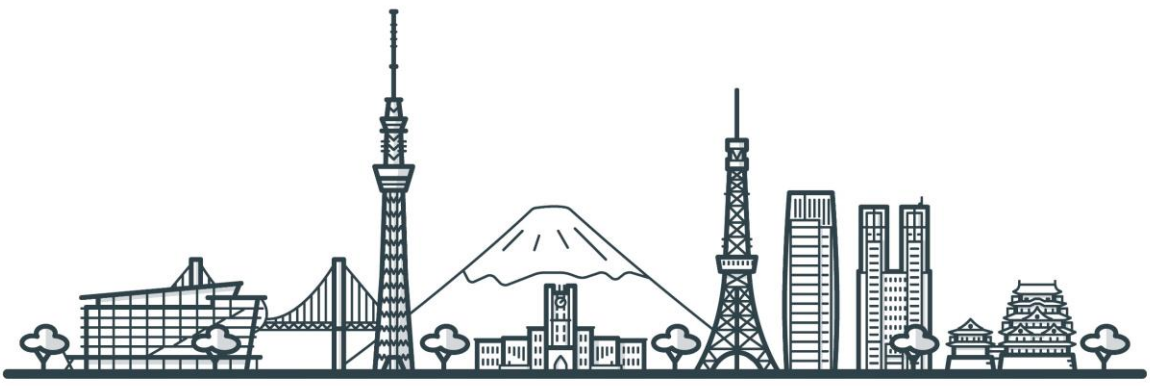
01.08.2022 | HALL-4

Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Dr. Bunyamin CICEK

Mehmet Hayrullah Akyıldız Ali Yaşar Zeyrek	University of Dicle, Department of Civil Engineering, Diyarbakır, Turkey	INVESTIGATION OF THE USAGE OF DIYARBAKIR BASALT IN DAM FILLING
Aishah H.O. Al Shehi Gul Ahmed Jokhio Abid Abu-Tair	The British University in Dubai	PREVENTIVE MAINTENANCE USING RECYCLED ASPHALT
Hayat El HAMMI Loubna JABIR Soumya ESSAYEH Mohamed Nor Omar Azougagh Hassan AMHAMDI Abderrahmane El IDRISSI Mohamed ABOU-SALAMA Soufian EL BARKANY	Multidisciplinary Faculty of Nador, Mohamed First University Morocco	FABRICATION OF HYDROXYETHYLCELLULOSE - BASED FLOCCULANT: CHARACTERIZATION, AND FLOCCULATION PERFORMANCE
Dr. Bunyamin CICEK	Technical Sciences Vocational School, Machine and Metal Technologies, Corum, Türkiye	EFFECT OF GRAPHENE ON MICROSTRUCTURE AND HARDNESS PROPERTIES IN MULTI-COMPONENT ALLOYS
Mehmet Aziz SAYAR Assoc. Prof. Dr. Mustafa ULUKAVAK	Harran University	THE EVALUATION OF THE LAND REGULATIONS MADE BY THE DIRECTORATES OF THE CADASTRE IN CONSEQUENCE OF PUBLIC PROPERTIES
Mustafa BİÇER Erkin ALTUNSARAY	Dokuz Eylul University	INVESTIGATION OF LOW-VELOCITY IMPACT BEHAVIOUR OF CARBON/EPOXY LAMINATED COMPOSITE PLATES AS A BOAT BUILDING MATERIAL
Mehmet Turan Demirci	Selçuk University	INVESTIGATION OF THE EFFECT OF GLASS AND HEMP FIBER- REINFORCED ALUMINUM COMPOSITE SANDWICHES ON EDGEWISE COMPRESSIVE STRENGTH



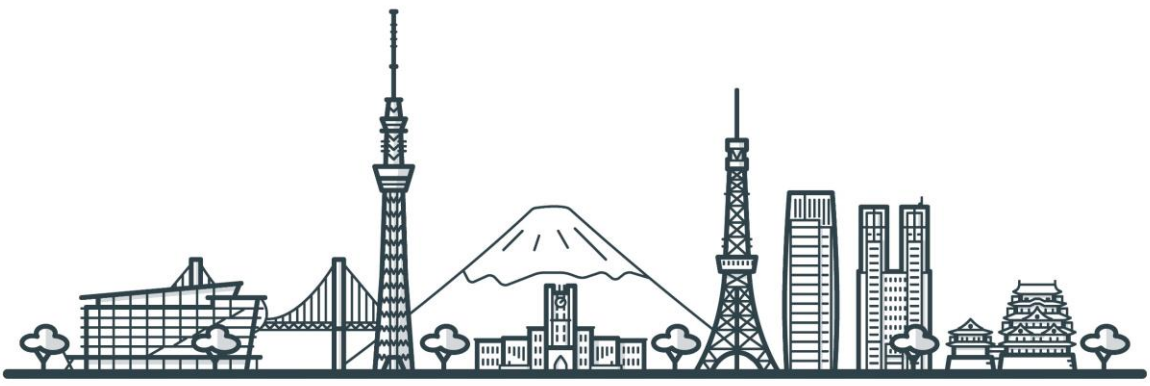
01.08.2022 | HALL-5

Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Major Gheorghe Giurgiu

Athulajayan Ajayan Kochuveettil Srushti Chauhan Catherine Anozie Dr. Gulhan Bizel	Saint Peter's University	PUBLIC SENTIMENT ANALYSIS FOR HIV, HERPES, AND OCD ON THE REDDIT SOCIAL MEDIA PLATFORM
Elchin Aghayev Tapdig Mammadov Zulfiyya Ismayilova	Azerbaijan Medical University	THE EFFECTIVENESS OF LAENNEC IN THE PREVENTION OF ANASTOMOTIC LEAKAGE
Zainab GHOLAMI Assoc. Prof. Dr. Havva SERT	Sakarya University	EVALUATION OF CORONAPHOBIA LEVELS OF INTERNATIONAL STUDENTS STUDYING IN UNIVERSITY DURING THE COVID-19 PANDEMIC PROCESS
Zulfi KADIMOVA	Azerbaijan Medical University	IDENTIFICATION OF ACTIVATION OF LATENT TUBERCULOSIS INFECTION
Prof. Dr. Buket Aksu Hasan Ali Hussein	Altınbaş University	CULTURAL COMPETENCE IN HEALTHCARE
Major Gheorghe Giurgiu Prof. Dr. Manole Cojocaru	Deniplant-Aide Sante Medical Center, Biomedicine, Bucharest, Romania Titu Maiorescu University, Faculty of Medicine, Bucharest, Romania	NUTRACEUTICALS DENIPLANT IN THE NEUROPATHIC PAIN IN DOG WITH SPINAL CORD INJURY
Abdul Hanan Tariq	Lithuanian Sports University, Lithuania	ELECTRICAL STIMULATION IN REHABLITATION PATIENTS WITH FACIAL PALSY
Deema Al Shawan	Imam Abdulrahman Bin Faisal University, College of Public Health, Department of Public Health, Dammam, Saudi Arabia	THE EFFECTIVENESS OF THE JOINT COMMISSION INTERNATIONAL ACCREDITATION IN IMPROVING QUALITY AT KING FAHD UNIVERSITY HOSPITAL, SAUDI ARABIA: A MIXED METHODS APPROACH



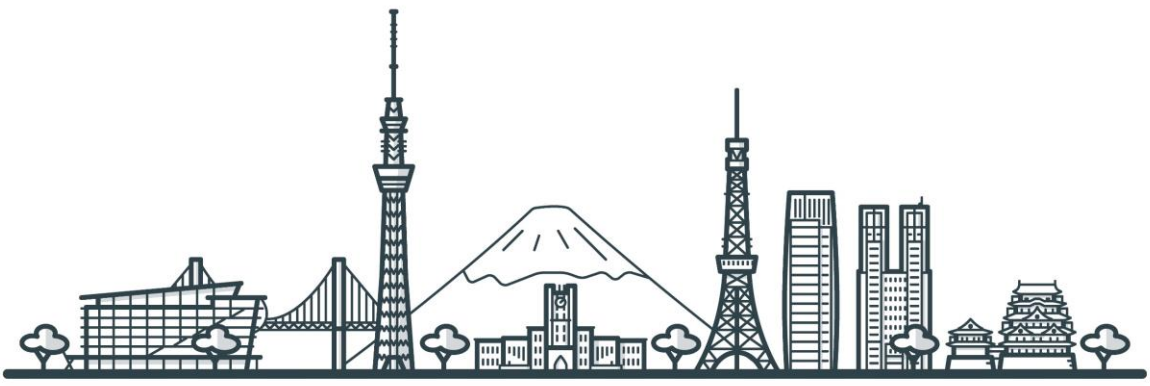
02.08.2022 | HALL-1

Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Elnur ALLAHVERDIYEV

Nurad Aghayev	National Aviation Academy	IDEOLOGY OF FEEDBACK
Özlem ALKAN Neslihan KIRAN	Ardahan Üniversitesi	UYGUR-ÇİN SİYASİ EVLİLİKLERİNDE TÖRENLER
Qasımova Aynur Mobil qızı p.ü.f.d. baş müəllim	Azərbaycan Dövlət Pedaqoji Universiteti	METHODS OF TEACHING DIAGRAMS AT SCHOOL
Prof. Dr. Mustafa KARABULUT	Adıyaman University	POPULATION EXCHANGE IN TURKISH NOVEL
Sueda Özbent	Marmara University	SCENES AND FRAMES THEORY IN TRANSLATION
İbrahim Yaşar KAZU Cemre KURTOĞLU YALÇIN	Fırat University Ministry of Education, Çubukbey Anatolian High School, Elazığ, Turkey	A LIGHT FOR EDUCATION DURING CORONAVIRUS PANDEMIC: FLIPPED LEARNING MODEL
Dilshoda Mubarakova	Tashkent State Institute of Oriental Studies	TRANSLATION METAPHORS



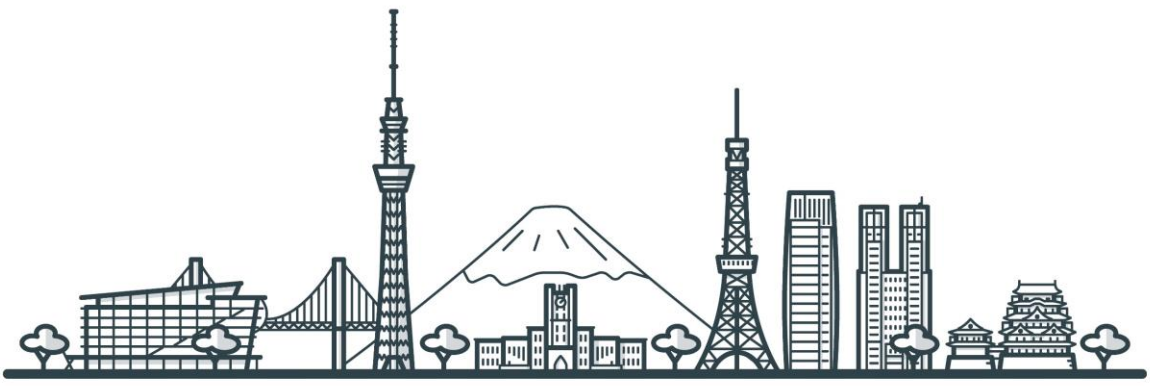
02.08.2022 | HALL-2

Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Assist. Prof. Dr. Nasim Kian-Pour

Weam Saed Mohammed Saeed Alyoubi	King Abdulaziz University	MOLECULAR DOCKING AND DYNAMICS STUDY OF NATURAL COMPOUNDS AS TG2 INHIBITORS ASSOCIATED WITH CELIAC DISEASE
Nasim Kian-Pour Ersin Arslan	Istanbul Aydin University	IMPACT OF HYDROCOLLOID-COATING PRE-TREATMENTS ON THE DRYING CHARACTERISTICS, DIFFUSION COEFFICIENT, TRANSPORT AND THERMOPHYSICAL PROPERTIES OF DRIED APPLE
Fehmi SALTAN	Çankırı Karatekin University	PREPARATION OF PVA/PVP/P(AA-co-MA) FILMS REINFORCED WITH GRAPHITE: STRUCTURAL AND THERMAL CHARACTERIZATION
Shatha Alamri	King Abdulaziz University	ELECTRONIC STRUCTURE OF THE LEAD-FREE CHIRAL ORGANIC-INORGANIC PEROVSKITE
Seda Hazer Ayse Aytac	Kocaeli University	DEVELOPMENT OF SMART PACKAGING WITH CURCUMIN TO DETERMINE THE CHANGES IN FOOD QUALITY
Norah Alotaibi	King Abdulaziz University	THE SUCCESSIVE DEHYDROGENATION OF AMMONIA AS A HYDROGEN STORAGE MATERIAL ON NI-BASED NANOPARTICLES: A COMPUTATIONAL STUDY
Ayşe UÇAR Hilal İNCEBAY	Nevşehir Hacı Bektaş Veli University	PREPARATION OF A NANOCOMPOSITE FOR USE IN THE DEVELOPMENT OF AN ELECTROCHEMICAL SENSOR SENSITIVE TO ELECTROSENSITIVE ANALYTES
Hanane Ait Hmeid Mustapha Akodad Mourad Baghour Abdelmajid Moumen Ali Skalli Ghizlane Azizi	Mohamed First University, Morocco.	DSORPTION OF PHENOL POLLUTANTS FROM AQUEOUS SOLUTION USING CA-BENTONITE/ NA-BENTONITE.



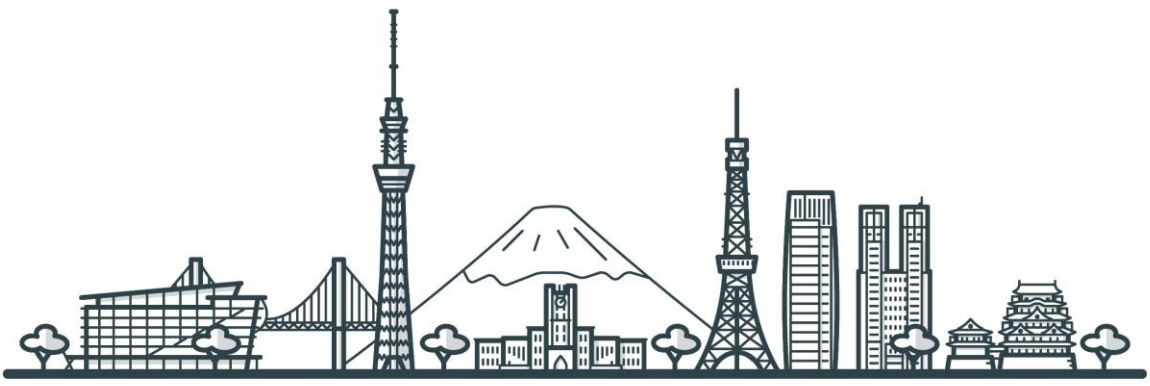
02.08.2022 | HALL-3

Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Prof. Dr. Kornelija Mrnjaus

Sofija Vrcelj Pamela Grozdanić	Faculty of Humanities and Social Sciences, Croatia	WHY IS STEM A MALE DOMAIN?
Ojo, Cornelius Segun Ph.D Shittu, Ganiyat Adeoti	Ajayi Crowther University	INFLUENCE OF TELEVISION ADVERTISING ON CHILDREN'S CHOICE OF BEVERAGES: A STUDY OF RIBENA AND CAPRI-SUN AMONG PUPILS OF AJAYI CROWTHER UNIVERSITY STAFF SCHOOL, OYO, SOUTHWEST NIGERIA.
SHOA FATIMA	Aligarh Muslim University	THE HISTORICAL SIGNIFICANCE OF UNIVERSITY MUSA DAKRI MUSEUM WITH SPECIAL REFERENCE TO SIR SYED COLLECTION
Hanife EREN Melek ZUBAROĞLU YANARDAĞ	Burdur Mehmet Akif Ersoy University	MENTAL PROBLEMS IN IMMIGRANTS AND THE PSYCHOSOCIAL NEEDS OF IMMIGRANTS
Eva Anđela Delale Kornelija Mrnjaus Lovro Bilić	Institute for Anthropological Research University of Rijeka University of Zagreb	IDENTITY PROCESSING STYLE AND LIFE VALUES OF STUDENTS AND THEIR PARENTS
Prof. Dr. Kornelija Mrnjaus	University of Rijeka, Faculty of Humanities and Social Sciences, Croatia	LISTENING IN EDUCATION
Victoria Q. Paraggua Brillo S. Paje	Philippine Merchant Marine Academy, Zambales, Philippines Don Mariano Marcos Memorial State University, La Union, Philippines	ATTRIBUTES AFFECTING TRAINING INSTRUCTORS' PERFORMANCE IN MARITIME-RELATED INSTITUTIONS: SPRINGBOARD FOR ORGANIZATIONAL DEVELOPMENT INTERVENTIONS
Victoria Q. Paraggua Ma. Nissa C. Espiritu Ellen E. Luna	Philippine Merchant Marine Academy, Zambales, Philippines	THE LIVED EXPERIENCES OF WOMEN LEADERS IN A MALE-DOMINATED WORLD OF WORK: A PHENOMENOLOGICAL STUDY
Yunus EROĞLU Cumhur DEMİRALP Ali Can GÖZCÜ	Hakkari Üniversitesi	MESLEK LİSELERİNDE ÖĞRENCİLERİN GELECEK SEÇİMLERİ ÜZERİNE BİR ALAN ARAŞTIRMASI: HAKKARİ İLİ ÖRNEĞİ



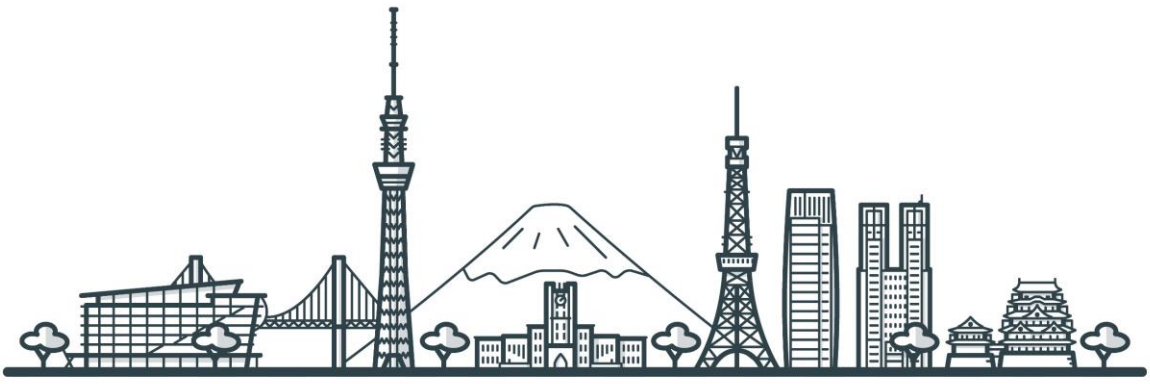
02.08.2022 | HALL-4

Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Prof. Dr. Ahmet Niyazi ÖZKER

Prof. Dr. Ahmet Niyazi ÖZKER	Bandirma Onyedi Eylul University	CHANGE EFFECT OF GLOBAL FISCAL RISK FACTORS ON PUBLIC FISCAL POLICIES AND DEVIATIONS IN PUBLIC REVENUES
Gwaison Panan Danladi Mabur Zumbung Danladi Maram Isa Maren Akpan James E.	Department of Economics & Management Sciences Nigerian Police Academy Wudil_Kano, Nigeria	NIGERIA DEVELOPMENT PLANS AND ITS IMPLICATION FOR NATIONAL DEVELOPMENT IN NIGERIA
Dr. K. Praveen	VIT Business School, Chennai, Tamilnadu, India	DOES WORK -FAMILY AND FAMILY-WORK CONFLICTS AFFECT EMPLOYEE COMMITMENT
ABBAS RAHEEM SALIH	Department of Accounting, Plateau State University, Bokkos, Plateau State.	FINANCIAL INNOVATION AS A FACTOR OF POSSIBLE ECONOMICAL DESTABILIZATION: MINSKY'S THEORY
ABBAS RAHEEM SALIH	Faculty of Economics, (RUDN), International Business, Moscow, Russia	STRATEGIC PLANNING FOR THE SUSTAINABILITY OF OIL AND NATURAL GAS RESOURCES IN IRAQ: A STUDY ON MIDLAND OIL COMPANY
Dr. Vijay Singh Prof. Simmi Agnihotri	Himachal Pradesh University	ROLEOF MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT-2005 TO COMBAT TRIBALMIGRATION IN HIMACHAL PRADESH: ACASE STUDY OF PANGWALA TRIBE
Esra Demirbaş	İstanbul Yeni Yüzyıl Üniversity	E-MARKETPLACES IN TÜRKIYE AND SCRAPE OUT THE REASON FOR THE COMING FAREWELL OF AN OLD ACTOR
Süleyman Özmen	Istanbul Rumeli University	SOCIO-CULTURAL CHANGES CAUSED BY INTERNATIONAL MIGRATION
Ruşen Ergün İrem Bekar İzzettin Kutlu	Dicle University Karadeniz Technical University Mardin Artuklu University	CULTURAL HERITAGE TOURISM AS AN ALTERNATIVE TO COASTAL TOURISM: MERSIN-SILIFKE
İrem Bekar Ruşen Ergün İzzettin Kutlu	Karadeniz Technical University Dicle University Mardin Artuklu University	EVALUATION OF CONTAINER USE IN ARCHITECTURE ON FLEXIBILITY PARAMETERS



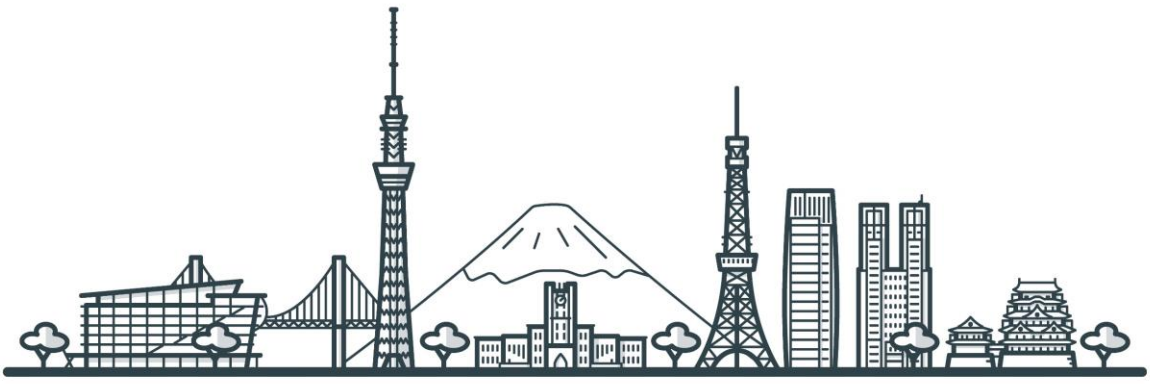
02.08.2022 | HALL-5

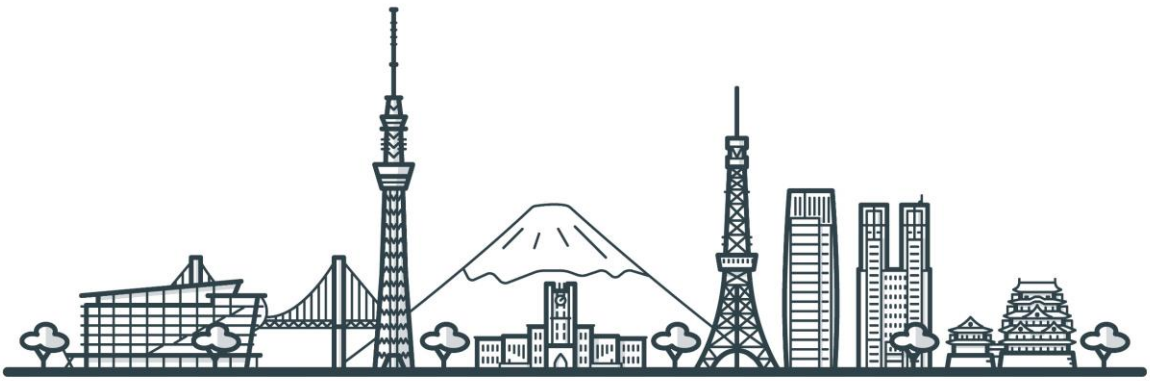
Tokyo Local Time: 15^{00}-17^{30}

Ankara Local Time: 09^{00}-11^{30}

HEAD OF SESSION: Dr. Binyam Zigta

Gurel Bozma Nazmiye Gonul Bilgin	Zonguldak Bulent Ecevit University	A NEW TYPE BIVARIATE BERNSTEIN SCHURER OPERATORS
G.P. Ashwinkumar C. Sulochana N.Sandeep	Department of Mathematics, Vijayanagara Sri Krishnadevaraya University, India	EFFECT OF THERMOPHORESIS AND BROWNIAN MOMENT ON 2D MHD NANOFLUID FLOW OVER AN ELONGATED SHEET
G.P. Ashwinkumar C. Sulochana N.Sandeep Doğukan Altıntaş	Department of Mathematics, Vijayanagara Sri Krishnadevaraya University, India	DESIGN AND ANALYSIS OF Y-25 TYPE TRAIN BOGIE CAPABLE OF CARRYING 200 TONS OF LOAD
Ebba (Bullo) Hindebu O. D. Makinde Lemi Guta	--	MODELING HEAT TRANSFER ENHANCEMENT OF FERROFLUID FLOW IN A MICROCHANNEL FILLED WITH A POROUS MEDIUM
Dr. Binyam Zigta	Wachemo University, College of Natural and Computational Science, Department of Mathematics , ETHIOPIA	THE INFLUENCE OF THERMAL RADIATION AND CHEMICAL REACTION ON MHD MICROPOLAR FLUID IN THE PRESENCE OF HEAT GENERATION/ ABSORPTION





Tokyo

CONTENT

DESIGN AND MANUFACTURING RESEARCH OF THE INFORMATION PROCESSING EQUIPMENT FOR APPLICABLE IN TECHNICAL SAFELY SUPERVISION OF THE FISHING VESSEL'S DIESEL ENGINES

Mai Duc Nghia, Doan Cong Thang

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Abstract

The technical condition of the fishing vessel's diesel engine often changes in the direction of deterioration during use due to many causes such as weakness, abrasion, metal fatigue, the aging process of parts, sub-assemblies, and systems, the mode of improper operation. If the engine is in a low-powered state because the technical safety test parameters are substandard, don't continue working. If there is a part of a sub-assemblies, a particular system that does not work stably is damaged and cannot work, that engine is in a state of breakdown or damage that needs maintenance and repair. To detect these phenomena early, the implementation of supervising is a meaningful requirement, so it is necessary to use equipment to manage the technical status of the engine while in operation and to notify and warn of broken. On that basis, promptly adjust the operating mode of the engine or stop the working so that there is no problem. In this paper, the design and manufacture of a central processing unit are presented, connected to the receiver and transmitter components to form a technical safety supervision device for the fishing vessel's diesel engines (offline and online). There, the receiver unit will record the data from the sensor measuring the supervision parameters. And the transmitter will warn by at place sound and warn via the phone wave to the phone of the user fishing vessel management (technical experts, a center of the machine operation consulting, and exploit) when the supervision parameters exceed the allowable limits. Research results have designed and manufactured a supervision device, recording basic working parameters of the engine, warning by sound and warning via phone waves, successfully applied on Fisherman's fishing vessel, with high reliability, stable working.

Keywords: Fishing vessel, diesel engine, supervision, warning, central processing unit.

INVESTIGATION OF THERMAL ENERGY ACCUMULATION USING SOIL LAYER FOR BUILDINGS' ENERGY EFFICIENCY

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Abstract

The cold climate countries require high energy consumption for buildings' heating. According to EU directives and national law, buildings' energy efficiency is increasing due to higher investment in the sector. Primary energy consumption for space heating still comprises a large part of global energy consumption. It is essential to develop technological solutions and innovations to reduce energy consumption by using newer, smarter, more natural energy generation and accumulation. The soil layer could be used as a natural material for thermal energy accumulation. The soil's temperature is higher than atmospheric air in the heating season and is lower in the non-heating season. Underground buildings placed in a soil medium could use less thermal energy for buildings' heating and cooling during its life cycle. The impact of the wind is eliminated in this underground building case. As the soil temperature rises, the difference in temperature of the buildings inside air and the soil decreases. This means that the heat loss into the soil generates the conditions acting against the heat loss. However, heat spreads further and dissipates in the surrounding soil medium. The analysis of this research results showed that the savings in energy could reach 28 percent in the case of the underground building. Heat loss to the soil could be treated as the charge of the soil by thermal energy. The charging by heat and heat dissipation in the soil was researched experimentally. The dependence of the intensity of the charge on time was analysed and presented in this paper also.

Keywords: underground building; soil; temperature profile; heat charge and accumulation; heating and cooling; building energy demand

INVESTIGATION OF ENTROPY GENERATION AND EXERGY GAIN OF GO-WATER NANOFLUID DEPENDING ON WORKING CONDITIONS

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Abstract

Entropy and exergy analysis of a thermal system is one of the most powerful tools that can be used to determine the optimum operating conditions of the system. While exergy is a measure of usability; The increase in entropy production in the system reduces the usability, that is, the exergy. Therefore, entropy and exergy are two opposite phenomena and they must be kept under control in order for the system to operate with high efficiency. In this study, entropy generation and exergy gain analysis of an experimental thermal system consisting of a copper straight pipe with a constant heat load, 12 mm inner diameter and 1830 mm length using GO (Graphene Oxide)-Water nanofluid was performed. While the heat loads applied to the copper pipe are 250 W and 350 W, the flow rates of the fluids flowing in the pipes are 0.9 l/min., 1.2 l/min. and 1.5 l/min. GO-Water nanofluid with 0.01% and 0.02% volumetric concentrations and distilled water were used as working fluids in the system. The results obtained from this study were compared with the studies conducted with different nanofluids in the literature and it was determined that the results were reasonable and consistent. As variable parameters in the study; nanofluid concentration, fluid flow rate and thermal load applied to the pipe were used. The results of the study were evaluated in detail as the variations of thermal and friction entropy generation, output exergy and the 2nd law efficiency along the length of the 12 mm inner diameter copper pipe, and the most suitable working conditions were determined. The results showed a 93.43% reduction in entropy production at an average of 0.02% GO-Water nanofluid concentration along the pipe at 250 W heat load and 0.9 l/min flow rate compared to 0.01% GO-Water nanofluid concentration. In addition, the exergy of 0.01% GO-Water nanofluid is 58% higher at a flow rate of 1.8 l/min compared to a flow rate of 0.9 l/min; it has determined that 2nd law efficiency of the nanofluid is 7.15% higher than the flow rate value of 0.9 l/min at a flow rate of 1.8 l/min.

Keywords: Entropy generation, Exergy gain, GO-Water nanofluid, 2nd law efficiency

GO-SU NANOAKIŞKANININ ÇALIŞMA ŞARTLARINA BAĞLI OLARAK ENTROPİ ÜRETİMİ VE EKSERJİ KAZANIMININ ARAŞTIRILMASI

Özet

Bir ısıl sistemin entropi ve ekserji analizi, sistemin en uygun çalışma şartlarını belirlemek için kullanılabilecek en güçlü araçlardan biridir. Ekserji, kullanılabilirliğin bir ölçüsü iken; sistemdeki entropi üretiminin artışı kullanılabilirliği yani ekserjiyi azaltmaktadır. Bu nedenle, entropi ve ekserji birbirine zıt iki olgudur ve sistemin yüksek verimli olarak çalışabilmesi için kontrol altında tutulmaları gerekmektedir. Bu çalışmada, GO (Grafen Oksit)-Su nanoakışkanı kullanılan sabit ısı yüklü, 12 mm iç çaplı ve 1830 mm uzunluklu bakır düz bir borudan oluşan deneysel bir ısıl sistemin entropi üretimi ve ekserji kazanımı analizi gerçekleştirilmiştir. Bakır boruya uygulanan ısı yükleri 250 W ve 350 W iken, borularda akan akışkanların debi değerleri 0,9 l/dak., 1,2 l/dak. ve 1,5 l/dak.' dır. Sistemde çalışma akışkanları olarak %0,01 ve %0,02 hacimsel konsantrasyona sahip GO-Su nanoakışkanı ve saf su kullanılmıştır. Bu çalışmadan elde edilen sonuçlar, literatürde bulunan farklı nanoakışkanlarla yapılan çalışmalarla kıyaslanmış ve sonuçların mantıklı ve tutarlı oldukları belirlenmiştir. Çalışmada değişken parametreler olarak; nanoakışkan konsantrasyonu, akışkan debisi ve boruya uygulanan ısıl yük kullanılmıştır. Çalışmanın sonuçları, 12 mm iç çaplı bakır boru uzunluğu boyunca ısıl ve sürtünme entropi üretimi, çıkış ekserjisi ve 2. yasa veriminin değişimleri olarak ayrıntılı bir şekilde değerlendirilmiş ve en uygun çalışma şartları belirlenmiştir. Sonuçlar, 250 W ısı yükünde ve 0,9 l/dak.' lık debide boru boyunca ortalama olarak %0,02 GO-Su nanoakışkan konsantrasyonunda %0,01 GO-Su nanoakışkan konsantrasyonuna göre entropi üretiminde %93,43' lük azalma olduğunu göstermiştir. Ayrıca, 1,8 l/dak.' lık debide 0,9 l/dak.' lık debi değerine göre %0,01 GO-Su nanoakışkanının ekserjisi %58 daha fazla olup; 1,8 l/dak.' lık debide nanoakışkanın ikinci yasa veriminin 0,9 l/dak. debi değerinden %7,15 daha fazla olduğu belirlenmiştir.

Anahtar Kelimeler: Entropi üretimi, Ekserji kazanımı, GO-Su nanoakışkanı, 2. yasa verimi.

INVESTIGATING THE COMBINED MODE FAILURE MECHANISM IN HONEYCOMB PANELS AND CALCULATING ENERGY ABSORPTION IN DYNAMIC LOADS

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Abstract

Honeycomb panels are widely used in various industries due to their good strength and suitable weight. Among other advantages of honeycomb structures, it can be mentioned that the mechanical properties of the structures can be changed by changing the geometric shape and changing the internal angles. Therefore, the development of analytical and computational methods for predicting the mechanical behavior of the structure is very important. In this research, in order to investigate the structural change of honeycomb panels with geometrical deformation, a composite failure mode test sample has been simulated using the developed finite element methods. By considering the different geometries of the cells as well as the position and dimensions of the holes, the effect of these parameters on the ability to absorb energy in honeycomb structures was investigated. On the other hand, the amount of energy absorption in dynamic loadings in geometric deformation was investigated. This research showed that the defect has a great effect on the amount of energy absorption, and with the increase of defects, the amount of energy absorption also decreases. Numerical integration was investigated in the enriched elements and by analyzing the number of Gauss points in these elements, the number of optimal points was investigated on the fracture parameter.

Keywords: Failure Mechanism, FEM, Honeycomb Panels, Energy Absorption

EFFECT ON FLOW AND HEAT TRANSFER OF TURBULATORS IN A TRAPEZOIDAL CORRUGATED CHANNEL

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Abstract

In this study, the effects on the flow and heat transfer of turbulators in a trapezoidal corrugated channel are numerically investigated. The numerical study is actualized with the Computational Fluid Dynamics (CFD) based ANSYS-Fluent program and the governing equations are solved using the SIMPLE algorithm. The present study is compared with the literature studies. The working fluid is water, and the channel material is considered aluminum. The fluid is considered incompressible, single-phase, and Newtonian type. The channel flow is two-dimensional and in a steady regime. The grooved surfaces of the channel are trapezoidal and placed in a staggered arrangement. The turbulators are added at a certain angle towards the trapezoidal spaces to the center of the channel. The upper and lower walls of the corrugated channel are kept at a constant temperature of 350 K. Nusselt number (Nu) and friction factor (f) are calculated for different Reynolds numbers ($100 \leq Re \leq 600$). This study is also compared to the channel without turbulators. To observe the flow and heat transfer mechanism in the channel, the velocity and temperature contours are obtained at different parameters in the trapezoidal corrugated channel with/without turbulators. The numerical findings show that the heat transfer and friction factors are significantly affected by the channel geometry and the turbulators. The heat transfer increased due to the turbulators at high Reynolds numbers. Moreover, it is observed that the turbulators considerably are changed the flow structure and thermal fields compared to the channel without turbulators. The highest Nusselt number is obtained at Re=600 in the trapezoidal corrugated channel with turbulators. However, a slight increase in the friction factor is also observed.

Keywords: Trapezoidal corrugated channel, Turbulator, Heat transfer, Friction factor

THE COMPARISON OF THE CHANGE IN SOOT EMISSION CONCENTRATION OF A DIESEL ENGINE ACCORDING TO FUEL TYPE AND ENGINE LOAD

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Abstract

Air pollution depends on many factors. However, one of the most important factors of air pollution is the exhaust emissions of vehicles. Pollutants such as soot, particulate matter and harmful emission gases released from the exhaust of diesel engine vehicles contribute to the increase in air pollution. Air pollution causes very important negative consequences such as damage to human health, climate change and global warming, and therefore creates great concern in the world. Petroleum-based fossil diesel fuel and renewable biofuels (which is produced in a laboratory from waste oils, algae, etc.) are used to operate diesel engines. Soot emissions occur as a result of the combustion of fuels in a diesel engine, which is an internal combustion engine. The concentrations of soot emissions obtained as a result of the combustion of diesel and biofuels in a diesel engine can be different. For this reason, the change in soot concentrations according to fuels should be examined and in this context, it is necessary to determine the fuel that is advantageous in terms of its impact on the environment. However, the engine load at which the diesel engine is operating also affects the soot concentration. For this reason, it is of vital importance for human health, air pollution, climate crisis and global warming to reduce the soot emissions released into the environment to the minimum as possible. In this regard, in the present study, the soot concentrations obtained as a result of operating a diesel engine in different fuels and different engine loads are compared and examined in detail.

Keywords: Biofuel; Biodiesel; Diesel fuel; Engine load; Exhaust emission; Soot concentration.

PRODUCTION AND CHARACTERIZATION OF BORON-REINFORCED MULTICOMPONENT ALLOYS

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Abstract

Today, studies on the development of new materials as alternatives to traditional materials continue. Among these new types of materials, the use of multicomponent alloys is becoming increasingly common. Multi-component alloys are more attractive working areas due to their higher strength properties than classical alloy types. In this study, a multi-component alloy containing Cu-Fe-Co-Ni-V elements was produced, and then B element was added to this alloy in different ratios, and its effect on the properties of the alloy was investigated. The production of the multi-component alloy was carried out by powder metallurgy. The properties of the alloy obtained in tablet form after mixing, pressing, and sintering in the vacuum oven were determined by using Scanning Electron Microscope and integrated EDX system, XRF, XRD, and Vickers hardness device. The samples were taken to the arc furnace, vacuumed inside the oven and then filled with Argon gas at atmospheric pressure. Then, the arc was formed and the melting process was performed. The smelting process was performed in at least 5 repetitions The sample was expected to cool with each repetition and the same vacuuming and Argon gas process was repeated. The same processes were then carried out after the addition of B into the alloy, and the contributions of element B to the alloy were tried to be revealed. As a result of experimental studies, it was observed that different phase regions were formed with the addition of B element. It has also been determined that element B increases hardness by about 50%.

Keywords: Multicomponent alloys, boron, powder metallurgy, hardness.

A NEW SHIELDING PRODUCT AND AUTOMATIC RADIATION PREVENTION MECHANISM FOR RADIATION ROOMS

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Abstract

Personnel working in radiology units should be protected from the harmful effects of X-rays by wearing lead or lead equivalent aprons, thyroid armor, goggles, and gloves. Personnel should stay as far away from the source as possible and stay behind lead glass while the run images are being taken. However, in general, personnel do not use these products because of the weight of lead products and the thought that "nothing will happen". For this reason, a lead-coated automatic side-sliding mechanism has been developed for the observation window of the X-ray room control console. In order to monitor the patient, especially children, the automatic sliding mechanism that opens when the person approaches the window is designed to close when the person leaves. Thus, the X-ray room control console is isolated. The sliding mechanism system has been created and tested. It has been observed that the sliding mechanism makes photocell detection and opens and closes in a short time like 0.8 seconds. In addition, a new type of anti-radiation application method has been developed that allows the lead plate to be easily mounted on the wall instead of inside the wall by coating the lead plate with resin. Products produced with a 3D resin printer with dimensions of 40mm*40mm*5mm were exposed to Co-57. Each prepared radiation shield was exposed to the source for 1 minute and measurements were taken with the ÇNAEM NEB-211 dosimeter. While the radiation transmittance of only the lead plate was 4.76 mSv, the radiation transmittance of the resin-coated products was 4.38 mSv. Thus, both the lead plate was covered and the radiation prevention feature was improved by 8%.

Keywords: Radiation shielding product, automatic anti-radiation mechanism, Co-57, lead plate coating, radiation room.

Acknowledgments

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RADYASYON ODALARI İÇİN YENİ BİR ZIRHLAMA ÜRÜNÜ VE OTOMATİK RADYASYON ÖNLEME MEKANİZMASI

Özet

Radyoloji ünitelerinde çalışan personelin kurşun veya kurşun eşdeğeri önlükler, tiroid zırhları, gözlükler ve eldivenler giyerek X-ışınının zararlı etkilerinden korunmaları gerekmektedir. Personelin kaynaktan mümkün olduğunca uzak durması ve run görüntüler alınırken personelin kurşun cam arkasına geçmesi gerekir. Ancak genelde personel, gerek kurşun ürünlerin ağırlığı gerekse "bir şey olmaz" düşüncesiyle bu ürünleri kullanmamaktadır. Bu nedenle, röntgen odası kumanda konsolunun gözetleme penceresine kurşun kaplamalı otomatik yana kayar bir mekanizma geliştirilmiştir. Hastanın, özellikle de çocukların, gözetlenmesi için personelin cama yaklaşması halinde açılan otomatik kayar mekanizma, personel uzaklaştığında kapanacak şekilde tasarlanmıştır. Böylece, röntgen odası kumanda konsolu izole edilmiştir. Kayar mekanizmalı sistem oluşturulmuş ve test edilmiştir. Kayar mekanizmanın fotoselli algılama yaptığı ve 0.8 saniye gibi kısa bir sürede açma ve kapama yaptığı görülmüştür. Ayrıca, kurşun plaka üzeri reçine ile kaplanarak kurşun plakanın duvar içerisine montajı yerine duvar üzerinde kolayca montajına imkan sağlayan yeni tip bir radyasyon önleyici uygulama yöntemi geliştirilmiştir. 3D reçine printer ile 40mm*40mm*5mm boyutlarında üretilen ürünler Co-57 kaynağına maruz bırakılmıştır. Hazırlanan her bir radyasyon zırhı 1 dakika kaynağa maruz bırakılıp ÇNAEM NEB-211 dozimetre ile ölçümler alınmıştır. Sadece kurşun plakanın radyasyon geçirgenliği 4.76 mSv ölçülürken reçine kaplı ürünlerin radyasyon geçirgenliği 4.38 mSv olarak ölçülmüştür. Böylece, hem kurşun plaka kaplanmış hem de radyasyon önleme özelliği %8 geliştirilmiştir.

Anahtar Kelimeler: Radyasyon zırhlama ürünü, otomatik radyasyon önleme mekanizması, Co-57, kurşun plaka kaplama, radyasyon odası

IMPACT OF MAINTENANCE ON PUMP PERFORMANCE

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Abstract

High pressure boiler feed water pumps (HPBFWPs) used in power plants are pumps that feed the water from the feed water tank to the boiler to convert it into steam. Sufficient pumping capacity is provided to meet flow requirements under all operational conditions by a set of at least two pumps capable of operating and sustaining the unit. The aim of this study is to determine the performance degradation of HPBFWPs in a multi-pump system used in power plants and to make a comparative analysis of their importance. Implementing a comprehensive and ongoing maintenance program can solve many problems. Stator, rotor, and bearing defects are responsible for more than 90% of motor failures. Pump performance may suffer from a variety of defects, including shaft misalignment, eccentricity, bearing faults, stator faults, and rotor faults. By using developments in mechanical engineering and artificial intelligence-based techniques, malfunctions of rotating machines can be detected early, and at this point, periodic maintenance and follow-ups are highly beneficial. In this study, the performance variation of the high pressure boiler feed water pump in the boiler feed water system used in a power plant before and after maintenance is analyzed. It was observed that the performance improvement ratio at the valve opening rate of 70% has a maximum value of 29% and the optimum value of a valve opening rate lies between 23% and 29%. With the increase in the flow rate of the pump after the maintenance, it has been observed that the pump has 8% more performance than before the maintenance. Therefore, it has been observed that regular maintenance of the pumps can lead to significant performance increases in the pumps after the maintenance.

Keywords: Feed water boiler pump, maintenance, service, performance enhancement.

POMPA PERFORMANSI ÜZERİNDE BAKIMIN ETKİSİ

Özet

Güç santrallerinde kullanılan yüksek basınçlı kazan besleme suyu pompaları (YBKBSP), besi suyu tankından aldığı suyu buhara dönüştürmek için kazana besleyen pompalardır. Üniteyi çalıştırabilen ve devamlılığını sürdürebilen en az iki pompadan oluşan bir set tarafından tüm operasyonel koşullar altında akış gereksinimlerini karşılamak için yeterli pompalama kapasitesi sağlanır. Bu çalışmanın amacı, güç santrallerinde kullanılan çok pompalı bir sistemde YBKBSP'in performans düşüşünü belirlemek ve öneminin karşılaştırmalı analizini yapmaktır. Kapsamlı ve sürekli bir bakım programını yürürlüğe koymak, birçok problemi çözebilir. Stator, rotor ve yatak kusurları, motor arızalarının %90'ından fazlasından sorumludur. Pompa performansı, mil hizasızlığı, eksantriklik, yatak arızaları, stator arızaları ve

rotor arızaları dahil olmak üzere çeşitli kusurlardan zarar görebilir. Makine mühendisliğindeki gelişmeler ve yapay zeka tabanlı teknikler kullanılarak, dönen makinelerin arızaları erken tespit edilebilmekte ve bu noktada periyodik bakım ve takipler oldukça faydalıdır. Bu çalışmada, bir santralde kullanılan kazan besi suyu sisteminde yüksek basınçlı kazan besi suyu pompasının bakım öncesi ve sonrası performans değişimi analiz edilmiştir. %70'lik valf açılma oranındaki performans iyileştirme oranının maksimum %29'luk bir değere sahip olduğu ve bir valf açılma oranının optimum değerinin %23 ile %29 arasında olduğu görülmüştür. Bakım sonrası pompa debisinin artması ile pompanın bakım öncesine göre %8 daha fazla performans gösterdiği gözlemlenmiştir. Bu nedenle pompaların düzenli bakımlarının bakım sonrası pompalarda önemli performans artışlarına yol açabileceği gözlemlenmiştir.

Anahtar Kelimeler: Besleme suyu kazan pompası, bakım, servis, performans geliştirme.

DIGITAL TWINS AND ITS MANIFOLD APPLICATIONS

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Abstract:

The intent of this article is to identify the most impactful research on digital twins and to map the conceptual and intellectual structure of its field of study. The articles reviewed were obtained from a search of 4 databases, comprising 924 articles published between 2000 and 2021. Through a systematic review of the literature related to digital twins, this paper aims to provide an updated landscape of the main elements of DTs, their specifications and interaction issues, describing existing research and technical issues in the development and construction of DTs, according to the different application domains and associated technologies. For this effort, the main questions we answer here are "What is a digital twin?"; "How to implement a digital twin?"; "What are the benefits of a digital twin?". Finally, to identify current and future trends that could encourage new research opportunities and formats, and thus fill existing research gaps. Accordingly, this article provides researchers with guidance for future research, highlighting the most important contributions on the topic and identifying trends in this research area.

Keywords: Digital twin, Bibliometric Analysis, Industry 4.0

UX STUDY ON HANDHELD AUGMENTED REALITY GAMES BY APPLYING SPRADLEY'S NINE DIMENSIONS DESIGN PRINCIPLE

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Abstract

The first step in researching augmented reality was making a head-mounted three-dimensional display at the beginning of 1968. The idea behind a three-dimensional display is to show the user a perspective image from a different point of view that changes as the user moves. Since that time, the majority of growth in augmented reality has been driven by technology. The researcher's emphasis on AR's technological aspects, such as its hardware and software, has resulted in very few initiatives directed toward user experience and exploration studies. To address the transition of the notion of augmented reality from research/laboratories to the general user, it is necessary to approach the technology in a more user-friendly, user-centric manner. In this study, we focus on handheld augmented reality (HAR) gaming applications and propose to employ Spradley's nine dimensions to investigate components of handheld augmented reality experience so that designers may comprehend the human-centric design approach. we posed a questionnaire to a diverse sample of 215 individuals. After the questionnaire we select 35 individuals and provide them our iPhone11 to play AR Gamest for direct observation. In the result we found out 61.9% user know about HAR games, 8.1% of users played the AR game without understanding that it is known handled augmented reality implies that even after utilising augmented reality, many are unaware of it. 28.2% (strongly agree) and 32.5% (agree) on the issue that it is easier to get skilled at AR games. We conclude our research by finding out there are 4 insights related to the HAR games. The detail about these insights are discussed in context with the human-centric design in HAR games.

Keywords: handheld augmented reality (HAR), user-centric, Spradley's nine dimensions, human-centric design

DEVELOPMENT OF MAİNTENANCE COST ESTİMATİON FOR SMALL HYDRO POWER PLANTS

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Abstract

In this study, a new equation model is proposed to improve the maintenance costs of small-scale hydroelectric power plants (SHP). The proposed equation model consists of 4 terms and 7 parameters using the Peafowl (Pavo muticus/cristatus) Optimization Algorithm (POA). In this case, the average error value for 14 maintenance items required for a SHP was calculated as 17.4819%. The maintenance cost of a SHP to be installed in this way can be predicted with high accuracy using the proposed equation model. In the study, the sensitivity analysis of the proposed equation model was also performed, and maintenance cost changes were expressed in different parameter values. In the study, corrected data from 8 SHP in India were used. These data cover the maintenance costs of all components for the years 2015-2016. In the study, unlike the literature, the flow parameter was added to the power and head parameters. In this way, a more sensitive equation model was developed for SHP data. In addition, realistic results were obtained by applying constraints to the parameters. Considering the 14 different maintenance cost parameters examined in the study, a correlation model was proposed to give better results than the literature for other maintenance costs except the power channel and penstock cost.

Keywords: Small-Scale Hydroelectric Power Plants (SHP), Maintenance Cost Estimation, Sensitivity Analysis

TECHNO-ECONOMİC ANALYSİS OF THE CONVERSİON OF VESSELS TO GREEN: THE CASE OF VAN LAKE

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Abstract

In the study, an alternative approach is proposed for the fuel consumption of sea vehicles. This approach includes the production and storage of green hydrogen with zero carbon emissions and different fuel types. For this, 19 different situations were analyzed, including the internal combustion engine of sea vehicles. Among the analyzed cases, different use cases of hydrogen were also considered. These are compressed and liquefied hydrogen. In addition to this use case, different fuel cell operating conditions are also examined. These fuel cells are Polymer electrolyte membrane fuel cells (PEMFC) and solid oxide fuel cell (SOFC).In the study, Van Lake, Türkiye's largest lake, where maritime transport is actively used, has been examined as a sample location. The study was carried out in three stages. As a first stage, the annual energy needs of the vessels on Van Lake were calculated. As a second stage, it has been suggested that the energies needed by sea vehicles should be met from different sources. As a final stage, the yields of the different scenarios examined, including their sub-components, were compared. As a result, the use of compressed hydrogen in fuel cells gave the highest efficiency with 30.59%. On the other hand, the use of marine gas oil gave the lowest efficiency with 13.85%.

Keywords: Van Lake Basin, Hydrogen Energy, Techno-Economic Analysis

BRAIN ANEURYSYM DETECTION USING IMAGE PROCESSING TECHNIQUES

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Abstract

The aim of this study is to evaluate whether image processing techniques can increase the detection sensitivity of radiologists for intracranial aneurysms that cause vital aneurysmal subarachnoid hemorrhage in cerebral computed tomography angiography (CTA). Brain aneurysms are examined under three headings: saccular, fusiform and ruptured. In the study, data from patients with non-ruptured saccular brain aneurysm were used.The process steps of the method are 3 stages and in the first stage; the medical image data of the patient with an aneurysm with a cerebral CTA image were examined. In order to detect the aneurysm during the segmentation process, different image processing techniques were applied and preprocessed. In the second stage, thresholding techniques, sharpening, masks and filters were used to reduce the noise value and image enhancement was performed on 3D cerebral CTA thin-section coronal images for image processing. In the last stage, regional analysis was performed for the brain aneurysm detected by the segmentation process.MatLab software was used for this analysis. For a new approach proposed in the study, values such as area, diameter, maximum and minimum axis distances were calculated as numerical data for each region determined as a result of filtering techniques in the medical image. As a result of the study, the cerebral computed tomography angiography (CTA) images of the patient were examined, the aneurysm was detected and numerical data analysis was performed for the aneurysm size.

Keywords: Image processing, Brain aneurysm detection, Cerebral CTA

EXAMİNATİON OF PRE-OP AND POST-OP SEREBRAL ANEURYSM IMAGES

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Abstract

In this study, the clipping process was investigated using image processing techniques. Clipping is done by craniotomy method. Craniotomy is a clipping procedure applied to a ruptured aneurysm by removing a portion of the skull. Aneurysm is the morphological change that occurs with the enlargement of the vessel wall structure in the arteries. An aneurysm that occurs in the brain vessels is called a cerebral or intracranial aneurysm. As a result of the pressure exerted by the blood flow in the vessels, dilatation or ballooning occurs. This vascular weakness causes rupture (vascular rupture) in the aneurysm. The biggest danger of aneurysm is that it can rupture in the vessel and cause brain hemorrhage.The study consists of two stages. First, a preoperative and postoperative computed tomography angiography (CTA) image data pool was created for the patient with a ruptured aneurysm. Then, by applying image processing techniques, ruptured and non-ruptured medical images in different time periods were examined. In the preoperative images, it is seen that the ruptured aneurysm was clipped at the end of the operation. As a result of the procedure, it was observed that the aneurysm was non-ruptured.As a result of the study, it was determined that the preoperative aneurysm area, perimeter, and axis distance values increased according to the image processing data. On the other hand, it was observed that these values decreased in the data obtained posroperative.

Keywords: Image processing, Craniotomy, Ruptured Aneurysm, Cerebral CTA

AUTOMATİC SQL TUNİNG ADVİSOR FOR POSTGRESQL

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Abstract

Relational Database Management Systems have been developing for years. PostgreSQL is the most preferred open source database for storing high-size data. PostgreSQL is the most used open source database in startup projects and public institutions. Closed source Oracle is the market's flagship within the Relational Database Management Systems. Oracle's licensing costs cover a large portion of public institutions' computing budgets, and this reason leading all public institutions to open source solutions. As Oracle is the oldest relational database management system developer, Oracle has developed a variety of user-friendly interfaces and management tools for database administrators to facilitate database management activities. In addition, there are no advanced administrative tools available for PostgreSQL, and therefore people who have no experience in database management and the public instituons afraid to choosing PostgreSQL for database usage. The performance of databases is the primary requirement and database administrators spend most of their time on performance improvement. This study explores solutions that will facilitate SQL Tuning for the postgresql database so that database performance management can be facilitated with a pre-prepared SQL Tuning tool, as in Oracle, and improve PostgreSQL utilization, which will help to free public institutions from licensing costs and enable existing projects to work with more efficient resource utilization. The future stages of the work aim not only to get SQL Tuning recommendations also get better recommendations for database parameters , and to store more effective data with recommendations for vacuum operations. Because open source system administrators are familiar with working on the Terminal, the aim is to develop command line interface but also a graphical user interface for those who are not familiar with the database management technologies and those who are new to open source system management.

Keywords: Oracle, PostgreSQL, index, vacuum, tuning, automatic tuning, advisor, RDBMS, database, Sql Access Advisor, SQL Tuning Advisor

MOLECULAR DOCKING AND DYNAMICS STUDY OF NATURAL COMPOUNDS AS TG2 INHIBITORS ASSOCIATED WITH CELIAC DISEASE

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Abstract

Celiac disease (CD) also known as Gluten intolerance, is a genetically predisposed autoimmune disorder characterized by a unique serological and histological profile caused by gluten consumption. People with celiac disease have one or two HLA alleles in the genome: HLA DQ2 and/or HLA DQ8 (Banaganapalli et al., 2020). These alleles are responsible for specific major histocompatibility complex molecules (MHCs), which are antigen-presenting cells surface receptors. The HLA DQ2 and HLA DQ8 are proteins that only can bind to glutamate (deamidated gluten peptide). The celiac disease began in the gastrointestinal tract when transglutaminase 2 (TG2) deamidated gluten peptides to glutamate (immunotoxic peptides). Despite extensive investigation on celiac in human no comprehensive computational analysis has been done to identify an effective ligand from phytochemicals to inhibit TG2 in celiac disease. In the current study, the main phytochemical compounds of Nigella sativa were screened for their binding affinity for the active site of the TG2. The binding affinity was investigated using molecular docking methods, and the interaction of phytochemicals with the TG2 active site was analyzed and visualized using suitable software. Out of the nine phytochemicals of N. sativa screened in this study, a significant docking score was observed for four compounds, namely α-hederin, dithymoquinone, nigellicine, and nigellidine. Based on the findings of our study, we report that α-hederin, which was found to possess the lowest binding energy (–8.7 kcal/mol) and hence the best binding affinity, is the best inhibitor of TG2, among all the compounds screened here. Our results prove that the top four potential phytochemical molecules of N. sativa, especially α-hederin, could be considered for ongoing drug development strategies against celiac disease. However, further in vitro and in vivo testing are required to confirm the findings of this study.

Keywords: Nigella Sativa; Celiac Disease; Docking; In silico; Phytochemical; TG2

AKILLI SENSÖRÜN TASARIMI VE OTOMASYON SİSTEMLERİNDEKİ ETKİSİ

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ÖZET

Literatür taramaları ve piyasa analizi yapıldığında, endüstriyel otomasyon sistemlerinin çok açık bir şekilde hız kesmeden yayıldığını görebiliyoruz. Endüstriyel üretimin verimini arttırmak için üretim teknolojilerinin akıllı olacak şekilde tasarlanması ve hatlarda oluşacak arıza durumundan sonra arıza onarımının 3M (Maintenance and Material Management) açısından hızlı yapılabilmesi için modülerlik önemli bir stratejidir. Sanayi devriminin önemli bir konusu olan akıllı fabrikaların oluşumunda akıllı sistemeler çok önemli elemanlardır. Akıllı fabrikalar birbirleriyle haberleşme yeteneğine sahip akıllı elemanlardan oluşur ve aynı zamanda kendi kendine veri işleme özelliğine sahiptirler. Geniş yelpazede yayılan akıllı üretim tesislerinin üretim işlemlerinin tek bir CPU (Central Processing Unit) ile yapılması hem veri işleme yükünü arttırır hem de yazılımda karışıklığa neden olur. Akıllı sensörlerin konum, uzunluk, yükseklik gibi fiziksel nicelikleri algılayıp, çeşitli dönüşümleri yapıp, analiz edip merkezi işlemci birimine talep edilen sonucu geri dönüş olarak aktarması daha verimli bir sistem tasarımına olanak sağlayacaktır.Bu çalışmada geleneksel bir analog sensörü, yukarıdaki amaç doğrultusunda IOT uygulamalara uyum sağlayacak şekilde akıllı sensöre dönüştürülmüştür. Sensör PLC (Programmable Logic Circuit) 'lerle hızlı ve hassas bir şekilde iletişim kurabilmek için ek bir mikro denetleyici ve ethernet iletişim protokolü ile donatılmıştır. Bazı zorunlu uygulama ayarları için OLED ekranı entegre edilmiştir. Bu zorunlu ayarlar dahili ekranın yanında PC GUI ile de yapılabilmektedir. Sensör mesafe ölçtüğünde analog sinyalini mikro denetleyiciye aktarır ve analog sinyalinin anlamlı dönüşümleri mikro denetleyicide yapılarak PLC'ye sadece bir dijital sinyal aktarılabilir. Bu dijital sinyalin tekabül ettiği eşik değer gerçek zamanlı PLC tarafından ethernet haberleşme protokol üzerinden de değiştirilebilir. Haberleşme protokolü üzerinden gerçek zamanlı ölçülen mesafede alınabilir.

KEYWORDS: Akıllı Fabrikalar, IOT, Otomasyon Teknolojileri, Sensörler, PLC.

CYBERATTACK RISKS AND POTENTIAL THREATS FOR AUTONOMOUS VEHICLES

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Abstract

Developments in the field of autonomous vehicle technologies have gained great momentum in recent years. The development of autonomous vehicles utilizing advanced artificial intelligence and software has brought with it some potential risks and cybersecurity challenges. With a Vehicle-to-Everything (V2X) vehicle, especially essential for the deployment of autonomous vehicles, all components that can affect or be affected by the vehicle further increase security risks as they greatly expand the potential attack surface and attack vectors. Although these vehicles, which work with artificial intelligence-based software, increase driver safety and comfort, the risk of causing loss of life and property due to external cyber attacks is very high. For this reason, it becomes extremely important to identify and analyze the threats and cyber security risks related to autonomous vehicles and to put forward security measures. Within the scope of the paper, potential threats and cyber attack risks for autonomous vehicles; In-vehicle network attacks, GPS spoofing attacks, Location tracking attacks, Nearest vulnerability attacks (Bluetooth, Tire Pressure Monitoring, Message forgery, Key and Keyless hijacking), Infrastructure attacks. In the paper, threat and cyber security requirements related to autonomous vehicles are defined according to the basic concepts of Confidentiality, Data integrity/consistency, Authentication, Usability and Non-Repudiation. The paper covers the determination, analysis and necessary security measures of the basic requirements that are dynamic, sensitive to threats, defensible against threats and take early precautions against threats in order for autonomous vehicles to drive safely and successfully.

Keywords: Autonomous Vehicles, Cyber Security, Artificial Intelligence, V2X Protocols

A NEW DEEP LEARNING-BASED APPROACH FOR AUTOMATED KIDNEY STONE DETECTION FROM CT SCANS

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ABSTRACT

Kidney stone disease has been increasing worldwide in recent years. Various medical imaging methods such as (Computed Tomography) CT, ultrasonography and MRI (Magnetic Resonance Imaging) are utilized to detect and locate kidney stone. Among them, CT is the most widely utilized imaging modality. However, in the diagnosis of kidney stones, interpretation of CT scans is a time-consuming, laborious and experience-requiring process. In this study, a new deep learning-based model is proposed for automatic kidney stone detection from CT scans. In the proposed model, transfer learning and fine-tuning strategies are employed and model achieved 99.6% classification accuracy for 10-fold cross validation. The high classification accuracy achieved shows that the proposed model can be used as a tool to assist the specialist for kidney stone detection. It also automates the interpretation process, thus minimizing specialist errors.

Keywords: Machine learning, Deep learning, Kidney stone detection, Transfer learning

MONITORING AND MANAGEMENT OF WEEDS IN HAZELNUT ORCHARDS

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Abstract

Hazelnuts is strategic crop for economic of Georgia. For the production its takes 3rd place in the world after Turkey and Italy. Therefore, it is very importante to protect them from harmful pest such insects, diseases, weeds. They damage caused by harmfulness often acheved 40-50%, where the share of weeds is 30%. In order to obtain a high-quality, environmentally friendly product, it is necessary phytosanitary monitory of hazelnut plantations and mange effectively control measures.In order to determine the weeds composition were carried out in the regions of Western Georgia (Guria, Samegrelo). Weeds of economic importance were identified and dominance species was determined. Pteridium tauricum L., Rubus fruticosus L., Spiraea japonica L., Artemisia absinthium L., Euphorbia, Pollinia imberbis Nees are mostly spread in Lanchkhuti municipality and Pollinia imberbis Nees is dominant. The species spectrum of weeds in Zugdidi municipality is as follows: Pteridium tauricum L., Rubus fruticosus L., Euphorbia, Smilax excels L., Ambrosia artemisiifolia L., which dominate. In Zugdidi and Lanchkhuti municipalities, new registered herbicides of the glyphosate group - Chouli - 2-4 l/ha, Clin - 3 l/ha, Cleaner Extra - 3 kg/ha were used against weeds. They efficiency reach 85-90%, which continued until the end of vegetation and is not phytotoxic to hazelnuts.An alternative method to control weeds is biological, although bioherbicides are not registered in Georgia yet. Therefore, in order to suppress weeds, siderate - Lathyrus sativus L was sown in the hazelnut plantations, and Trifolium repens L for the cordwoods. Also mulch was made with weeds.Soil samples were taken from the experimental plots, where Lathyrus sativus L. and Clover, as a soil fertility were used and additional, has increased, which is caused by the formation of nitrogen in they roots. An exception is the case of mulch, where no positive change is recorded.

Keywords: Hazelnuts, Chemical herbicides, Bioherbicide, Control

THE AGRICULTURAL POTENTIAL OF LIBERATED TERRITORIES

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ABSTRACT

Agriculture is a priority area for Azerbaijan. The Karabakh region is of great importance in this field. Due to the development of agriculture in the territories freed from occupation, unemployment will be eliminated, local production will be developed, and the country's economy will be more stable. Considering that approximately 50 percent of the population of Azerbaijan lives in villages, this is a big social issue. Therefore, in the next years, of course, all these issues will be considered in the state investment program. In the coming years, more attention should be paid to the development of villages. The natural resources of the liberated territories, especially the agricultural potential, are of great importance for the economic development of our country. Work on the development of agriculture has already started in these lands. Residents who once owned farms in Karabakh plan what they will do after returning. In the pre-occupation period, the territory of Karabakh had high agricultural indicators. Most of the production of grain, cotton, grapes, meat and milk, wool and cocoons in the country fell to those areas. Preparations are now being made to restore the region to its former agrarian glory. Plans have been prepared to provide agricultural machinery, seeds, fertilizers and other necessary tools to the residents who will be engaged in agriculture after the settlement process begins. The region has great potential for the production of export-oriented agricultural products. In the article, factors such as crop production, animal husbandry, soil structure and climatic conditions were included in the context of the agricultural area of the territories freed from occupation.

Keywords: Azerbaijan, agriculture, occupation, liberated, territories, development, priority.

DETERMINANTS OF HOUSEHOLD FOOD SECURITY AND COPING STRATEGIES IN NORTHERN GHANA

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Abstract

Household food insecurity is gradually being acknowledged as a public health issue in Sub-Saharan Africa. However, little is known about the actions that food insecure households take in the case of a food crisis. We used ordered probit, count data, and Tobit models to investigate the drivers of food insecurity and the extent of household food coping mechanisms in the face of food deficit. The food consumption score and food insecurity experience scale indicators were used to measure food insecurity situations in the study area, while the coping strategy index was used to estimate the extent of food coping mechanisms used in the face of food deficit. The study found that the primary coping techniques used by the sampled households included eating less favorite meals, lowering the number of meals eaten per day, and reducing the size of the meals eaten. The severity of a household's food insecurity status was determined by a variety of household demographic factors, asset accumulation and policy-driven factors. While households with a high number of assets, participate in non-farm activities, and have access to extension used less approaches to overcome food shortages, those with a large number of wards in school used more coping strategies in the event of food shortages. Households should be encouraged to diversify their income sources, and create both capital and social assets in order to increase their resilience to food insecurity circumstances.

Keywords: Food scarcity; household food coping strategy index; food consumption score; food insecurity experience scale

POLİETİLEN TEREFTALAT (PET) BİDONLAR İÇİNE KONULAN SALAMURA BEYAZ PEYNİRLERDE OLGUNLAŞMA VE MUHAFAZA SÜRECİNDE BİSFENOL A (BFA) MİGRASYONUNUN BELİRLENMESİ

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Özet

Bisfenol A (BFA), özellikle polikarbonat plastiklerin ve epoksi reçinelerin üretiminde yüksek oranda kullanılan bir kimyasaldır. Bu çalışma, salamura beyaz peynirin yapım, olgunlaşma ve muhafaza sürecinde BFA migrasyonunu incelemek amacıyla yapıldı. Çalışmada, peynir üretiminde kullanılan süt, peyniraltı suyu (PAS), teleme, salamura ve peynir BFA, yağ, kuru madde, pH ve asitlik (% lak.asit cin.) bakımından; peynir mayası , salamura çözeltisi ve plastik bidonlar (PET ambalajlar) BFA yönünden incelendi. Araştırma 3 tekrar yapıldı ve her tekrarda iki örnek incelendi. Bu amaçla Kontrol ve BFA içeren (çiğ inek sütüne 1mg/lt dozunda BFA ilave edildi) iki grup peynir üretildi. Elde edilen telemeler 250 g'lık PET ambalajlara konuldu ve üzerine %18 NaCl içeren salamura çözeltisi İlave edilip, +4°C'de 270 gün muhafaza edildi. Muhafazanın 120., 150., 180., 210., 240. ve 270. günlerinde ilgili analizler yapıldı. Araştırmada toplam 36 adet PET ambalaj, 36 adet peynir, 36 adet peynirin içinde olgunlaştırıldığı salamura çözeltisi 6 adet süt örneği, 6 adet teleme, 6 adet peynir altı suyunda (PAS) 3 adet peynir mayası ve 3 adet salamura solüsyonu olmak üzere toplam 132 BFA analizi yapılmıştır. Örneklerde BFA ektraksiyonunda katı faz ekstraksiyon yöntemi uygulandı ve HPLC ile tespit edildi. Analizi yapılan salamuraların BFA miktarları Kontrol grubunun (SK) 0.70±0.28 mg/kg, BFA grubunun (SB) ise 12.68±11.07 µg/kg olmuştur. Peynirlerin BFA miktarları ise Kontrol grubu peynirlerin (PK) BFA miktarı 1.17±1.01 µg/kg BFA grubu peynirlerin (PB) BFA miktarı ise 9.78±2.37 µg/kg olduğu bulunmuştur.Muhafaza süresi, pH, asitlik, yağ, tuz ve kuru madde ile BFA oranı arasında korelâsyonun önemli olmadığı gözlendi($p>0,05$). BFA içeren salamura peynirlerin konulduğu PET'lerde BFA miktarı, kontrol grubu ve kullanılmamış PET'lere oranla oldukça yüksek saptandı. BFA içeren PET'ler, kontrol grubu PET'ler ve Kullanılmamış PET'lerin BFA miktarları sırasıyla 0,170±0,08 µg/kg, 0,039±0,028 µg/kg ve 0,020±0,006 µg/kg olmuştur. BFA miktar bakımından PET'ler arasında önemli bir farklılık tespit edildi ($p<0.05$). Bu durum peynir ve salamura çözeltisinden PET ambalajlara BFA migrasyonunun olduğunu kanıtlamaktadır.

Anahtar Kelimeler: BFA , Migrasyon, PET, Salamura Beyaz Peynir

DETERMİNATİON OF BİSPHENOL A (BPA) MİGRATİON DURİNG RİPENİNG AND PRESERVATİON PROCESS İN BRİNE WHİTE CHEESE RİPENED İN POLYETHYLENE TEREPHTHALATE (PET) PACKAGES

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Abstract

Bisphenol A (BPA) is a highly used chemical, especially in the production of polycarbonate plastics and epoxy resins. This study was carried out to examine the migration of BFA in the production, ripening and storage processes of brined white cheese. In the study, milk used in cheese production , whey, curd, brine and cheese were analyzed in terms of BPA, fat, dry matter, pH and acidity (lac.acid %).Moreover, rennet, brine solution and PET packages were analyzed in terms of BPA. The study was repeated in three times and two analyzes were performed in each time. For this purpose, two groups of cheese were produced. The first group was the BPA group, in which 1 mg/lt BFA was added to raw cow's milk, and the other was the control group. The obtained curds were placed in 250 g PET packages and a brine solution containing 18% NaCl was added on it and stored at +4C^{o} for 270 days. BPA and chemical analyzes were performed on the 120th, 150th, 180th, 210th, 240th and 270th days of Storage. In the research, a total of 132 BFA analyzes were analyzed, including 36 PET packaging, 36 cheese, brine solution in which 36 cheese was ripened, 6 milk samples, 6 curd, 6 whey ,3 rennet and 3 brine solutions. Solid phase extraction method was applied in BPA extraction in samples and detected by HPLC. BPA amounts of control group brines, BPA group brines , control group cheeses and BPA group cheeses were 0.70±0.28 µg /kg , 12.68±11.07 µg/kg, 1.17±1.01 µg/kg and 9.78±2.37 µg/kg respectively. It was observed that the correlation between storage time, pH, acidity, fat, salt and dry matter and BPA amount was not significant ($p>0.05$).Finally , the amount of BPA in PETs containing BPA brined cheeses was significantly higher than the control group and unused PETs. BPA amounts of BPA containing PETs, control group PETs and unused PETs were 0.170±0.08 µg/kg, 0.039±0.028 µg/kg and 0.020±0.006 µg/kg, respectively. This shows that there is a significant difference between the groups and explains the possibility of BPA migration from food to package ($p<0.05$).

Key Words: BPA, Migration, PET, Brined White Cheese

DIFFERENT BREEDING SYSTEMS EFFECTS ON BLOOD, FATTY ACID AND AMINO ACID PROFILES IN NATIVE TURKISH GEESE

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Abstract

The aim of this study was to examine the effect of breeding in intensive and semi-intensive systems native Turkish geese on blood, fatty acid and amino acid properties. Geese reared under the same conditions for the first 4 weeks were fed ad libitum. As of the 5th week, they were divided into 2 groups as intensive (16 wk) and semi-intensive (28 wk) until slaughter. While the geese in the intensive system consume concentrated feed ad libitum, the geese raised in the semi-intensive system were given 50% of the feed consumed in the intensive system in addition to the pasture. Samples of blood serum, abdominal adipose tissue, thigh and breast muscles were taken from a total of 24 geese, 6 females and 6 males in each group. The effect of the breeding system on total cholesterol, HDL, LDL, triglyceride and albumin was found in blood samples taken from vena jugulars ($P<0.05$). It has been determined that the breeding system has no effect on total protein. Gender was found to have an effect only on HDL and LDL levels ($P<0.01$). Interaction between breeding system and gender was detected on HDL, LDL and triglyceride ($P<0.05$). It was determined that the breeding system and gender had no effect on the amino acid profile in the thigh and breast muscles and the fatty acid profile in the abdominal adipose tissue. In conclusion, in this study, it was determined that the breeding system did not have a significant effect on amino acids and fatty acids, but the total PUFA and MUFA values in abdominal adipose tissue were higher than the saturated fatty acid content. When it is evaluated in terms of human nutrition and cardiovascular health, consumers can use goose fat in their traditional dishes. Since essential amino acids constitute about half of the total amount of amino acids in the breast and thigh muscles of geese, they can consume goose meat as an alternative animal protein source in addition to being an economic benefit for people living in rural areas.

Keywords: breeding system, Turkish goose, geese, blood, fatty acid, amino acid

GROWTH PERFORMANCE AND METABOLIC PROFILES IN THE EARLY PERİOD OF HOLSTEIN CALVES FEEDING WITH TRANSITION MILK

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Abstract

This study was aimed to evaluate effects of feeding calves with transition in early preweaning period on growth performance and health status. Twenty calves with adequate passive transfer, recorded birth weight and fed with transition milk by 5 days of age were assigned to 2 equal number of treatment groups: Control (C) and Transition (T). The calves in C will be fed with normal bulk tank milk while those in T were fed with transition milk up to 21 days of age. Blood samples were collected from all calves in the first 1, 7, 14 and 21st days of age to analyze Ig G content and biochemical parameters. Body weight and feed consumption were recorded in the 7, 14 and 21st days of age. Fecal scoring was done daily and general health status was monitored. Feeding calves with transition milk in the early period had no significant effect on the average daily gain (ADG) and feed consumption efficiency (FCE) values. There was no significant effect on fecal score between C and T groups. While metabolic profile parameters were not significantly affected between the treatment groups, the effect of age was generally found ($P<0.01$). Significant interactions were determined between treatment and age on BUN, Ca, Mg, AST, glucose, cholesterol, albumen and BHB ($P<0.05$). As a result, no significant differences for growth performance and blood metabolites were occurred in calves fed with transition milk in early period of their life.

Keywords: transition milk, growth performance, metabolic profile, Holstein, calf

BIRTH RATE OF EUROPEAN BISON (Bison bonasus bonasus L. 1758) IN ROMANIA IN THE 2004 – 2020

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Abstract

European Bison population in Europe decreases due to the habitat damage, deforestation and lack of food. The males in the wild are usually most reproductive at an age of 6 to 12 years. As to females, they normally reach maturity by the age of 3 years. Reproduction intensity depends much on the amount and quality of food. The reproduction time slows down by the lack of food. Biological mechanism inhibits reproduction of the young that are not able to get food for survival that is for the good growth and right development. This mechanism works vice versa: the reproduction potential comes to the fore when there is plenty of food.The data from the European Bison Pedigree Book (EBPB) were used to analyse the natality of the European Bison in Romania. There were examined the total European Bison number, the gender ratio with number of born calves. The gender ratio of new-born calves was also analysed.There were 1.684 Eurpean Bison in Romania at the observed period of time. 912 of it were females (54,16%), and the rest of population were males (45,44%). The females number for the year of 2019 is not complete, and in the official EBPB document for the Armenis Forest, where European Bison live in the wild, females and males number is not indicated at all. Based on these incomplete data, the proportion of male calves is 55,07% and female calves is 44.93%.

Key words: European Bison, reproduction, population, natality rate.

GREEN SYNTHESIS OF NIO NANOPARTICLES USING *ALOE VERA* GEL EXTRACT AND EVALUATION OF ANTIMICROBIAL ACTIVITY

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A cost effective and eco-benign green synthesis was adopted for the synthesis of nickel oxide (NiO) nanoparticles (NPs) using Aloe vera gel and effect of temperature (300, 400 and 500 ˚C) of annealing was investigated on NPs properties. XRD showed formation of pure NiO NPs (face-centered-cubic) and the grain size was increased with temperature. Band gap of NiO NPs was 3.2 eV and refractive index was 2.65. Specific surface area annealed at 300 ˚C, 400 ˚C and 500 ˚C are 58.41 m^2/g, 42.19 m^2/gand 40.89 m^2/g, respectively. The antibacterial activity was evaluated against bacteria, Gram-negative (Escherichia coli, Pasturella multocida), Gram-positive (Bacillus subtilis, Staphylococcus aureus) and fungal (Aspergillus niger, Aspergillus flavus, Penicillium notatum) strains. The NPs annealed at 500 ˚C showed promising antibacterial activity in comparison to standards (Rifampicin and Fluconazol for bacterial and fungal strains, respectively). The antibacterial activity of NiO was higher versus antifungal activity. Results revealed that the Aloe vera gel has potential to prepare NiO NPs with promising antimicrobial activity for application in medical field.

Reference; Bilal,et al. Materials Chemistry and Physics. 288 (2022), 126363.

SACBROOD VIRUS INFECTION OF BEES IN SERBIA

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Abstract

One among many reasons for global bees-decline phenomenon is the influence of many viruses on honeybees' health. Viral diseases comprise a very large and least known area of bee pathology. One of the most common viral infections of bees in Serbia is Sacbrood virus. In the northern and southern parts of the country prevalence was from 54.5% to 83.6%. On the other hand, in the central, northern and western areas it ranges from 3.3% to 14.3%. The virus mostly affects worker larvae, but can also infect adult honey bees. SBV causes an uneven brood pattern with discolored, sunken or perforated cappings scattered throughout the brood. Larvae are thought to be infected by consuming brood food contaminated with SBV. The virus multiplies within the infected larvae causing it to display unusual behavior (such as sitting in cells with their head up).The infected larvae die shortly after capping before they pupate. The larvae then changes color from a white to a yellow and then brown. The skin of the larvae hardens and fills with a fluid which gives the impression of the larvae becoming a fluid-filled sac. The fluid contains viral particles, which allows the virus to spread and infect other bees. Over time the larvae dries out becoming a brown to black colored, brittle, scale that adheres loosely to the cell. The scales contain viral particles, providing another mechanism for spreading the virus. Infected adult bees do not show any obvious symptoms. However the hypopharyngeal glands (these are the glands that produce royal jelly/brood food) of nurse bees become infected. It is thought that infected nurse bees may spread the virus to larvae while feeding them brood food. Adult bees that have been infected with the virus tend not to feed larvae for long.

Keywords: Sacbrood virus, SBV, bee, Serbia

INVESTIGATION OF THE USAGE OF DIYARBAKIR BASALT IN DAM FILLING

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Abstract

Climate change, severe drought and wrong land use today the efficient use of agricultural land is important for the future of the generation. Humanity has been meeting its needs from nature since its existence. It has struggled with nature to meet these needs. Over time, the need for increasing proportionally with the population has increased the pressure on natural resources, and the level of welfare has increased as it controls natural conditions. With the industrial revolution, the negative pressure on these resources gradually increased as a result of the intense consumption of soil and water, which are natural resources. In order to reduce this pressure, cleaning the stones, which prevent agriculture, appears as an emergency action plan. Meeting the increasing material needs of the construction sector, which develops and grows depending on the population, can also have negative effects on natural resources. This need can be met with basalt stones, which create an unfavorable situation on agricultural land without causing damage to nature. Basalt stone has spread over a large area in the Diyarbakir Karacadağ region, which has particularly fertile agricultural lands. With population growth in Turkey with the effect of social and economic development in order to meet the increasing energy demand high quality, reliable, environmentally friendly and economical energy needs are constantly increasing. This situation requires making more use of renewable energy. It shows that the construction of hydroelectric energy dams, which is one of the leading sources of domestic and renewable energy, should be focused on in order to meet the increasing energy need. In this study, the use of basalt stones as a filling material used in the construction of dams, which have great contributions to the country's economy, was investigated.

Keywords: Dam, embankment, basalt stone, Diyarbakir, agricultural yield, sustainable energy

PREVENTIVE MAINTENANCE USING RECYCLED ASPHALT

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Abstract. This article addresses the importance of using recycled asphalt with the integration of road maintenance procedures in the road network. The road network is considered the main element of any national infrastructure development plan. The research aims to study and highlight the using recycled asphalt as a suggested sustainable method for road maintenance procedures. Recycled asphalt can be used as a sustainable material, there is a need to conduct an in-depth analysis to verify and quantify the effectiveness of the material, where the information is limited in the current literature. This study addresses the importance of using recycled asphalt with the integration of road maintenance procedures in the road network. This element is considered the main element of any national infrastructure development plan. The research aims to study and highlight the using recycled asphalt as a suggested sustainable method for road maintenance procedures.Therefore, the study elaborates on the historical use of recycled asphalt, its advantages, and disadvantages. Besides that, the maintenances process categories to ensure the suitable type that helps provide the best quality of the network. Since roadway pavement assessment is based on quality as well as different characteristics parameters such as rutting, cracking, pavement quality Index, and roughness in addition to other parameters.The primary method used in this study is the review of existing literature. It can be concluded that the use of recycled asphalt in road maintenance can become a viable and sustainable alternative to current road maintenance practices.

Keywords: Recycled asphalt, Roadway maintenance, Pavement Parameter, Condition Index, roadway quality

FABRICATION OF HYDROXYETHYLCELLULOSE -BASED FLOCCULANT: CHARACTERIZATION, AND FLOCCULATION PERFORMANCE

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Abstract:

In this study, a new flocculant, namely QC, was successfully synthesized. Various characterization techniques were used to study the structure and physicochemical properties of the flocculants. 1H nuclear magnetic resonance spectroscopy (1H NMR), Fourier transform infrared spectroscopy (FTIR), X-ray diffraction spectroscopy (XRD), and thermogravimetric analysis/differential scanning calorimetry (TG/DSC) confirmed the successful synthesis of QC. The novel flocculant was then used to flocculate the simulated wastewater of the kaolin suspension.Besides external factors, such as the dosage of flocculant pH, and the effect of

contact time was also evaluated. The experimental results showed that the flocculant also revealed excellent flocculation effect.

Key word: kaolin, flocculation, hydroxyethyl cellulose (HEC).

EFFECT OF GRAPHENE ON MICROSTRUCTURE AND HARDNESS PROPERTIES IN MULTI-COMPONENT ALLOYS

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Abstract

Multi-component alloys obtained as a result of technological studies have become a new field of study at all stages of the industry. In this study, Cu, Fe, Co, Ni and V elements were used to form the multi-component alloy structure. Elements were added at 40%, 15%, 15%, 15% and 15% by weight, respectively. Also added to the alloy was 1% by weight Graphene nanoplatelets (GNPs). Thus, two samples with and without GNPs were obtained. Elements used as micron-sized powder raw materials were pressed after a simple hand mixing. Pressing process was done with 20kg/mm2 pressure. The compressed powder materials in the form of tablets were melted. Alloys were produced under high temperature in the mini-arc furnace. The production was carried out with the help of an electric arc in a vacuumed environment. The produced alloys were examined in scanning electron microscope (SEM) and hardness (Vickers) test after sample preparation process. The obtained alloys were also subjected to X-ray diffraction (XRD), X-ray fluorescence (XRF) and Energy Dispersive X-Ray (EDX) analyzes. As a result of the examination, different phase regions where different elemental compounds were observed were obtained. The hardness map of the structure was drawn with the hardness test taken on a volumetric and regional basis. In addition, changes due to the effect of GNPs have been reported. With the addition of GNPs, thinning of the phases occurred and the hardness increased by about 40%. With the analysis studies (XRD, XRF and EDX) the effect of the GNPs structure was examined in detail. In this study, both a new multi-component alloy was produced and the effect of GNPs structure on the alloy was investigated.

KADASTRO MÜDÜRLÜKLERİNCE YAPILAN YÜZÖLÇÜMÜ DÜZELTMELERİNİN HAZİNE TAŞINMAZLARI YÖNÜNDEN DEĞERLENDİRİLMESİ

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Özet

Arazi, taşınamaz ve yok edilemez özellikte olmasının yanı sıra toplumların ve bireylerin akla gelebilecek olan bütün taşınabilir değer ve aktivitelerine mekân oluşturması bakımından vazgeçilemeyecek bir olgudur. Bu olgunun değerlendirilmesinde ortaya çıkan kullanım ve mülkiyet çeşitliliği, dünyamız üzerinde uçsuz bucaksız şekilde yer kaplayan arazileri sınırlandırarak belirli parçalara bölmeyi gerekli kılmıştır. Böylelikle her biri belirli bir geometri ve yüzölçümüne sahip olan parsel kavramı ortaya çıkmıştır. Neredeyse bütün literatürde "arazi" ismiyle tanımlanan taşınmaz varlıkların, sınırlandırılarak belirli bir yüzölçümüne kavuşturulması, geometrik bilgilerinin paftalara, metinsel bilgilerinin ise tapu kütüklerine kaydedilmesi suretiyle parsel halini alması süreci ülkemizde 3402 sayılı Kadastro Kanunu kapsamında gerçekleştirilmektedir.Kadastro Kanunu gereğince oluşturulan parseller, bir yerin kadastro çalışmasının yapıldığı tarihte tedavülde olan; alet-edevat, teknolojik yöntem ve teknik hesaplamalarıyla yapıldığı için günümüz teknolojisi ve hesaplama yöntemleriyle kontrol edilip karşılaştırıldığında, bu kanun kapsamında kadastrosu yapılarak kayıt altına alınmış olan parsellerin yüzölçümlerinde hataların çıkması kaçınılmaz olmaktadır. Bazen parsellerin sınırlarında ve yüzölçümlerinde, bazen de sadece yüzölçümlerinde var olan bu hatalara sıklıkla rastlanılması ve gerek teknik gerekse hukuki sebeplerce bu hataların düzeltilmesinin zorunluluk arz etmesi, "yüzölçümü düzeltmesi" denilen iş kalemini doğurmuştur. Öyle ki; 3402 sayılı Kadastro Kanunu'nun 41. maddesinde anılan yüzölçümü düzeltmesi işlemi, "Kadastro Sırasında veya Sonrasında Yapılan İşlemlerle Geometrik Durumları Kesinleşmiş Olan Taşınmazlarda Ölçü, Sınırlandırma, Tersimat ve Hesaplamalardan Doğan Hataların Düzeltilmesi Yönetmeliği" ve "Tapulama ve Kadastro Paftalarını Yenileme Yönetmeliği" gibi mevzuat çalışmalarının yürürlüğe konulmasını gerekli kılmıştır.Yüzölçümü düzeltmesi işlemi, yüzölçümü hatalı olan tüm parsellerde uygulanacağından dolayı bu kapsama mülkiyeti şahıslara ait olan parsellerle birlikte aynı zamanda mülkiyeti Devlete ait olan Hazine parselleri de dâhil olmaktadır. Tasarrufu Milli Emlak Genel Müdürlüğüne ait olan Hazine parsellerinin tabii tutulacağı yüzölçümü düzeltmesi iş ve işlemleri çeşitlilik ve yoğunluk arz etmekte olduğundan dolayı ilgili idare olan Milli Emlak Genel Müdürlüğünce bu konuda mevzuat hükümleri ihdas edilerek bu iş ve işlemlerde istikamet belirlenmiştir. Bunların ilk akla geleni ise "327 sayılı Milli Emlak Genel Tebliği'dir". Çalışmada Hazine parselleri üzerinde

gerçekleştirilen yüzölçümü düzeltmesi işlemleri irdelenerek bunlar hakkında izlenen yol ve belirsizlik olduğu düşünülen hususlarla ilgili gerçekleştirilecek süreç ortaya konulmaya çalışılmıştır.

Anahtar kelimeler: Yüzölçümü düzeltmesi, Hazine parseli, Kadastro Kanunu, Mülkiyet

THE EVALUATION OF THE LAND REGULATIONS MADE BY THE DIRECTORATES OF THE CADASTRE IN CONSEQUENCE OF PUBLIC PROPERTIES

Abstract

In addition to being immovable and indestructible, land is an indispensable phenomenon in terms of creating a place for all movable values and activities of societies and individuals. The diversity of use and ownership that emerged in the evaluation of this phenomenon necessitated dividing the vast lands on our world into certain parts by limiting them. Thus, the concept of parcels, each of which has a certain geometry and surface area, has emerged. The process of limiting immovable assets, defined as "land" in almost all the literature, to a certain area, recording their geometric information on maps and textual information on land registry, is carried out within the scope of the Cadastre Law No. 3402 in our country.The parcels created in accordance with the Cadastre Law, which were in circulation at the date of the cadastral survey of a place; Since the tools and equipment are made with technological methods and technical calculations, it is inevitable that errors will occur in the surface areas of the parcels that have been recorded by cadastre within the scope of this law, when they are checked and compared with today's technology and calculation methods. The fact that these errors, which sometimes exist in the borders and areas of the parcels, and sometimes only in the area, and the necessity of correcting these errors due to both technical and legal reasons, named to the work item called "area correction". So that; Area correction process referred to in Article 41 of the Cadastre Law No. 3402, “Regulation for Correction of Errors in Measurement, Limitation, Reversal and Calculations in Real Estates whose Geometric Conditions Have Been Determined During or After the Cadastre” and “Regulation for Renewal of Land Registry and Cadastre Sheets”. required to be put into effect.Since the surface area correction process will be applied to all parcels with an incorrect surface area, this coverage includes the parcels owned by individuals and the Public properties owned by the State at the same time. Due to the diversity and intensity of works and operations for the correction of the surface area to which the Public properties, which are owned by the General Directorate of National Real Estate, will be subject to, the relevant administration, the General Directorate of National Real Estate, has established the provisions of the legislation and the direction in these works and transactions has been determined. The first thing that comes to mind is the "National Real Estate General Communiqué No. 327". In the study, the surface area correction operations carried out on the Public properties were examined, and the process to be carried out regarding the issues thought to be uncertain and the path followed about them was tried to be revealed.

Keywords: Area correction, Public property, Cadastre Law, Property

INVESTIGATION OF LOW-VELOCITY IMPACT BEHAVIOUR OF CARBON/EPOXY LAMINATED COMPOSITE PLATES AS A BOAT BUILDING MATERIAL

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Abstract

Composite materials have been widely used in marine vehicles with newer technology and production methods. They are characterized by their high specific strength and stiffness ratios as well as corrosion and fatigue resistance. Besides they are preferable to traditional materials such as wood, steel and aluminium. Marine vehicles are exposed to severe sea conditions; static and dynamic effects, collision with other floating objects, grounding, slamming, low-speed harbour impact, falling impacts on their decks and impact loads that result in damage, from which they are expected to emerge being able to continue their task.In this study, firstly, an experimental study was carried out to investigate the mechanical performance of multiaxial carbon/epoxy composite plates in different layer sequences. Multiaxial carbon/epoxy plates, with vacuum-assisted resin infusion method (VARIM), with symmetrical layers and in different layer sequences ([0/90/45/-45]s, [90/45/-45/0]s, [0/90/0/90)]s, [45/-45/45/-45]s) were produced. Then, low-velocity impact (LVI) tests were carried out on the CEAST 9350 Fractovis Plus impact device. The different forms of damage were observed on the plates. As a result, it was determined that the low-velocity impact behaviour of the composite plates was significantly affected by the different layer sequences.With the information obtained from the experimental data, the data set was expanded in the continuation of the study, and numerical simulations for different layer sequences were carried out with commercial finite element software LS-DYNA, and the structures in the optimum array were investigated. The data obtained from the study will be used to determine the most suitable parameters for the preliminary design stage of the composite boats. Thus, labour, cost and time will be saved in production.

Keywords: Carbon-epoxy composite plates, low-velocity impact (LVI), experimental study, LS-DYNA

Acknowledgements

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INVESTIGATION OF THE EFFECT OF GLASS AND HEMP FIBER-REINFORCED ALUMINUM COMPOSITE SANDWICHES ON EDGEWISE COMPRESSIVE STRENGTH

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Abstract

Composite sandwiches are widely used in aviation, defense, marine, and land transportation vehicles, owing to their many advantages. The development of composite technologies has led to many problems such as increased costs and recyclability. The usability of natural fibers in composites is an important topic that needs to be investigated. The top and bottom faces of the composite sandwich are the most important factors providing rigidity and strength to the core structure. Face/core interface strength is another important factor. Additionally, the ultra-lightness of the sandwich composite should also be ensured at an optimum level. In this study, glass fiber and hemp fiber-reinforced aluminum composite sandwiches were produced. DGEBA epoxy was preferred as a matrix material for E-glass and hemp fabrics. DGEBA, which was used as a matrix material, was used between the aluminum honeycomb core structure and the composite faces. Fabrics soaked with epoxy were placed on the upper and lower surfaces of the aluminum core, and composite sandwiches were produced using the hot-press method. The produced E-glass and hemp-reinforced aluminum composite sandwiches were cut according to ASTM standards and subjected to edgewise compressive tests. Both different composite sandwiches were compared with each other according to the results of the edgewise compressive tests. At the same time, the types of damage resulting from compression tests were examined by microscope analysis. And the dominant damage types in the fiber-reinforced composite faces and composite sandwiches were determined.

Keywords: Composite Sandwich, Hemp Fiber-Reinforcement, Compressive Test.

PUBLIC SENTIMENT ANALYSIS FOR HIV, HERPES, AND OCD ON THE REDDIT SOCIAL MEDIA PLATFORM

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Abstract

Purpose/Design

Understanding the challenges that people living with HIV, STDs like Herpes, and mental health conditions like obsessive compulsive disorder (OCD) is significantly important. People that don't have any first-hand knowledge or experience with people affected by these diseases or conditions receive much of their information about them via social media platforms. Increasingly, many people form opinions based on information they obtain through online social media. As a result, understanding the type of content that attracts people's attention on social media and drives discussions for these diseases and conditions is very important. This research analyzes the sentiments of people who use online social media platforms such as Reddit and measures the rate of sentiment analysis of three health situations: knowledge, attitude, and practice. It specifically examines the impact of positive and negative sentiments on the patients with these conditions and diseases and the public's reaction to them.

Methodology/Approach

The principal origin for the datasets collected on keywords for HIV, Obsessive Compulsive Disorder (OCD), and HERPES were repossessed using trends from Reddit. The data was legally obtained from the public resources. The research attempts to employ a lexicon-based approach to track the prevalence of keywords indicating public interest in various categories of topics such as health, economics, politics, and other social issues.

Findings

Among the three diseases analyzed, HIV seemed less investigated when compared to the others despite its negative implications. Herpes showed the most negative implications. While Herpes is the one people were commenting upon the most. Although these diseases are perceived as more private, Reddit usage was observed mostly during the late evenings of the day.

Discussion

The data retrieved from Reddit needs deeper analysis to draw conclusions. Reddit data can be used to better understand user reactions and attitudes towards the disease posted on the platform. Positive, negative, or neutral responses give insights of how people feel and help guide the treatments of people with these health concerns.

Keywords: Social media, Reddit, sentiment analysis

THE EFFECTIVENESS OF LAENNEC IN THE PREVENTION OF ANASTOMOTIC LEAKAGE

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One of the serious complications after intestinal surgery is intestinal anastomotic leakage, which is observed in 5.4-10.5% of cases. We conducted an experimental research study to investigate the effectiveness of human placental hydrolysate – Laennec (Japan) in the prevention of intestinal anastomotic leakage. A total of 60 chinchilla rabbits (weight 3-4 kg) were divided into 2 groups (20 in control and 40 in main). The model of acute intestinal obstruction and primary anastomosis was performed in all groups. Control group animals received standard treatment. Rabbits in the first half of the main group were given intramuscularly - Laennec 0.15ml (8.4mg)/kg once a day along with standard treatment. The second half of the main group was given Laennec 0.15ml (8.4mg/kg) infusion by using catheter placed in the root of the mesentery during the operation along with the standard treatment. The rabbits were operated again on the 3rd, 5th, 7th and 15th days of the operation and the intestinal anastomoses tissues were taken for morphological examination. It was found that the control group results of regeneration indicators, mitotic index, fibrillogenesis, vascularization were at the lower level, compare to the main group results. The morphological examination of tissues taken from the experimental animals it was found that the crypts were thickened and deepened, the mitotic index was high, collagen fibers were denser, and fibrillogenesis and microangiogenesis were more intense, the intramural nerve plexus was very well preserved in the anastomosis wall. The results of the study demonstrate that Laennec has a positive effect on the regeneration of intestinal anastomoses and decreases the frequency of postoperative complications. We recommend the wide application of Laennec for the prevention of intestinal anastomotic leakage.

Key words: intestinal anastomoses**,** anastomotic leakage, prevention of anastomotic leakage, Laennec, postoperative complications.

EVALUATION OF CORONAPHOBIA LEVELS OF INTERNATIONAL STUDENTS STUDYING IN UNIVERSITY DURING THE COVID-19 PANDEMIC PROCESS

COVID-19 PANDEMİ SÜRECİNDE ÜNİVERSİTEDE EĞİTİM ALAN ULUSLARARASI ÖĞRENCİLERİN KORONAFOBİ DÜZEYLERİNİN DEĞERLENDİRİLMESİ

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Abstract

Objective: The Coronavirus Disease 2019 pandemic has caused various difficulties and fears in education and health systems. This study was conducted to determine the coronavirus fear levels of international students studying in university.

Method: The study was carried out with 100 international students. The data of the study were collected online through internet using a descriptive form containing sociodemographic characteristics and the "Coronavirus Fear Scale". The data were transferred to the IBM SPSS Statistics 23 program and analyzed using number, percentage, mean, standard deviation, minimum, maximum, t test, and One Way ANOVA tests.

Results: In the study, 47.0% of the participants were between the ages of 17-22 years, 66% were female, 65% were undergraduate students, 70% had a middle-income level, 77% did not have COVID-19 disease before while 95% of participants had no family members dying due to COVID-19 disease although 53% reported a member of family/relatives had coronavirus disease. The participants mean scores obtained from fear of coronavirus disease scale was 17.80±5.64. There was no statistically significant difference between the participants' mean scores of fear of coronavirus disease scale and their sociodemographic characteristics and having coronavirus disease previously, losing a family member due to coronavirus disease, and coronavirus disease status of their family/relatives.

Conclusion: In conclusion, it was determined that the coronavirus fear levels of the students participating in the study were moderete.

Key words: COVID-19, Coronavirus, Coronaphobia, Pandemic, Student

Özet

Amaç: Koronavirüs Hastalığı 2019 pandemisi eğitim ve sağlık sistemlerinde çeşitli zorluklar ve korkuya yol açmıştır. Bu çalışma, üniversitede eğitim gören uluslararası öğrencilerin koronavirüs korku düzeylerini belirlemek amacıyla yapılmıştır.

Yöntem: Çalışma uluslararası öğrenci statüsünde eğitim alan 100 öğrenci ile gerçekleştirilmiştir. Araştırmanın verileri sosyodemografik özellikleri içeren tanımlayıcı form ve "Koronavirüs Korkusu Ölçeği" kullanılarak internet üzerinden çevrimiçi ortamda toplanmıştır. Veriler IBM SPSS Statistics 23 programına aktarılarak sayı, yüzde, ortalama,

standart sapma, minimum, maksimum, t testi, One Way ANOVA testleri kullanılarak analiz edildi.

Bulgular: Çalışmada, katılımcıların %47,0'si 17-22 yaş aralığında, %66'sı kadın, %65'i lisans öğrencisi, %70'i orta gelir düzeyine sahip, %77'si daha önce COVID-19 hastalığı geçirmemiş, %95'inin ailesinde koronavirüs hastalığı nedeniyle ölüm olmamış ve %53'ünün aile/akrabası koronavirüs hastalığı geçirmiştir. Katılımcıların koronavirüs hastalığı korkusu ölçeği ortalamaları 17,80±5,64'tür. Katılımcıların koronavirüs hastalığı korkusu ölçeği ortalamaları ile sosyodemografik özellikleri ve koronavirüs hastalığı geçirme durumu, ailesinde koronavirüs hastalığı nedeniyle ölüm durumu, aile/akrabasının koronavirüs hastalığı geçirme durumu arasında istatistiksel olarak anlamlı fark bulunmamıştır.

Sonuç: Sonuç olarak, çalışmaya katılan öğrencilerin koronavirüs korku düzeylerinin orta düzeyde olduğu belirlendi.

Anahtar kalimeler: COVİD-19, Koronavirüs, Koronafobi, Pandemi, Öğrenci

IDENTIFICATION OF ACTIVATION OF LATENT TUBERCULOSIS INFECTION

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Abstract

Introduction: According to the World Health Organization, one third of all humankind has a latent tuberculosis infection (LTI). From 5-20% of infected there is a risk of development of active TB during there lifetime and in most cases tuberculosis develops in 2-5 years after infection. Thus LTI is the reservuar of future tuberculosis, therefore, detection of activation of LTI is necessary in order to control the infection with the help of preventive treatment.
The purpose of the study. The aim is to identificate the activation of LTI.
Methods: 100 persons with suspicion of tuberculosis aged from 2 to 18 years, 60 men and 40 women were examined using generally accepted clinical, laboratory, radiological examination methods, TST and the innovation test with use of tuberculosis recombinant ESAT-6-CFP-10 protein allergen – "Diaskintest" (DST). All persons carried out qualitative and quantitative determination of total antibodies to M.tuberculosis (TTA) in the blood serum by EIA method. Tuberculosis antibodies detected using a set of "AT-Tub-Best" on the unit "Bio-Screen 500" (USA). Circulating immune complexes (CIC) were determed in blood serum with photometric determination at a wavelength of 450 nm on a spectrophotometer SF 26 (LUMAM).
Results: The examined persons did not have a pronounced syndrome of general deviations, but only weaky expressed symptoms of intoxication in various combinations. The results of TST were positive in all the examined persons. Hyperergic reaction was observed in 22% of cases. DST was positive in 26% of cases.
Hyperergic reaction according to the results of the TST and DST coincided in 9 people. In patients with positive TST and positive DST the value of TTA was in the interval 0,14-2,28 units of od, the level of the CIC was reduced to 0,045±0,005 units of od.
Conclusions: In persons with latent tuberculosis infection with the level of TTA in the range 0,14-2,28 u.o.d., normal or reduced CIC values, a positive DST result the presence of only symptoms of intoxication should be interpreted as an signs of activation of LTI which is a prescription for preventive chemotherapy.

Keywords: Latent Tuberculosis Infection, identification of activation, preventive treatment.

Title: CULTURAL COMPETENCE IN HEALTHCARE

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Abstract

Due to the high rates of migrations worldwide, healthcare providers are affected by the increased patients' ethnicity and cultural diversity. “Cultural Competencies in Healthcare” can be defined as factors that healthcare providers and organizations should comprehend and integrate to enhance the delivery and structure of healthcare systems and facilities. Cultural competencies mainly depend on how a person's beliefs, values, and behaviors concerning health and well-being are built upon certain factors such as nationality, race, ethnicity, gender, language, sexual orientation, physical and mental ability, occupation, and socioeconomic status. The main aim of a healthcare system that is culturally competent is to supply excellent care for every single patient despite race, ethnicity, and cultural background. Various programs teach facts regarding cultural competence to be ready before transitioning into their jobs. But to know every detail about every culture is considered impossible; hence, training techniques that concentrate only on facts are limited, so they are combined with approaches that yield universal skills. When it comes to encouraging cultural competence, several organizations have actively participated by developing guidelines that focus on improving the perspectives of specific areas, such as respect and tolerance for cultural differences, physicians accept responsibility to understand health and illness's cultural aspects, recognizing personal biases against people of different cultures, and being aware of sociocultural factors' impact on patients. Nonetheless, cultural competence is still considered a new concept and is an ongoing learning process that develops through stages based on experiences and previous knowledge.

Keywords: Cultural competence, cultural diversity, migrants’ integration, healthcare providers skills.

NUTRACEUTICALS DENIPLANT IN THE NEUROPATHIC PAIN IN DOG WITH SPINAL CORD INJURY

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Background After spinal cord injury, intestinal dysfunction has a serious impact on physical and mental health, quality of life. The dysbiosis is thought to impair recovery by decreasing the production of short-chain fatty acids which play a role in suppressing inflammation within the central nervous system. The neuropathic pain, is directly or indirectly related to gut dysbiosis, which may be mediated by "gut-brain" interactions.Objective Remodeling gut microbiota could be beneficial for the recovery of motor function after spinal cord injury. Targeting gut dysbiosis could have significant therapeutic value in the management of spinal cord injury. The objective of this presentation is to discuss the scientific evidence supporting the efficacy of nutraceuticals Deniplant in the neuropathic pain. Materials and methods While surgical decompression is the recommended treatment for compressive injury, information is lacking on what treatment best targets contusive injury. Several methods for treating the contusive injury have been investigated in dogs but an optional treatment has yet to be determined. We will overview neuropathic pain and the use of nutraceuticals in spinal cord injury management, evaluated by clinical trials.Results Studies have demonstrated the presence of gut dysbiosis secondary to spinal cord injury. Nutraceuticals and dietary supplements derived from herbs have been used and there is considerable evidence that nutraceuticals may play an important role in inflammation and motor function after spinal cord injury. Conclusion The dysbiosis contributes to the onset and progression of intraspinal pathology after spinal cord injury. Canine studies have demonstrated that inflammatory mechanisms may play a critical role in canine spinal cord injury.

Keywords: gut microbiota, spinal cord injury, ”microbiota-gut-brain” axis, nutraceuticals Deniplant

ELECTRICAL STIMULATION IN REHABLITATION PATIENTS WITH FACIAL PALSY

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ABSTRACT

A systematic- Meta analysis of randomized, case studies and randomized clinical trials published between 2000 to 2021, using Elsevier, PubMed, and Google Scholar, among other sources. Over the course of a month, we conducted our research. This meta-analysis was conducted to find and analyze all available information on electrical stimulation in facial palsy treatment, as well as to see how neuromuscular electrical stimulation impacts strength of face musculature. There is an inadequate evidence to support the use of electrical stimulation to treat Bell's palsy, the findings of this comprehensive review suggest that the intervention has a positive outcome. We concluded 9 studies in this review. We've compiled a list of recent research studies that are relevant to and related to our main topic, deleted all unpublished research articles and included all published journal publications for the best analysis. According to the results of current study, patients who received electrical stimulation benefited in both acute and chronic stages. As long as the muscle is not entirely innervated, electrical stimulation can restore facial muscle activity even in facial nerve palsies that have been present for several years and when the muscle has no clinical function. Electrical Stimulation, according to this meta-analysis and comprehensive review, increases facial muscle strength, facial movements and optimizes the oral mechanism of swallowing.

Keywords: Facial palsy, Physiotherapy for Bell’s palsy, Facial Paralysis, Rehabilitation, in addition to Electro-stimulation

THE EFFECTIVENESS OF THE JOINT COMMISSION INTERNATIONAL ACCREDITATION IN IMPROVING QUALITY AT KING FAHD UNIVERSITY HOSPITAL, SAUDI ARABIA: A MIXED METHODS APPROACH

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Abstract

Saudi Arabia has one of the highest numbers of health organizations accredited by the Joint Commission International. This study aimed to measure this process's effectiveness in improving quality at King Fahd Hospital of the University in Khobar, Saudi Arabia. Additionally, the study investigated health providers' perceptions of this process.This research utilized a Convergent parallel mixed method. For the quantitative analysis, an interrupted time series was conducted to assess the changes in a total of 12 quality outcomes pre and post accreditation. Thematic analysis was utilized to collect and analyze qualitative data from hospital employees and health providers. The quantitative results indicated that pursuing accreditation positively impacted nine out of 12 outcomes. The improved outcomes included: the average length of stay, the percentage of hand hygiene compliance, the rate of nosocomial infections, the percentage of radiology reporting outliers, the rate of pressure ulcers, the percentage of the correct identification of patients, the percentage of critical lab reporting, and the bed occupancy rate. The outcomes that did not improve were the rate of patients leaving the ER without being seen, the percentage of OR cancelations, and the rate of patient falls. The qualitative analysis suggested that the accreditation process was perceived positively by participants. Nevertheless, participants also highlighted some of the drawbacks of this process, including: the potential bias in observation-based Key Performance Indicators, the focus on improving process without enhancing the hospital structure, and the increased workload. In conlusion, international accreditation had a positive impact on quality and was received positively by providers. However, several issues need to be addressed by hospital administrators in future accreditation cycles. According to participants, the most notable issue during the first two accreditation cycles was the increased workload and paperwork, which can potentially distract from patient care.

Keywords: Joint Commission International, Interrupted time series analysis, JCI, Mixed Methods, Saudi Arabia, JCIA

IDEOLOGY OF FEEDBACK

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Abstract

All of the world's biggest and most popular companies rely on customer satisfaction. Most of branded companies earned the trust and respect of their consumers, that in turn helped them gain popularity and longevity. As we look at today's biggest brands like Apple, Amazon, Nike they have a lot of fans worldwide, because of their great production work, as well as their support to the customers. Most of "top of the food chain" companies like to bring innovation into their work. As such first means of feedback and customer satisfaction come from the biggest companies that were mentioned earlier. Satisfying customer needs leads to companies being able to predict customer wants in the future. If the customer needs, wants are fully satisfied and he/she is fully comfortable with the product, that creates customer loyalty. In current day and age of countless companies creating similar means of service and production, customer loyalty is utmost important. Feedback and different means of surveys help companies learn the needs, identify the strong/weak sides and to some extent predict the needs of the market. Because of this a lot of companies start either building or outsourcing different feedback systems. Bigger companies like Amazon and Apple like to have their own systems, but some consider outsourcing the system for better quality. Feedback doesn't have to be just a system, most companies use different means to collect it, for example survey monkey is used by most companies, as it is partly free, easy to use and wide spread system.

Keywords: Customer satisfaction, Feedback, Service level, Customer support.

UYGUR-ÇİN SİYASİ EVLİLİKLERİNDE TÖRENLER

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Özet

Evlilik en basit anlamıyla iki kişinin dolayısıyla da iki ailenin birleşmesidir. Siyasi evlilikler ise devletler arasındaki politik süreci etkileyen en önemli faktörlerden biridir. Bu evliliklerle zayıf olan devlet, belli bir güce sahip olan diğer bir devlet ile akrabalık yoluyla sosyo-politik ilişkiler kurmak, olası saldırıları engellemek ve barış ortamını sürdürmeyi amaçlamaktadır. Devletlerin siyasi ve ekonomik güçleri bu evliliklerin içeriğini belirlemektedir. Evliliği talep eden devletin gücü, gönderilen gelinin siyasi statüsü ile doğru orantılıdır. Örneğin güçlü bir devletin evlilik talebi karşılığında gönderilen gelin, hükümdarın birinci dereceden akrabaları arasından seçilirken, daha güçsüz bir devletin talebi hükümdarın diğer yakınları arasından karşılık bulmaktaydı. Gelinin kendi ülkesindeki politik gücü, geldiği ülkenin siyasetinde ne denli söz sahibi olacağını belirlemekteydi. Aynı şekilde damadın statüsü de gelinin kendi ülkesindeki politik gücüyle doğru orantılı olarak dış politikadaki saygınlığını belirleyen faktörler arasındaydı.Uygurlar dönemindeki Çin ile yapılan siyasi evlilikler incelendiğinde, bu evliliklerin devletlerin politik ve ekonomik durumlarının yansıması olduğu görülmektedir. Uygurların güçlü olduğu dönemlerde evlilik taleplerinin hızla değerlendirildiği ve gelinin imparatorun ailesinden seçildiği görülmektedir. Bu duruma en güzel örneklerden birisi Çin İmparatorunun öz kızını, Uygur Kağanı Moyen Çor'a vermesidir. Uygurların iç çekişmelerinin yoğun olduğu veya dış politikada sıkıntılı oldukları zamanlarda Çin ile yapılan siyasi evliliklerde sürecin daha yavaş ve isteksiz işlediği görülmektedir. Tun Baga Tarkan'ın evlilik talebinin değerlendirilmesindeki süreç bu duruma örnek olarak gösterilebilir. Bu evlilikler sonucunda gönderilen prensesler için kapsamlı bir karşılama ve görkemli evlilik merasimleri yapılmaktaydı. Gelen prensesler kendi ülkelerinin adetlerine uygun şekilde karşılanmaktaydı. Daha sonra Uygur geleneklerine göre belirli ritüellerle Uygur olarak kabul edilen prenseslere, Hatun ünvanı verilmekteydi. Hatun ünvanı alan prensesler törenlerle Kağanın yanına oturtulurdu. Bu çalışmada Çin prenseslerinin, Uygur Hatunu ünvanı alışı sırasındaki törenler ayrıntılı ele alınacaktır.

Anahtar Kelimeler: Uygur, Çin, Evlilik, Tören, Dış Politika.

CEREMONIES IN UYGUR-CHINA POLITICAL MARRIAGES

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Summary

Marriage, in its simplest sense, is the union of two people and therefore two families. Political marriages are one of the most important factors affecting the political process between states. The weak state with these marriages aims to establish socio-political relations with another powerful state through kinship, to prevent possible attacks, and to maintain a peaceful environment. The political and economic powers of the states determine the content of these marriages. The power of the state requesting marriage is directly proportional to the political status of the bride sent. For example, the bride, who was sent in return for the marriage request of a powerful state, was chosen among the first-degree relatives of the monarch, while the request of a weaker state was met among the other relatives of the monarch. The political power of the bride in her home country determined how much she would have a say in the politics of the country she came from. Likewise, the status of the groom was among the factors that determined the prestige of the bride in foreign policy in direct proportion to her political power in her own country. When the political marriages with China in the Uygurs period are examined, it is seen that these marriages reflect the state's political and economic conditions. It is seen that during the times when the Uygurs were strong, the marriage demands were quickly evaluated and the bride was chosen from the emperor's family. One of the best examples of this situation is that the Emperor of China gave his daughter to the Uygur Kagan Moyen Çor. It is seen that the process is slower and more reluctant in the political marriages made with China when the internal conflicts of the Uygurs are intense or when they are troubled with foreign policy. The process of evaluating Tun Baga Tarkan's marriage request can be given as an example of this situation. A comprehensive welcome and magnificent marriage ceremonies were held for the princesses sent as a result of these marriages. The princesses who came were welcomed by the customs of their own countries. Afterward, the princesses who were accepted as Uygurs with certain rituals according to Uygur traditions were given the title of Hatun. Princesses who took the title of Hatun were seated next to the Kagan with ceremonies. This study will be discussed in detail the ceremonies during the Chinese princesses' taking the title of Uygur Hatun.

Keywords: Uygur, China, Marriage, Ceremony, Foreign Policy.

METHODS OF TEACHING DIAGRAMS AT SCHOOL

DIAQRAMLARIN MƏKTƏBDƏ ÖYRƏDILMƏSI METODIKASI

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Abstract

The main goal here is to synthesize and analyze information obtained by students from different sources; to receive new information and to process new information; to develop the ability to self-expression and creative self-expression, to increase interest in objects; conduct statistical analysis of the information obtained by means of a schematic description; construct charts on tables or other information; develop skills to work with different types of diagrams.The main goal is to organize lessons with interdisciplinary links that can expand the knowledge of students at the expense of researching each subject and encourage them to pay more attention to the choice of future career and image.As we know, after the 7th grade "Creating Word Tables" comes the season of "creating diagrams in Word". Today, in schools, the number of people in the course of the students in the school is very small. After teaching the rules of creating the Tables on "Tables" in Word to organize the lesson, as a homework, the students are investigating their loved ones, and even investigated them and even calling them on these subjects. The "Diagram in the text editor" can be offered to prepare a project for the section.

Keywords: Bar Chart/Graph, Pie Chart, Line Graph or Chart, Histogram Chart, Area Chart, Scatter Plot, Bubble Chart.

POPULATION EXCHANGE IN TURKISH NOVEL

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Abstract

Population exchange comes from the Arabic word mubādala[t], which means exchange, exchange with price and price. With the additional protocol dated January 30, 1923 to the Lausanne Peace Treaty in the history of the Republic of Turkey, the "population Exchange" officially entered into force. Accordingly, Turkish nationals from the Greek Orthodox religion settled in Turkish territory and Greek nationals from the Muslim religion settled in Greek territory are exchanged. This practice causes great tragedies for Greeks and Turks living in Turkey and Greece. The narratives about the exchange are also reflected in the Turkish novel. In these works, themes such as separation, death, cruelty, love and longing come to the fore.The first works that deal with the exchange and migration themes are: *Sarduvan* (Faik Baysal), *Dikmen Yıldızı* (Aka Gündüz), *Panorama* (Yakup Kadri Karaosmanoğlu), *Ateş Gecesi* (Reşat Nuri). Some of the novels written in the 1960s and 1970s are as follows: *Ateş Yılları* (Hasan İzzettin Dinamo), *Anayurt Oteli* (Yusuf Atılgan), *Kurt Kanunu* (Kemal Tahir). After the 1990s, the number of novels about exchange increased. Some of the works focusing on migration and population exchange in these years are: Bir Avuç Mazi (Fügen Ünal Şen), Mor Kaftanlı Selanik (Yılmaz Karakoyunlu), Emanet Çeyiz - Mübadele İnsanları (Kemal Yalçın), Ulya Ege'nin Kıyısında (Ahmet Yorulmaz), Ah Mana Mu (Handan Gökçek), Çalı Harmanı (Akın Üner), Mübadele Günlerinde Aşk (Belgin Karabulut), Maria - Göç Acısı (Ertuğrul Aladağ), Mübadil (Handan Öztürk), Elveda Rumeli (Murtaza Kölemezli), Pavli Kardeş (Fikret Otyam), Büyük Ayrılık (Kemal Anadol), Mübadiller (Yılmaz Gürbüz), Fırat Suyu Kan Akıyor Baksana, (Yaşar Kemal), Hasret (Canan Tan). The aim of this study is to give information about some novels in Turkish literature that deal with the subject of exchange.

Key Words: Türk romanı, population exchange. themes of separation, love, longing.

SCENES AND FRAMES THEORY İN TRANSLATİON

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Abstract

The new approach brought by the Scenes and Frames theory to translation carries the functionality of translation to the top. Charles J. Fillmore is the founder of the Scenes-and-frames-semantics theory, which is a linguistic theory. Mary Snell-Hornby brought this theory, which was developed in 1977 by Fillmore and based on the prototype theory, to translation studies. Vannerem/Snell-Hornby considered the scenes-and-frames theory as a dynamic concept in their study in 1986.Scenes that are meaningful through associations are formed in the mind of the person who reads any text. Although these scenes differ from person to person, they contain fundamentally unchanged elements. The purpose of the scenes and frames theory is to enable the reader to find the correct equivalents of these scenes in the target language and culture for an equivalent translation in the target language. For this, the translator must know both languages and cultures very well. Scenes and frames cause associations by stimulating each other mutually. Just as frames create a scene, a scene also brings a frame to mind. If the same scenes come to life in the minds of the target reader reading the translation text, we can consider the translation successful. This translation strategy aims the translator to visualize the scenes in the source text in his mind and to find frames in the target language suitable for these scenes. Based on this idea, this theory is also used for translation criticism.The aim of the study is to discuss this new perspective, which has not been studied enough in the German-Turkish language pair, and to discuss the German-Turkish examples. German and Turkish are two languages belonging to different language families. German is an inflected language and belongs to the Indo-European languages. Turkish, on the other hand, belongs to the Ural-Altaic language group and is an agglutinative language. Considering that the speakers of these languages have a very different social structure in terms of culture, this comparative study is important in terms of revealing how effective the theory is in practice.

Keywords: scenes and frames theory, German Turkish translation, Vannerem/Snell-Hornby, cultural differences, cultural elements in translation

Abstract

Scenes and Frames teorisinin çeviriye getirdiği yeni yaklaşım çevirinin işlevselliğini üst noktaya taşımaktadır. Dilbilim teorisi olan Scenes-and-frames-semantics teorisinin kurucusu Charles J. Fillmore'dur. Mary Snell-Hornby, 1977 yılında Fillmore tarafından geliştirilen ve prototip teorisine dayanan bu teoriyi çeviribilimine kazandırmıştır. Vannerem/Snell-Hornby 1986 yılında yaptığı çalışmada sahneler ve çerçeveler teorisini dinamik bir kavram olarak ele almıştır.Herhangi bir metni okuyan kişinin kafasında çağrışımlar yoluyla anlamlandırılmış sahneler şekillenmektedir. Bu sahneler kişiden kişiye farklılıklar göstermekle beraber temelde

değişmeyen unsurlar içerir. Scenes and frames teorisinin amacı erek dilde eşdeğer bir çeviri için okurun kafasında canlanan bu sahnelerin erek dilde ve kültürde doğru karşılıklarını bulmasını sağlamaktır. Bunun için çevirmenin her iki dili ve kültürü çok iyi tanıması şarttır. Scenes and frames karşılıklı olarak birbirini uyararak çağrışımlara yol açar. Frames bir scene oluşmasını sağladığı gibi aynı şekilde bir sahne de bir çerçeveyi akla getirir. Çeviri metnini okuyan erek okurun kafasında aynı sahneler canlanıyorsa çeviriyi başarılı sayabiliriz. Bu çeviri stratejisi çevirmenin kaynak metindeki sahneleri kafasında canlandırarak bu sahnelere uygun erek dilde çerçeveler bulmasını hedeflemektedir. Bu düşünceden hareketle bu teori çeviri eleştirisi için de kullanılmaktadır. Çalışmanın amacı Almanca-Türkçe dil çiftinde yeterince çalışma bulunmayan bu yeni bakış açısını irdeleyerek Almanca-Türkçe örnekler üzerinde tartışmaktır. Almanca ve Türkçe farklı dil ailelerine mensup iki dildir. Almanca çekimli bir dil olup Hint-Avrupa dillerine aittir. Türkçe ise Ural-Altay dil grubuna dahildir ve sondan eklemeli bir dildir. Bu dillerin konuşanları kültürel açıdan da oldukça farklı toplumsal yapıya sahip olduğu düşünüldüğünde, yapılan bu karşılaştırmalı çalışmanın teorinin uygulamalı olarak ne kadar etkin olup olmadığını ortaya koyması bakımından önemlidir.

Keywords: scenes and frames teorisi, Almanca Türkçe çeviri, Vannerem/Snell-Hornby, kültür farkları, çeviride kültürel unsurlar

A LIGHT FOR EDUCATION DURING CORONAVIRUS PANDEMIC: FLIPPED LEARNING MODEL

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The coronavirus pandemic necessitates change in every field of life, especially in education. In order to reduce the spread of the COVID-19 virus, the widespread closure of schools, colleges, universities, and other educational institutions in many countries has become inevitable. Technology plays an important role in the continuation of education during this process. During the epidemic, one of the technology based models, flipped learning also known as the 21st century education model, based on teaching at home by using technology and practicing at school in a short time, is thought as a light for the continuation of education. This technology centered model aims to both provide social isolation to a great extent by spending little time at schools and grow generation using science and technology skillfully by taking active part in process. This research aims to describe 'flipped learning', the conceptual framework and its theoretical basis, application, the differences from traditional model; moreover, to investigate the effect of applying this model during pandemic on students' success by reviewing the related literature. The related studies show that applying the flipped learning model during a pandemic effects learners' success, motivation, and interest positively. It is considered that flipped learning is shining as a diamond for the endurance of education during pandemic.

Keywords: Flipped learning, pandemic, epidemic, COVID-19, technology

TERCÜMEDE METAFORLAR

IN TRANSLATION METAPHORS

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ÖZET

Metafor, halkların kültürüyle yakından ilişkili ve medeniyet mirasının ayrılmaz bir parçası haline gelen en önemli dil fenomenlerinden biridir. Bu bildiride metaforu çevirmenin özelliklerini, çevirmenin metaforu iki dil arasında çevirirken karşılaştığı zorlukları ve metafor çevirmeninin en önemli sorumluluklarını açıklamaktadır. Biçim ve içerik bütünlüğünü, güzelliği sağlayan tüm unsurları koruyarak, ikinci dil araçları temelinde başka bir dilde yaratılmış bir sanat eserinin yeniden yaratılmasıdır. Edebi çeviri ise ulusal edebiyatın gelişmesine, halklar arasındaki dostluk ve kardeşliğin çıkarlarına ve kültürel ve edebi bağların kurulmasına ve gelişmesine katkıda bulunur.Metafor, ulusların kültürüyle yakından bağlantılı olan ve medeniyet mirasının ayrılmaz bir parçası haline gelen en önemli dil fenomenlerinden biridir. Metafor hem dilsel hem de edebi bir kavramdır. Bu nedenle, dilbilimsel metafor ve edebi metafor gibi türlere ayrılmıştır. Her iki durumda da metafor, benzerlik ilkesine göre bir nesnenin özelliklerinin diğerine aktarılmasını ifade eder. Bununla birlikte, dilbilimsel bir bakış açısından, bir metafor, hazır bir konuşma unsurudur ve edebi bir bakış açısından, bir metafor bir mecazdır, yani bir kelimenin mecazi anlamda kullanımına dayanan bir imge. Bu durumda, metaforun dilbilimsel bir birim olarak anlamı, onu mecazi olarak bir nesne, olay, işaret olarak adlandırmaktır - konuşmanın duygusal ifadesini geliştirmek. Metaforik çeviri, bir dizi dilbilimsel, edebi, kültürel, felsefi ve hatta psikolojik konuları kapsar. Metaforik çeviri çalışmasına doğru yaklaşım, okuyucuya yeterli metaforik bilgi sağlarken, çeviri sürecinde orijinal kaynak metnin biçimsel etkisinin geri yüklenmesinin önemini gösterir.

Anahtar sözcükler: metafor kavramı, çeviri, metafor çevirinin zorlukları.

ABSTRACT

Metaphor is one of the most important linguistic phenomena that is closely related to the culture of peoples and is an integral part of the cultural heritage. This statement explains the features of metaphor translation, the difficulties encountered when translating metaphors between two languages, and the most important responsibilities of metaphor translation. It is the re-creation of a work of art created in another language on the basis of second language tools, while preserving all the elements that maintain the integrity of form and content. Literary translation contributes to the development of national literature, friendship and brotherhood between

peoples, and the establishment and development of cultural and literary ties.Metaphor is one of the most important linguistic phenomena, which is closely connected with the culture of nations and has become an integral part of the cultural heritage. Metaphor is both a linguistic and a literary concept. For this reason, it is divided into types such as linguistic metaphor and literary metaphor. In both cases, the metaphor represents the transfer of the properties of an object to another according to the principle of similarity. However, from a linguistic point of view, a metaphor is an element of ready speech, and from a literary point of view, a metaphor is a metaphor, that is, an image based on the use of a word in a metaphorical sense. In this case, the meaning of the metaphor as a linguistic unit is to call it a metaphor, an object, an event, a sign - to develop the emotional expression of speech. Metaphorical translation, a series of linguistic, literary, cultural, philosophical and even psychological topics. Approaching the work of metaphorical translation, while providing the reader with sufficient metaphorical knowledge, shows the importance of reloading the formative influence of the original source text during the translation process.

Keywords: metaphor concept, translation, metaphor translation difficulties.

IMPACT OF HYDROCOLLOİD-COATİNG PRE-TREATMENTS ON THE DRYİNG CHARACTERİSTİCS, DİFFUSİON COEFFİCİENT, TRANSPORT AND THERMOPHYSİCAL PROPERTİES OF DRİED APPLE

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Abstract

The effect of hydrocolloid-coating pre-treatments (HCP) on the drying kinetics, transport, and thermophysical properties of dried apple were investigated. HCP was carried out by dipping the apple slice (2mm thickness) for 10 minutes in aqueous coating solutions of gelatin (GE) (1% w/v), sodium alginate (0.3% w/v) (SA), pectin (0.3% w/v) (PE), xanthan gum (0.3% w/w) (XG), and Arabic gum 0.3% (w/v) (AG). The apples dipped into pure distilled water were used as a control sample (CN). Then, they were dried with hot air at 120°C and velocity of 1.75 m/s. All drying was accomplished in the falling rate period which demonstrated that the diffusion mechanism was dominant. According to the Fick's second law of diffusion, the effective diffusion coefficient (Deff) were 2.52×10^{-9}, 3.36×10^{-9}, 3.02×10^{-9}, 1.77×10^{-9}, 2.24×10^{-9}, and 2.47×10^{-9} (m^2/s) for GE, SA, PE, XG, AG, and CN, respectively. The Deff increased by 2.02%, 36.03%, and 22.27%, for GE, SA, and PE, respectively. However, coating with XG, and AG, decreased Deff by 28.34%, and 9.31%, respectively. Also, drying time decreased by 33.33% and 11.11% by coating at SA, and PE solutions, respectively. While drying time increased by 22.22% and 11.11% by XA and AG coating. GE did not change the drying time of samples. Transport properties were determined as 4.2×10^{-6} N (drag force), 60.3W/m² K (heat transfer coefficient), and 0.05 m/s (mass transfer coefficient). The thermophysical properties of apples were computed according to their moisture content and thermal conductivity, specific heat, and density ranging from 0.5580 to 0.5797 W/m.K, 3730 to 3860 (J/kg.K), and 849 to 883 (kg/m3), respectively. The results revealed that among hydrocolloid materials sodium alginate followed by pectin could significantly modify drying characteristics, moisture diffusion, and drying time of apples at an industrial scale.

Keywords: Hydrocolloid-coating; Sodium Alginate, Pectin, Gelatin, Xanthan gum, Arabic gum

PREPARATION OF PVA/PVP/P(AA-*co*-MA) FILMS REINFORCED WITH GRAPHITE: STRUCTURAL AND THERMAL CHARACTERIZATION

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Abstract

Herein, it is reported that the preparation of Poly(vinyl alcohol)/Poly(vinyl pyrrolidone)/Poly(acrylic acid-*co*-maleic acid) (PVA/PVP/P(AA-*co*-MA)) blend polymer film and reinforcement of this film with expanded graphite. PVA (Mw=130000), PVP (Mw=55000) and P(AA-co-MA) sodium salt (Mw=50000) polymers were used to prepare the polymer blend film. After mixing PVA and PVP in water for 1 hour at the reflux point, P(AA-co-MA) sodium salt was added to the medium and the mixture was continued for 1 hour. At a separate point, the graptihe powder is treated with silver nitrate and kept in an ultrasonic bath for 2 hours, the mixture is filtered and the remaining graphite particles are oven-dried. The obtained expanded graphite blend is added to the mixture. The mixture is continued for 2 days. Solvent casting method was used to prepare the film. The resulting mixture was poured into the petri dish, and the water was allowed to evaporate spontaneously at room temperature. Finally, the films are dried in a vacuum oven at 40 ^{o}C for 1 day. Homogeneous, flexible and 0.3 mm thick black films are obtained from graphite-added polymer blends. In addition, transparent colored PVA/PVP/P(AA-*co*-MA) blend films with the same properties were obtained.The thermal characterizations of the obtained films were made with Thermogravimetry (TG) and differential scanning calorimetry (DSC) devices. The change in the 2 theta degree of the obtained materials was determined by X-Ray Diffractometers (XRD). Scanning electron microscope (SEM) was used for surface characterization. In addition, Fouirer Transform Infrared Spectrophotometer (FT-IR) device was used for structural analysis.

Keywords: Graphite, Reinforced Film, PVA, PVP, Thermal Propertie

ELECTRONIC STRUCTURE OF THE LEAD-FREE CHIRAL ORGANIC-INORGANIC PEROVSKITE

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Abstract:

Chirality is found in biomolecules like proteins, amino acids, saccharides, and other small organic molecules. However, for inorganic materials, intrinsic chirality is rarely observed. Recent studies have shown that chirality can be transferred to inorganic perovskites by introducing chiral organics into their structures. Research on chiral perovskites has drawn great interest due to their fascinating spintronics and chiroptoelectronics properties, such as circular dichroism (CD), nonlinear optical responses, and chirality-induced spin selectivity (CISS), and ferroelectricity which are promising for next-generation optoelectronic and spintronic devices. In this project, we introduced chiral organic molecules R/S- (naphthyl) ethyl ammonium (R/S-NEA) into Sn−Cl inorganic skeletons to achieve a chirality in hybrid Tin chloride, (R-/S-NEA)2SnCl4 and investigated their electronic structure by theoretical modeling based on density functional theory (DFT). We also investigated the SOC effect in these systems, which is expected to be strong due to the presence of the heavy element Sn. DFT calculations were performed in Vienna ab initio Simulation Packages, using projector augmented-wave pseudopotentials. The functional PBE was employed with the Tkatchenko-Scheffler (TS) van der Waals correction (PBE + TS) for optimizing the geometry. The electronic structure of chiral perovskites was calculated using PBE, including spin−orbit coupling; because of the presence of the heavy element, the inclusion of the SOC is needed to investigate the electronic properties, especially for the inorganic framework. This effect was also necessary for evaluating the spin textures. This research is essential to shedding light on the possible use of lead-free chiral perovskite in spin-optoelectronic and spintronic devices because of their unique chiral or spin-related optical and electrical properties

Keywords: Chiral perovskite, DFT, VASP, Spin-orbit-coupling, Band structure.

DEVELOPMENT OF SMART PACKAGING WITH CURCUMIN TO DETERMINE THE CHANGES IN FOOD QUALITY

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Abstract

Smart packaging is based on the one-to-one interaction of food with its packaging or its environment to monitor food quality and safety. The smart packages are designed to provide consumers with information about food quality throughout the food chain, from the moment of storage to the moment of purchase from the shelves. Especially, colorimetric pH indicators (synthetic, natural) working within the system of smart food packaging are remarkable when used with fresh food materials such as fish and meat, which are perishable and require real-time freshness monitoring. Among polyethylene (PE) types, low-density polyethylene (LDPE) is a polymer widely used in food packaging due to its good sealing, stiffness and moisture barrier, and transparency properties. Thermoplastic starch (TPS) is of great interest because it is biodegradable and provides high flexibility. LDPE/TPS blends can be considered semisynthetic polymers for smart food packaging film applications. Synthetic pH-sensitive dyes perform well, but the development of safe colorimetric films is preferred in the development of meat quality indicators. In recent years, pH-sensitive films have been developed to monitor meat quality with edible natural pigments such as anthocyanins, betalains, and curcumin. Curcumin is a hydrophobic phenolic substance derived from Curcumin longa and is known as turmeric. Curcumin, a natural bioactive compound, is notable for being non-toxic and showing numerous benefits. It is widely used as a food coloring agent due to its intense yellow color. In this study, it was tried to develop a hydrophobic colorimetric film by adding natural pigment curcumin to LDPE/TPS (%70/30 and %50/50 by weight) blends by melt extrusion method. The thermal and mechanical properties, an affinity for water, and color change properties in pH solutions of LDPE/TPS/Curcumin films were investigated. These films exhibited a distinct color change from yellow to brown at pH: 10 at the end of the seventh day, especially in the pH buffer solutions at a %50/50 mixture. When the same mixture was used to monitor chicken meat spoilage at 25°C, the meat samples has shown color changes from light yellow to light brown due to the increased content of total volatile basic amines (TVBN).

Keywords: LDPE, Smart Packing, Curcumin, pH indicator, Meat Spoilage

THE SUCCESSIVE DEHYDROGENATION OF AMMONIA AS A HYDROGEN STORAGE MATERIAL ON NI-BASED NANOPARTICLES: A COMPUTATIONAL STUDY

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Abstract

Nanoparticles (NPs) are known as clusters of atoms, ions, or molecules with sizes between 1 and 100 nanometers. The most distinctive characteristics of nanostructured materials that determine the chemical reactivity, magnetic properties, and optical properties are their chemical arrangement and electronic structure. By alloying metallic elements, the nanoalloy's properties have resulted from the size, shape, and chemical composition, making it possible to design well-defined, tunable materials. Reasonable initial ground-state structures of Ni-based nanoparticles $Ni_{55-x}Zn_n$ (x=0–55) will be systematically generated by the artificial bee colony algorithm (ABC), a swarm-based algorithm that uses the semi-empirical Gupta potential for providing a description of the interactions between the atoms in the bimetallic systems. The artificial bee colony algorithm (ABC) code will generate the low-lying energy structures for our considered bimetallic systems with different compositions for the sake of having the optimum ones, notably, at a reasonable computational cost. In the next step, a catalytic reaction should be performed. A successful result from the previous steps will give a generalized methodology to be applied to various bimetallic systems. The different compositions of the obtained nanoparticles will be then studied and their properties with a quantum mechanical method known as Density Functional Theory (DFT). The best candidates should be chosen to study the deydrogenation reaction of NH_3.

Keywords: Ni-based nanoparticles, Artificial Bee Colony algorithm, DFT. Ammonia dehydrogenation. Hydrogen fuel storage.

PREPARATİON OF A NANOCOMPOSİTE FOR USE IN THE DEVELOPMENT OF AN ELECTROCHEMİCAL SENSOR SENSİTİVE TO ELECTROSENSİTİVE ANALYTES

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Abstract

Electrochemical sensors are analytical systems with unique binding properties to target analytes. These systems can be widely used in clinical pharmacy R&D, pharmaceutical industry, drug delivery, medical diagnostics and healthcare, analytical chemistry, food analysis testing, environmental monitoring, and military applications. Electrochemical sensors have many advantages in terms of high sensitivity, low cost, fast and real-time sampling capability, and low detection limit. In recent years, scientists have accelerated surface modification studies to add new properties to a limited number of electrode materials. Nanomaterials such as gold nanoparticles, metal oxide nanoparticles, carbon nanotubes, and quantum dots are used as immobilization support for diagnostic molecules in electrochemical sensors. They have different electronic properties and are highly advantageous for transmitting electrical signals generated upon target recognition due to the unique structure of nanomaterials. In addition to these advantages, nanostructures can also be in strong interactions with chemical species, thanks to their mechanical, thermal, and electronic properties. They are used as highly sensitive modifiers when nanostructures form composites with natural polymers. Considering all these, in this study, the nanocomposites were formed by combining a natural polymer and metal oxide nanoparticles in different proportions. After spectroscopic and electrochemical characterization of nanocomposites, it was tested as a modifier. The glassy carbon electrode surface was modified with the nanocomposite, which exhibited the best electrocatalytic effect and presented as an electrochemical sensor sensitive to electrosensitive analytes. The electrochemical sensor performed very well with features such as high sensitivity, low detection limit, wide linear range, long-term stability good repeatability, and reproducibility.

Keywords: Electrochemical sensors, modification, nanocomposites

DSORPTION OF PHENOL POLLUTANTS FROM AQUEOUS SOLUTION USING CA-BENTONITE/ NA-BENTONITE.

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Abstract

Phenolic compounds are poisonous and carcinogenic organic pollutants. The presence of phenol in the environment can have a negative impact on humans and the environmental system. A successful method for reducing phenol is adsorption. This study investigated the adsorption of phenol into an aqueous solution using two types of Ca-bentonite/chitosan bentonite compounds. Characterization of the Ca-bentonite/Na-bentonite composite was carried out using Fourier Transform Infrared (FTIR) and Energy Dispersion X-ray Scanning-Spectroscopy Electron Microscopy (SEM-EDX). The results of the physico-chemical analyses showed that the effluents of the oil mills showed that they are highly polluted, particularly in terms of the total suspended solids (TSS), chemical oxygen demand (COD), and iron content of around 154.82 (mg/L), and copper content of 31.72 (mg/L). The mineralogy of bentonites studied by X-ray diffraction (XRD) reveals the existence of two types of montmorillonite; theoretically, the diffraction peak (001) of the montmorillonite appears at 15 Å, with a basal spacing that corresponds to a calcium pole, and the diffraction peak (001) appears at 12Å, with a basal spacing that corresponds to a sodium pole. The specific surface area of the bentonite used is characterized by a large specific surface area, varying between 127.62 m2·g-1 and 693.04 m2·g-1, which is due to the presence of hydrated interleaved cations. This surface is likely to increase in aqueous solution depending on the solid/liquid ratio that modulates the degree of hydration. With a high cation exchange capacity (CEC) (146.54 meq/100 g), samples of margin mixed with raw bentonites at different percentages vary between 5% and 100%. The potential of Moroccan bentonite for the phenol adsorption of 9.17 (g/L) from aqueous solutions was investigated. Adsorption tests have confirmed the effectiveness of these natural minerals in reducing phenolic compounds ranging from 8.72% to 76.23% contained in the margin and the efficiency of heavy metal retention through microelements on raw bentonites.

Keywords: Ca-bentonites; Na-bentonites; retention; margin; heavy metal; adsorption; phenolic compounds ; organic pollutants.

WHY IS STEM A MALE DOMAIN?

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ABSTRACT

The authors problematize the division of science into the so-called hard or male sciences and the so-called soft sciences, which receive the epithet "women's sciences." Such a division is the result of socialization processes as well as all other social processes that have built gendered expectations and rationales into biology as the destiny of women and men. School systems carry the burden of gender stereotypes that are part of a broader belief system that includes attitudes about female and male family roles, female and male occupations, and gendered perceptions of self. Bipolar constructs, male and female, determine that everything that is difficult should be done by men, while easier jobs should be carried out by women. Gender stereotypes often become mechanisms of gender segregation, which may justify defining STEM as a male domain because the conditions are created for men to succeed, i.e., there are no conditions in which women are directed to the STEM domain. Local environment is deemed important in disrupting the inequality between genders and creating the alternative constructions of genders. Consequently, schools and classrooms represent locations where gendered expectations about STEM fields are shaped and a starting point for recreation of traditionally gendered beliefs and roles. The physical environment of classrooms and a syllabus may serve as a barrier which tends to cause women to underestimate their own abilities. The authors believe that it is necessary to redesign all gender-tinted curricula and create stimulating environments in educational systems for all students to show their potential so that STEM can be a women's field as well.

Keywords: gender stereotypes, gender roles, gender segregation, STEM field

INFLUENCE OF TELEVISION ADVERTISING ON CHILDREN'S CHOICE OF BEVERAGES: A STUDY OF RIBENA AND CAPRI-SUN AMONG PUPILS OF AJAYI CROWTHER UNIVERSITY STAFF SCHOOL, OYO, SOUTHWEST NIGERIA.

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Abstract

The objective of this study was to investigate the influence of television advertisements on children's choice of beverages, using Ribena and Capri-sun as case studies; with a view to answering the research questions: Are children exposed to television advertisements of Ribena and Capri-sun? Is there a link between the advertisements of Ribena and Capri-sun that children are exposed to, and their preference and patronage of the beverages? Two relevant theories: the Social Learning Theory and the Elaborate Likelihood Theory underpinned the study. Methodologically, Focus Group Discussion was employed for the study. Subjects were drawn from pupils of Ajayi Crowther University Staff School, Oyo, southwest Nigeria, using purposive sampling technique. Thirty participants were selected for three discussion groups (10 per group). Findings show that television advertisements have been invaluable and very relevant in creating exposure for the selected beverages. Majority of the subjects were aware of the products and have been exposed to their commercials, although their recallability of the products' commercials was poor owing to varied reasons. Also, findings affirm that there is a link between the exposure of the children to the commercials of Ribena and Capri-sun; and their preference and patronage of the products. To this end, the study concludes that television advertisements create awareness for brands and to a great extent, influence the preference and patronage of the brands (particularly, children's products). For brands survival on a long-term basis, especially children's products, the study recommends that advertisers and ad agencies should work together to produce creative and interesting ad copies capable of arresting the attention of the children and retaining their interest; while ensuring product quality.

Key Words: Influence, Television, Advertisement, Children, Beverage

THE HISTORICAL SIGNIFICANCE OF UNIVERSITY MUSA DAKRI MUSEUM WITH SPECIAL REFERENCE TO SIR SYED COLLECTION

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Abstract

Aligarh Muslim University from the time of its origin, consider museum as an integral part of it. With the Jami Masjid, the Strachey hall and other adjacent buildings Sir Syed Ahmad Khan dreamed of an idea of the museum, which ultimately results in Nizam Museum. Overtime with the transformation of college into university, this museum got shifted to a new location and eventually the university developed a central museum in the form of Musa Dakri museum in addition to certain other artifacts .The journey from the Nizam museum to the Musa Dakri Museum has been long and intriguing, with Sir Syed collection the university museum had a great cultural wealth of Indian heritage. The Sir Syed collection was single handedly the result of the founder of the Aligarh Muslim University's deep interest of archeological endeavors.

GÖÇMENLERDE RUHSAL SORUNLAR VE GÖÇMENLERİN PSİKOSOSYAL İHTİYAÇLARI

MENTAL PROBLEMS IN IMMIGRANTS AND THE PSYCHOSOCIAL NEEDS OF IMMIGRANTS

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ÖZET

Göç kavramı göç terimleri sözlüğünde; süresi, yapısı ve nedeni ne olursa olsun insanların uluslararası bir sınırı geçerek veya bir devlet içinde yer değiştirdiği nüfus hareketleri şeklinde yer verilmiştir. Kişiler ya da gruplar ekonomik, siyasi, kültürel, sosyal, bireysel, savaş veya doğal afetlerle ilgili ve benzeri nedenlerden ötürü iç göç ya da dış göç gerçekleştirebilmektedir. Göç eden bireyler, göç öncesinde, göç sırasında ve göç sonrasında tecavüze uğrama, işkenceye maruz kalma, yaralanma, kaçırılma gibi travmatik olaylar, ailede kayıplar, şiddete maruz kalma veya tanık olma, tacize uğrama, zorlu yaşam koşullarında hayatta kalmaya çalışma, gelecekle ilgili belirsizlikten dolayı huzursuz olma, sosyal yaşama ilişkin korku (barınma, beslenme, arkadaş edinememe vb.), maddi güçlükler, işsizlik, sosyal yalnızlık, geçmişe özlem, ayrımcılık, zorlu kamp yaşantıları, kültürel engeller, dil sorunu, yeni rol ve sorumlulukların bilinmezliği gibi birçok problem yaşamaktadırlar. Yaşanan bu problemlerden dolayı fiziksel rahatsızlıklar olduğu gibi ruhsal rahatsızlıklar da oluşabilmektedir. Göç eden bireyler, geride yakınlarını bırakabilmekte ve ayrılıklar yaşayabilmekte, göç etmiş oldukları yerlerde kültürel, dil, ekonomik ve sosyal boyutlarda ilişkili problemler yaşayabilmekte ve bu durumlar da kişileri psikolojik olarak olumsuz etkilemektedir. Bu çalışmada; göç eden bireylerin ruhsal olarak genellikle; Travma Sonrası Stres Bozukluğu, Somatizasyon, Obsesif Kompulsif Bozukluk, Kişilerarası Duyarlılık, Depresyon, Anksiyete, Uyum Bozukluğu ve Şizofreni ile bağlantılı ruhsal sorunlar yaşadıklarına değinilmiş, ayrıca göçmenlerin yaşadıkları ruhsal sorunların temelinde veya öncülünde genel olarak travma sonrası stres bozukluğu olduğu saptanmıştır. Kişi ya da grupların zorunlu göç etmiş olmalarının, onların ruhsal problem yaşama riskini arttırdığına ilişkin bilgilere rastlanmıştır. Göçmenler yaşamış oldukları bu tür sorunlar ve travmalar sonrasında psikososyal desteğe ihtiyaç duymaktadırlar. Etkilenen kişilere yardım, bireysel ve toplum düzeyinde düşünülmelidir. Travma mağduru göçmenlerin kliniklerde hizmet almaları ve fiziksel sağlık dahil olmak üzere psikososyal sağlıkla ilgili boyutların da tedavide göz önünde bulundurulması dolayısıyla bütüncül bir değerlendirme yapılarak tedavi edilmeleri önem arz etmektedir. Göçmen bireylerin psikolojik yardım almaları noktasında bilinçlendirme çalışmaları yapılması, sağlık hizmetlerine erişimlerinin kolaylaştırılması ve bu bağlamda politikalar geliştirilmesi de önemli olarak değerlendirilmiştir.

Anahtar Kelimeler: Göçmen, Ruhsal Sorunlar, Psikososyal İhtiyaçlar

ABSTRACT

The concept of migration is in the dictionary of migration terms; Population movements in which people move across an international border or within a state, regardless of duration, nature or cause. Individuals or groups may perform internal or external migration due to economic, political, cultural, social, individual, war or natural disasters and similar reasons. Immigrants, traumatic events such as being raped, tortured, injured, kidnapped before, during and after migration, losses in the family, being exposed to or witnessing violence, being harassed, trying to survive in difficult life conditions, due to uncertainty about the future. they experience many problems such as being restless, fear of social life (shelter, nutrition, not being able to make friends, etc.), financial difficulties, unemployment, social loneliness, nostalgia, discrimination, difficult camp experiences, cultural barriers, language problems, ignorance of new roles and responsibilities. As a result of these problems, mental disorders can occur as well as physical ailments. Immigrant individuals can leave their relatives behind and experience separations, experience cultural, linguistic, economic and social problems in the places they have migrated, and these situations negatively affect people psychologically. In this study; immigrating individuals generally; It was mentioned that they had mental problems related to Post Traumatic Stress Disorder, Somatization, Obsessive Compulsive Disorder, Interpersonal Sensitivity, Depression, Anxiety, Adjustment Disorder and Schizophrenia, and it was determined that post-traumatic stress disorder was generally the basis or precursor of the mental problems experienced by immigrants. It has been found that the forced migration of individuals or groups increases their risk of experiencing mental problems. Immigrants need psychosocial support after such problems and traumas they have experienced. Assistance to affected persons should be considered at the individual and community level. It is important that immigrants who are traumatized receive services in clinics and that psychosocial health-related dimensions, including physical health, are taken into account in the treatment, so that they are treated with a holistic evaluation. It was also considered important to carry out awareness raising activities for immigrant individuals to receive psychological help, to facilitate their access to health services, and to develop policies in this context.

Keywords: Immigrant, Mental Problems, Psychosocial Needs

IDENTITY PROCESSING STYLE AND LIFE VALUES OF STUDENTS AND THEIR PARENTS

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Abstract

Identity processing style refers to relatively stable differences in how individuals process identity-relevant information to negotiate identity conflicts. Relationship between student's identity processing style and their life values as well as the congruence of values between parents and their college-aged children is still a relatively unexplored, especially in the new complex societal circumstances of their maturation. The goals of this study were to determine the relationship between students' identity processing st**y**les and their live values, as well as with their parents' life values. The participants were 160 female students and their parents, of which 54 were students, 54 were mothers and 52 were fathers. Identity Style Inventory was used to assess the identity style of students and Portrait Value Questionnaire to measure the importance of the ten life values of parents and students. The diffuse-avoidant identity style of students significantly positively correlated with the value of power and negatively with the value of self-direction. Informational identity style of students significantly positive**ly** correlated with self-direction and universalism. Normative identity style significantly positive**ly** correlated with the values of security, conformity and tradition and negatively with the value of stimulation. Student's identity style only significantly positively correlated with tradition and negatively with self-direction of their mothers. The results show a significant positive correlation of the mother-student relation on the values of self-direction, power, tradition and universalism, as well as a significant positive correlation of the father-student relation on the values of hedonism, achievement, tradition, benevolence and universalism. Individual differences in identity processing style and similarities and differences in certain values of parents and students will be discussed also within the Schwartz theoretical model**.**

Keywords: values, identity, students, parents

LISTENING IN EDUCATION

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Abstract

İn this paper we will discuss importance of listening in education through elaboration of stages and forms of listening and it's importance in educational process. Communication refers to the exchange of information and meaning with the purpose of managing the recipient's opinion, ideas, expectations and behaviors and achieving the desired goal or intention. Educational communication can be defined as a developmental-interactive process of creating and exchanging meaning between students and educators, which aims at the personal development of students.Interpersonal relationships are based on interaction. Integral part of that interaction is communication cause it is impossible to create an human interaction without communication and vice versa. The educational process implies the establishment of relations between the educational subjects. İf we accept the fact that the establishment of relations is a communication process, then the educational process is also a communication process. İn order to communicate effectively we need to have developed communication skills. One of communication skills especially important in educational process is listening. Scientific research has proven that students spend on average half of their total communicating time on listening. In addition, effective listeners achieve greater academic success. Listening is extremly important for effective communication. In order to avoid the misunderstandings, it is not only important to listen but also to hear. Listening is not a natural process and requires effort and, being a skill, it can be learned.

Keywords: active listening, communication, communication skills, education, listening

ATTRIBUTES AFFECTING TRAINING INSTRUCTORS' PERFORMANCE IN MARITIME-RELATED INSTITUTIONS: SPRINGBOARD FOR ORGANIZATIONAL

DEVELOPMENT INTERVENTIONS

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Abstract

This research study aimed to identify the attributes that motivate the training instructors to perform effectively as basis in proposing Organizational Development Interventions (ODI) for the Philippine Coast Guard – Coast Guard Education, Training and Doctrine Command (PCG-CGETDC), Philippine Navy – Naval Education, Training and Doctrine Command (PN-NETDC), and Philippine Merchant Marine Academy – Training Center (PMMA-TC) using a quantitative-descriptive approach with 214 training instructors as respondents. Results identified thirty-one attributes that highly motivate the instructors to perform effectively covering Leadership, Goals, and System; Capacity and Expertise; Personal; Welfare; Task-related; Resource-related; and Relationship where no significant difference among the responses was established. Conversely, a significant relationship between the instructor-respondents' extent of agreement on the attributes affecting their performance and their profiles was revealed. Among them, it was Salary that has the most number of significant relationships, with six out of seven attributes. It is noted, however, that each attribute has several indicators and that even if a profile was generally found without a significant relationship with an attribute, there were identified significant relationship with specific indicators. Regarding organizational interventions' degree of importance, the respondents considered twenty-three activities very important involving Diagnostic; Education and Training; Techno-Structural; Process Consultation; Coaching and Counseling; Life and Career Planning; Planning and Goal Setting; and Strategic Management. A significant difference within their responses as an institution, specifically between PMMA and PN, was noted on two specific activities. The SWOT analysis that includes the results of the study and other related data were utilized in developing the proposed validated ODI for these maritime-related institutions with the goal to improve the participation and performance of training instructors towards institutional efficiency and effectiveness. These interventions were meant to address the identified weaknesses and threats, as well as tapping on the attributes that highly motivate the instructors and the ODI that they consider as very important. To ensure implementation, the proposal includes the Intervention, Strategy, Resources (Personnel and Estimated Cost), Key Result Area, Duration/Timeframe, and Evaluation Measures, as well as the proposed ODI descriptions and procedures. This validated proposal is recommended to be pilot-tested, evaluated, adopted and institutionalized by PCG, PN and PMMA.

Keywords: attributes, maritime-related institution, OD interventions

THE LIVED EXPERIENCES OF WOMEN LEADERS IN A MALE-DOMINATED WORLD OF WORK: A PHENOMENOLOGICAL STUDY

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Abstract

The maritime industry is still considered to be a male-dominated field. Studies noted that women seafarers experienced gender issues and concerns such as sexual discrimination, sexual harassment, unequal access to premium wage rates, etc., which prove that working in the maritime industry is challenging for women. Nevertheless, there are a few women who still managed to emerge victorious in the field, defying the stigma that women cannot embrace the maritime world. The main objective of this phenomenological study on the lived experiences of women leaders in the male-dominated world of work is to uncover some of the women who were able to break the glass ceiling in the maritime world, onboard and ashore, documenting their experiences while ascending to their current position, in terms of: (a) welfare; (b) access; (c) conscientisation; (d) participation; and (e) control. It utilized a researcher-made semi-structured interview guide about the journey of each participant to leadership. Eight participants were purposively selected to shed light on the matters being sought. This study also clustered the challenges these women leaders individually encountered as they rose from the ranks such as cultural adaptation, discrimination, harassment, and stereotyping. These challenges became opportunities for them to show that women can also do the job ascribed for men. Values and principles, such as dedication, discipline and commitment to work, which helped and guided the participants to triumph over the challenges, were also discussed. Job excellence is common in most of the participants as their way to overcome any challenge. They eventually gained the respect of their male colleagues by proving their worth and doing their best.

Keywords: Women in Maritime Industry; Women Leader; Phenomenology

CHANGE EFFECT OF GLOBAL FISCAL RISK FACTORS ON PUBLIC FISCAL POLICIES AND DEVIATIONS IN PUBLIC REVENUES

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Abstract

This study aims to reveal a structural end effect in which financial risk factors cause different effects on tax revenues as essential public revenue. It is seen that this level of structural relationship also explains the reasons for some critical financial changes in the post-2010 period. The position of financial risk factors after 2010 caused some significant deviations, especially by negatively affecting the targeted public revenue portfolios. It is observed that within the scope of OECD and European Union countries, all public financial revenues mainly are constituted by dynamics of new public reform understandings and the search for new public resources. This phenomenon has also raised the question of the current effectiveness of fiscal risk factors. Namely, this phenomenon has made balancing the target public revenues and the budgetary risk factors inevitable, especially in overcoming the contradictory trend between public policies and fiscal targets in EU countries. An inflationary process of financial risk factors, especially in developing countries, has put forth a new public balance policy process inevitable. EU fiscal balance policies have come to the fore with different approaches in recent years. It appears that public fiscal balance policies have transformed into fiscal balance policies on a global and periodic basis rather than budget-based ones. This structure means possible controllable public budget options beyond a situation where budget deficits and balance are absolute, especially at the global level. This trend, after 2010, has formed the reason for a controllable global fiscal balance position with new changes in the targeted public fiscal policies and its formation with global standards.

Key Words: Budget Balances, European Unity, Fiscal Risks, Global Risk Factors, Public Revenues.

JEL Codes: H11, H13, H21.

NIGERIA DEVELOPMENT PLANS AND ITS IMPLICATION FOR NATIONAL DEVELOPMENT IN NIGERIA

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Abstract

Every society has a set of resources, natural and man-made, which are normally harnessed to produce the goods and services consumed by members of the society and for export. It is in pursuance of economic growth and development that developing countries have always engaged in economic growth and development planning. Nigeria as a country has always engaged in one form of national planning or the other. This paper review various development plans of Nigeria, and its implication for national development from 1946-2020. This study employed a theoretical review approach. The study identified some achievements of national development plans such as the establishment of the oil refinery in Port Harcourt, the Niger Bridge at Asaba, the Niger Dam at new Bussa, rehabilitation of farms and plantations, abandoned during the civil war, the establishment of twenty new Federal Government Secondary Schools, establishment of the Nigerian National Oil Corporation (NNOC), now Nigerian National Petroleum Corporation (NNPC). reconstruction of 2,200 miles of roads and establishment of food production companies. The challenges of national development plans identified are deficiencies in the plan and implementations, financial constraints, political instability, and upheavals, plan Indiscipline, inadequate well-trained planners and executors, poor information and data, lack of national interest, and political will, corruption, and Institutional weaknesses. The study recommended that there is a serious need to eradicate corruption in all its ramifications. There is a need for national awareness to sensitize, and conscientize Nigerians to be patriotic to the country among other recommendations were made

Keywords: Development Plans, National Development, Nigeria, Plan Implementation

DOES WORK -FAMILY AND FAMILY-WORK CONFLICTS AFFECT EMPLOYEE COMMITMENT

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Abstract

Economic, social, and cultural changes in recent years have had an effect on employee working life. The demands on people, their jobs, and their families have increased in particular because of the rise in living standards and the significance of work and family life. The dynamic interaction between work and family life has a big impact on employee commitment. The current study's goal is to determine how work-family and family-work conflicts affect employee commitment. 120 people from various notable organisations in India received questionnaires. The respondents' demographic and professional information was gathered using a structured questionnaire, and they were also asked to respond to research-related questions. The proposed hypotheses were put to the test using SPSS analysis. Results showed that employee commitments are significantly impacted by work-family and family-work conflicts. This study has important theoretical and practical implications for increasing employee commitment. By providing empirical proof and support for the novel adaptation of organisational theory, the current study adds to the body of knowledge on organisational behaviour.

Keywords

Work-Family Conflicts, Family -Work Conflicts, Employee Commitment, Organisations

FINANCIAL INNOVATION AS A FACTOR OF POSSIBLE ECONOMICAL DESTABILIZATION: MINSKY'S THEORY

ABBAS RAHEEM SALIH

Master's in

Faculty of Economics, (RUDN), International Business, Moscow, Russia

Abstract

This study researched updating existing and creating new financial products and services has become a leading factor in the development of global financial markets over the past 30 years. New financial instruments and technologies, united by the concept of "financial innovations," initiate large-scale transformations of the relevant financial markets and, as a result, affect the development of the economy as a whole. However, the overall positive view of this phenomenon has us thinking about the possible negative effects of an increase in the number of financial innovations. Turning to Western economic thought, we find theoretical developments indicating that under certain conditions an uncontrolled "innovation boom" in the financial sphere poses a threat to macroeconomic equilibrium, which is confirmed by the practice of developed countries.

Keywords: Innovation, Theory, Hypothesis, Financial

STRATEGIC PLANNING FOR THE SUSTAINABILITY OF OIL AND NATURAL GAS RESOURCES IN IRAQ: A STUDY ON MIDLAND OIL COMPANY

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Abstract

This study researched and highlighted the natural and economic resources of the Central Oil Company and then adopted the appropriate strategy for it, through the conduct of a strategic analysis of the internal and external environmental factors in the company and in the light of the results of this analysis identified the appropriate sustainable strategy for its economic resources, which contributed to the introduction of strategic options for the process of investing those resources to achieve economic diversity that makes Iraq less affected by these fluctuations.

Keywords: strategies, sustainably, environment, analysis

ROLEOF MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT-2005 TO COMBAT TRIBALMIGRATION IN HIMACHAL PRADESH: ACASE STUDY OF PANGWALA TRIBE

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Abstract

Purpose: Mahatma Gandhi National Rural Employment Guarantee Act-2005 (MGNREGA) scheme was launched by the Government of India on 7th September 2005 to provide 100days of guaranteed manual work to its unskilled workers in rural areas. Migration among tribal communities in search of food is most popular. MGNREGA has provided an opportunity to the tribal communities to generate livelihood at their door steps. The special focus of this study will be to analyze the impact of MGNREGA on tribal migration in Himachal Pradesh.

Methodology: To complete the present study Pangwala tribe will be taken in to consideration. Pangi Integrated Tribal Development Project (ITDP) will be taken as study area, because Pangwala tribe lives in this region. The study will be based on secondary data and will be analytical in nature.

Results: The results of the study will be helpful to government and policymakers to pay special attention to these vulnerable groups especially tribal communities in Himachal Pradesh.

Conclusion: The movement among tribal communities from hills to plain in search of food is very popular. The problems of tribal people are different than other people of the country. Tribal communities are getting migrated because of less employment opportunities at their origin place, land snatching, construction of power projects and other developmental activities tribal people are losing their agricultural lands, which causes threat to their survival. Agriculture is the primary profession of the tribal communities and because of low agricultural land holding the productivity is also low and they get migrated in search of food.

Keywords: MGNREGA, Tribal Migration, Pangi, Pangwala Tribe, Himachal Pradesh

E-MARKETPLACES IN TÜRKIYE AND SCRAPE OUT THE REASON FOR THE COMING FAREWELL OF AN OLD ACTOR

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Abstract

E-marketplaces which bring buyers and sellers electronically together through a third party, and thus exhibit and sell products, have emerged and enlarged as an important sales channel where most companies carry out their e-commerce activities quickly, in the last years. As of the first 6 months of 2021, only 2.9% of the enterprises engaged in e-commerce activities only on their website, while 92.7% operate only in e-marketplaces, and 4.4% sell on both channels, in Türkiye. An old and big actor owned a hundred percent by an international e-commerce company, has just announced that it is going to end its operations soon, in our country due to the competition reason. Accordingly, it will be meaningful to review novelties seen in the market for the last three years, to guess the senior player's farewell reason.Tremendously increasing demands in e-commerce created a bottleneck in the logistic sector in the first half of 2020. Most logistic companies developed new business models to answer customers' short-time delivery expectations as outsourcing and/or cooperating with small business units to use them as a delivery point. Two captive logistic companies belonging to two leader e-marketplaces, meanwhile serving also other e-retailers, developed new business models to be adopted changes in the market. Improved service quality and shortened delivery time pushed food producers to sell their products electronically. Furthermore, the leading actors of the market, have not stayed calm, and instead reacted to the new entrants by adding food delivery to their service ranges to be strong in the rising competition. Moreover, these two leaders have applied both contemporary and traditional promotional activities such as advertising on mobile, social media, and traditional channels, cooperation with influencers, and CRM, to inform customers about their new business methods and new service ranges, and to keep their brands' strength. The social marketing activities of these two companies are also striking. They support small and medium-sized, and female entrepreneurs and cooperative organizations by easing memberships to their e-marketplaces and requesting low commission rates from their sales, therefore, holding a large volume of vendors in their portfolios.The short review of the e-marketplaces for the last three years indicates that not competitively updating the business model besides well-developed technological investments, has not held this old player in midfield and let it leave the game.

Key Words: E-commerce, E-marketplaces, Competition in the E-Commerce sector, social marketing, changes in logistic business, adaptability to changes.

SOCIO-CULTURAL CHANGES CAUSED BY INTERNATIONAL MIGRATION

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Abstract

International migration is the illegal or legal displacement of people. This concept not only provides change and transformation among people but also affects countries socially and politically. Due to its geopolitical position, Turkey is a transit country that fits the concept of migration. Countries have developed and implemented various policies to take advantage of the effects of migration or to reduce its negative effects. For Turkey, which receives immigrants from many countries, Syrian immigrants have special importance especially because of their numbers. Population and spatial expansion related to the admission of Syrian refugees to our country has gained more momentum. Because the refugee population prefers to live in big cities. In addition, the return of refugees arriving in Turkey who do not want or do not want to go to other countries for our country and other countries is an important activity that affects both. This population movement does not matter as much as our country, as well as the political, economic, social, and cultural factors that have the potential to affect the world. The data to be obtained by monitoring refugee mobility for all actors, especially policymakers, is extremely important. Because the common ground of this dynamism is cities, especially metropolitan cities. Studies and projections that need to be revealed regarding economic integration, social cohesion, legal statuses, public policies, and political changes need to be supported by data to be obtained from monitoring refugee mobility. This study has been prepared to obtain general information about the socio-cultural changes caused by international migration.

Keywords: Migration, Urban Development, Urban Livability, Socio-Cultural, Refugee.

CULTURAL HERITAGE TOURISM AS AN ALTERNATIVE TO COASTAL TOURISM: MERSIN-SILIFKE

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Abstract

Silifke is one of the largest districts of Mersin province and is located on the Mediterranean coastline. Due to its location, Silifke is suitable for sea-sand-sun tourism and has an important cultural heritage as it under ruled by various civilizations throughout history. Although this district has many important cultural heritage values, the fact that it is usually mentioned with sea-sand-sun tourism has prepared the background for this study. Silifke has cultural tourism, which will be an important alternative to sea-sand-sun tourism. The development of cultural tourism will contribute to the economic development of the local people and will also provide an important opportunity for the preservation and reuse of cultural heritage sites. There are various religious buildings, historical water structures, military buildings, and mausoleum structures in this region, which have under ruled by many civilizations such as the Ottoman and Seljuk periods, especially the Roman and Byzantine periods. These tangible cultural structures are values the traces of the past. In addition to these, there are natural formations such as caves and sinkholes that can be evaluated within the scope of cultural tourism. In the scope of the study are discussed Roman Temple, Cambazlı Church, Alaaddin Mosque, Zeus Temple and Church, and Aya Thekla Church (religious buildings); Poimenios Bath and Three Beauties Mosaic, Stone Bridge, and Tekir Warehouse Water Cistern (historical water structures); Silifke Castle, Tokmar Castle and Liman Castle (military buildings); Adam Kayalar, Demircili Mausoleum and Mezgitkale (mausoleums structure) and Cennet Hell Pitcher and Astım Cave as natural formations. The fact that these structures are not actively used as an alternative cultural tourism element both do not provide economic benefits to the local people and cause many structures to be unused and destroyed. As a result of the study, it is observed to be important to transform the region into a more active and attractive cultural touristic area by including these cultural structures in the scope of cultural tourism. In this context, promotions ve landscaping, strengthening structural elements, necessary restorations, and tourism routes should be created for the region.

Keywords: Cultural heritage, alternative tourism, historical buildings, natural formations, Mersin.

EVALUATION OF CONTAINER USE IN ARCHITECTURE ON FLEXIBILITY PARAMETERS

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Abstract

Flexible structures, one of the requirements of sustainable architecture, are used together with the concepts of reuse and recycling. One of the best examples of this is container architecture, which has been used frequently in recent years. Examples of architectural use of containers have increased day by day. Containers have been components used in various areas of life, from the smallest scale to the construction of more complex structures. Practical, rational, and creative solutions can be built by reusing containers to create architectural products. Re-evaluation and use of containers in different functions is a sustainable approach but also provides many opportunities in terms of flexibility. Containers turn into a building component that allows flexible use with its features such as modular structure, easy transportation, disassembly, and assembly. In the study, the use of containers in creating an architectural product was discussed through the flexibility approach and it is aimed to reveal the use of containers through this approach. In this direction, the study consisted of three stages. In the first stage, a theoretical background was created by making a literature review on container architecture and flexibility. In the second stage, flexibility parameters were created based on the literature. At this second stage, the parameters used in the studies on flexibility were used. In this context, flexibility parameters were discussed under five headings; mobility, extensibility, adaptability, modularity, and multi-purpose. In the third stage of the study, the use of containers in architecture was examined in line with the flexibility parameters determined. Therefore, the relationship between the use of containers as a building component and the flexibility approach, which is a requirement of sustainable architecture, has been revealed. It is hoped that the research, which deals with the use of containers in architecture through the flexibility approach, will guide other research.

Keywords: Container, flexible structure, sustainability, flexibility parameters.

A NEW TYPE BIVARIATE BERNSTEIN SCHURER OPERATORS

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Abstract

This study is prepared in the field of approximation theory. Approximation theory is an important tool in solving problems that arise in fields such as daily life and engineering, medicine. It is based on using tools such as simple and useful function operators instead of difficult and complex functions to work with. Many researchers have defined new linear positive operators and their approximation properties have been studied with the help of Korovkin –Volkov type theorem. In this study, a generalization of the Bernstein Schurer operator will be carried into two-dimensional space and important approximation properties will be examined. By obtaining the equations provided by the test functions required for the functions of two variables, calculation of rate of convergence was made with the help of the partial modulus of continuity.

Key words: Bernstein Schurer operator, Volkov theorem, linear positive operators.

EFFECT OF THERMOPHORESIS AND BROWNIAN MOMENT ON 2D MHD NANOFLUID FLOW OVER AN ELONGATED SHEET

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Abstract

In this study we investigate the 2D MHD flow of a dissipative Maxwell nanofluid past an elongated sheet with uneven heat source/sink, Brownian moment and thermophoresis effects. The flow governing PDEs are transmuted into nonlinear ODEs adopting suitable similarity transmissions. Further, the RK-4 technique is employed to acquire numerical solutions. The impact of pertinent parameters such as thermal radiation, frictional heating, irregular heat source/sink, volume fraction of nanoparticle, biot number, Brownian moment and thermophoresis on the flow quantities such as velocity, thermal and concentration fields likewise friction factor, heat and mass transfer rates are bestowed with the succor of graphs and tables. Dual nature is witnessed for Newtonian and non-Newtonian fluid cases. It is noticed that the heat and mass transfer rate in Newtonian fluid larger as compared with non-Newtonian fluid. Comparisons of the achieved upshots are in good covenant with the available literature for limiting cases.

Keywords: MHD; Stretching sheet; Maxwell fluid; Nanoparticle; frictional heating; uneven heat source/sink.

CARREAU MODEL FOR LIQUID THIN FILM FLOW OF DISSIPATIVE MAGNETIC-NANOFLUIDS OVER A STRETCHING SHEET

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Abstract

In recent days, external magnetic fields are very effective to set the thermal and physical properties of magnetic-nanofluids and regulate the flow and heat transfer characteristics. The strength of the applied magnetic field affects the thermal conductivity of magnetic-nanofluids and makes it aeolotropic. With this incentive, we investigate the flow and heat transfer characteristics of electrically conducting liquid film flow of magnetic-nanofluids over a stretching sheet by considering the aligned magnetic field with space and temperature dependent heat source/sink, viscous dissipation and thermal radiation. For this study, we considered Fe_3O_4 and $CoFe_2O_4$ nanoparticles embedded in water. Numerical results are determined by adopting Runge-Kutta based shooting technique. Graphs are exhibited and explained for various parameters of interest. The influence of pertinent parameters on reduced Nusselt number, friction factor, flow and heat transfer is discussed with the assistance of graphs and tables. It is found that aligned magnetic field regulates the momentum boundary layer and heat transfer rate. It is also observed that increasing the volume fraction of nanoparticles effectively enhances the thermal conductivity of Fe_3O_4-water nanofluid when compared with $CoFe_2O_4$-water nanofluid.

Keywords: film flow, inclined magnetic field, viscous dissipation, radiation, non-uniform heat source/sink.

DESIGN AND ANALYSIS OF Y-25 TYPE TRAIN BOGIE CAPABLE OF CARRYING 200 TONS OF LOAD

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ABSTRACT

The Y-25 bogie model, which is used as a standard today, can carry 45 tons with 2 axles. The aim of the study is to calculate the stress, total deformation and safety factor in the designed bogie. The designed bogie has a carrying capacity of up to 200 tons. Static loading analyzes of this bogie, which were drawn and assembled using the Solidworks program, were made by assigning the same material and giving different loads over the ANSYS program. Structural Steel was used as the material during the analyses. A 50 mm mesh was used in the analysis. As a result of these analyzes, the equivalent stress, total deformation and safety factor value were determined. In the first analysis, a force of 70 tons (700000 N) was applied to the hub sleeper and the results were examined. The maximum stress under 70 tons load was measured as 6.6439 MPa, and the factor of safety was 15. Secondly, 150 tons (15000000 N) of force was applied and the results were examined. The maximum stress at 150 tons load was analyzed as 142.37 MPa and the minimum factor of safety was 1.756. Finally, 200 tons (2000000 N) force was applied and the results were examined. The maximum stress under 200 tons was analyzed as 189.83 and the minimum safety factor was 1.317.Since the stress value calculated as a result of the reports obtained is smaller than the yield stress of the material (250MPa) and the safety factor value is greater than 1, the bogie; able to work safely under the applied force

Keywords: Freight wagons, cargo bogies, Y-25 bogie, finite element analysis.

MODELING HEAT TRANSFER ENHANCEMENT OF FERROFLUID FLOW IN A MICROCHANNEL FILLED WITH A POROUS MEDIUM

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Lemi Guta

Summary

Heat transfer characteristics and hydrodynamical properties of ferrofluid through microchannels with non-uniform permeable walls temperature and filled with porous media plays an important role in modern microfluidic applications, such as solar collectors, nuclear reactors, micro-electro-chemical cell transport, micro heat exchanging, microchip cooling, and electronic equipment. Therefore, this paper presents the investigation of ferrofluid heat transfer characteristics as well as hydrodynamical properties in a permeable microchannel with non-uniform permeable walls. The semi-discretization finite difference method is utilized to solve the highly non-linear partial differential equations that govern the momentum and energy equations. Accordingly, the numerical outcomes reveal that the ferrofluid velocity and temperature profiles indicate a rising trend as the pressure gradient parameter, the variable viscosity parameter, the Darcy number, the Eckert number, and Prandtl number increase. The Reynolds number, which is a suction/injection parameter, shows a contrary influence on the ferrofluid velocity and temperature whereas nanoparticles volume fraction and the Forchheimer constant show a decreasing effect on the ferrofluid velocity and temperature. The outcomes also depict that the coefficient of skin friction at the cold wall of the microchannel is larger for higher values of the nanoparticles volume fraction, the variable viscosity parameter, the Darcy number, and the Eckert number. Besides, the coefficient of skin friction at the hot wall rises with the Darcy number, and the Prandtl number. Furthermore, the heat transfer rate at both cold and hot walls of the microchannel increases as the variable viscosity parameter, the Darcy number, the Eckert number, and the Prandtl number increase. The nanoparticles volume fraction and Darcy number show a retarding effect on the heat transfer rate at both walls of the microchannel.

Keywords: Microchannel, Ferrofluid, Variable viscosity, Heat transfer, Porous medium

THE INFLUENCE OF THERMAL RADIATION AND CHEMICAL REACTION ON MHD MICROPOLAR FLUID IN THE PRESENCE OF HEAT GENERATION/ ABSORPTION

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Abstract

Numerical and theoretical analysis of mixed convection flow of MHD micropolar fluid with stretching capillary in the presence of thermal radiation, chemical reaction, viscous dissipation and heat generation/ absorption have been studied. The governing non linear partial differential equations of momentum, angular velocity, energy and concentration are converted into ordinary differential equations using similarity transformations which can be solved numerically. The dimensionless governing equations are solved by using Runge Kutta fourth fifth order along with shooting method. The effect of physical parameters viz., micropolar parameter, unsteadiness parameter, thermal buoyancy parameter, concentration buoyancy parameter, Hartmann number, spin gradient viscosity parameter, microinertial density parameter, thermal radiation parameter, Prandtl number, Eckert number, heat generation or absorption parameter, Schmidt number and chemical reaction parameter on flow variables viz., velocity of micropolar fluid, microrotation, temperature and concentration has been analyzed and discussed graphically. MATLAB code is used to analyze numerical and theoretical facts. From the simulation study it can be concluded that an increment of micropolar parameter, Hartmann number, unsteadiness parameter, thermal and concentration buoyancy parameter results in decrement of velocity flow of micropolar fluid; microrotation of micropolar fluid decreases with an increment of micropolar parameter, unsteadiness parameter, microinertial density parameter and spin gradient viscosity parameter; temperature profile of micropolar fluid decreases with an increment of thermal radiation parameter, Prandtl number, micropolar parameter, unsteadiness parameter, heat absorption and viscous dissipation parameter; concentration of micropolar fluid decreases as unsteadiness parameter, Schmidt number and chemical reaction parameter increases. Furthermore, computational values of local skin friction coefficient, local wall coupled coefficient, local Nusselt number and local Sherwood number for different values of parameters have been investigated.

Keywords: Thermal radiation, chemical reaction, viscous dissipation, heat absorption/ generation, similarity transformation**.**

MESLEK LİSELERİNDE ÖĞRENCİLERİN GELECEK SEÇİMLERİ ÜZERİNE BİR ALAN ARAŞTIRMASI: HAKKARİ İLİ ÖRNEĞİ

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Özet

Toplumların gelecek inşa etmesine birinci derece etki eden kurum, kuşkusuz eğitim kurumudur. Bu yüzden eğitimin tarihi insanlığın tarihi ile eşdeğerdir. Her ne kadar günümüz eğitim kurumu ve eğitim sistemi değişim ve dönüşüm geçirmiş olsa da temelde eğitim etkinliğinin hep var olduğu kabul edilmektedir. Eğitimde yaşanan bu dönüşümler, çoğu zaman öğrencinin, öğretmenin ve ebeveynlerin öğrenci geleceklerine ilişkin karar verme mekanizma ve süreçlerini de dönüşüme uğratmıştır. Bu araştırma; meslek liselerinde öğrencilerin kendi gelecek seçimlerinin kimler tarafından gerçekleştirildiğini, seçilen bölümlerin meslek uyumu ile neticelenip neticelenmediğini, meslek liselerinden erken ayrılmaların hangi sebeplerden kaynaklandığını ve "ne okulda ne istihdamda bulunma" sorunsalına dair araştırma gerçekleştirmeyi ve nedenlerini ortaya koymayı amaçlamaktadır. Araştırma, AB ERASMUS+ projesi olan "Gelecek Seçimlerine Destek Projesi (Support to Choose Future Project) kapsamında gerçekleştirilmiştir. Bu araştırmanın metodolojik yaklaşımı ise Co-Agency yöntemiyle odak grup görüşmesi olarak tasarlanmıştır. Odak grup çalışması öncesinde literatürde yer alan çalışmalar incelenmiş, daha önce bu alanda yürütülen Avrupa Birliği tarafından desteklenen projeler ve sonuçları derinlemesine analiz edilmiştir. İnteraktif bir şekilde katılımcıların hepsinin uzman ve gözlemci dahil fikirlerini beyan etme süreci olan Co-Agency bağlamında yapılan odak grup görüşmesi yarı yapılandırılmış olarak hazırlanmış olup 2 araştırmacı, 1 moderatör ve 12 katılımcı ile gerçekleştirilmiştir. Katılımcılar öğretmen, rehber öğretmen, idareci, öğrenci ve velilerden oluşmuştur. Araştırma; "okuldan erken ayrılma", "beceri uyumsuzluğu" ve "ne okulda ne istihdamda bulunma durumu" olmak üzere 3 tema üzerine inşa edilmiştir. Araştırma sonucunda para, sabit gelir gibi ekonomik güdülenmeler ön plana çıksa da mutluluk, umut-hedef-hayal, başarı, özgüven duygusu gibi motivasyon kaynaklarının öğrencilerin gelecek seçimlerini etkilediği sonucu ortaya çıkmıştır.

Anahtar Kelimeler: Mesleki Eğitim, Okuldan Erken Ayrılma, Co-Agency, Beceri Uyumsuzluğu, NEET.

A FIELD STUDY ON FUTURE CHOISES OF STUDENTS IN VOCATIONAL HIGH SCHOOLS: THE CASE OF HAKKARI

Yunus EROĞLU, Cumhur DEMİRALP, Ali Can GÖZCÜ

Abstract

Education for sure is the institution that has a primary impact on the future construction of societies. Therefor the history of education is equivalent to the history of humankind. It is accepted that education always exists, even though the education system and the institution of today's education system have been transformed so far. These transformations in education have been transformed in the process of students, parents and teachers in deciding on the future of the students in education throughout the entire time period. This research; aims to carry out research on the problem and to reveal the reasons why those who will be elected from vocational high schools are not selected, and the reasons and reasons for leaving school early. The research has been carried out within the scope of the EU ERASMUS+ project "Support to Choose Futures". The methodology of this study is designed as Focus group meeting in Co-Agency technique. Studies in the literature related to focus group work have been examined, and the studies and projects by the European Union in these areas have been analyzied at the beginning. The focus group interview, held interactively in the context of Co-Agency, which is the process of expressing opinions of all participants, including experts and observers,has been prepared as semi-structured and has been carried out with 2 researchers, 1 moderator and 12 participants. The participants consist of teachers, counselors, administrators, and the parents of the students. Research has been built on 3 themes: "early leaving school", "skills mismatch" and "neither in school nor in employment". As a result of the research, although economic motivations such as money and fixed income are the forefronts, it has been concluded that motivation sources such as happiness, hope-goal-dream, success and self-confidence affect students' future choices.

Keywords: Vocational Education, Early School Leaving, Co-Agency, Skill Mismatch, NEET.