International Marmara Sciences Congress (Spring 2020)

19 – 20 June 2020 KOCAELI

ABSTRACT E-BOOK

Organizer

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IMASCON 2020 ORGANIZATION

IMASCON 2020, organized by Kocaeli University (KOÜ) and Körfez Municipality and also sponsored by Kocaeli Metropolitan Municipality, Kartepe Municipality, Gölcük Municipality and East Marmara Development Agency.

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CONGRESS PROGRAMME

19 JUNE Friday

The Start of Registration Process

OPENING SPEECHES - 10:15 / 11:00

- İstiklal Marşı ve Saygı Duruşu
- Körfez Belediyesi Tanıtım Filmi
- Kocaeli Üniversitesi Tanıtım Filmi

- Doç. Dr. Öznur GÖKKAYA Kocaeli Üniversitesi / Imascon Kongre Başkanı
- Mak. Yük. Müh. Şener SÖĞÜT Körfez Belediye Başkanı
- Prof. Dr. Sadettin HÜLAGÜ Kocaeli Üniversitesi Rektörü
- Doç. Dr. Tahir BÜYÜKAKIN Kocaeli Büyükşehir Belediye Başkanı
- Dr. Bekir Pakdemirli, T.C.Tarım ve Orman Bakanı

IMASCON PANEL – 11:00 / 11:30	
SESSION CHAIR :	
Assoc. Prof. Dr. Arif OZKAN Kocaeli University	Küresel Salgın Döneminde Sürdürülebilirlik / Sustainability in the Global Pandemic Period
Av.Vedat DOĞUSEL Turkish Chamber of Shipping / Head of Kocaeli Branch	
Eng. Recep OZTURK Head of Korfez Chamber of Commerce	
Yahya OZTURK Head of Korfez Trademans Chamber of Commerce	
Prof. Dr. N.Zafer CANTÜRK Kocaeli University Hospital Chief Physician	
Prof.Dr. Mehmet YILDIRIM Kocaeli University Dean of Technology Faculty	
IMASCON PANEL I – 11:30 / 13:00	
SESSION CHAIR :	
Prof. Dr. Tamara Milenkovic Kerkovic, University of Nis, Serbia	Küresel Salgın Döneminde Sürdürülebilirlik / Sustainability in the Global Pandemic Period
Prof. Dr. Andrei Mitic, Belgrad University, Serbia	
Prof. Assoc. Dr. Flora Merko, “Aleksandër Moisiu” University Durrës, Albania	
Prof. Dr. Ahmet Kala, İstanbul University	
Prof. Dr. Nardane Yusifova, Azerbaijan National Academy of Sciences	
Prof. Dr. Novo Palakalovic, University of East Sarajevo, Bosnia and Herzegovina	
Assist. Prof. Dr. Reyhan Dadaş, Azerbaijan State Pedagogical University, Azerbaijan	
Lecturer Phd. Violeta Neza, “Aleksandër Moisiu” University Durrës, Albaniaoturu	
Prof. Dr. Özcan Gündoğdu, Kocaeli Üniversitesi	
IMASCON PANEL II – 14:00 / 15:30	
SESSION CHAIR :	
Prof. Dr. Şükrü Dursun, Konya Teknik Üniversitesi	Küresel Salgın Döneminde Sürdürülebilirlik / Sustainability in the Global Pandemic Period
Prof. Assoc., Dr. Lyudmyla Symochko, Uzhhorod National University, Ukraine	
Prof. Dr. Luis Manuel Ferreira Roseiro, Coimbra Polytechnic- ISEC, Portugal	
Prof. Dr. Tom Gillpatrick, Portland State University, U.S.A.	
Phd. Murzaqmatov Amanbek Kamıtoviç, Osh State University, Kirghizistan	
Prof. Dr. Mehboob Nagarbawdi, Aki’s Poona College Of Arts, Science & Commerce, India	
Prof. Dr. Hüseyin Toros, İstanbul Teknik Üniversitesi	
Doç. Dr. Ayşe Günsel, Kocaeli Üniversitesi	

ORAL PRESENTATIONS		
19 June 2020	**SESSION 1**	**Time 14:00 – 15:15**
IMASCON Session 1.1 / 14:00 – 15:15	**Hall : 1**	**19 June 2020**
SESSION CHAIR : Assit. Prof. Dr. İbrahim MUTLU		
Ayşenur Bozoğluer	The Determination Of Cytotoxic Effects Of Gemcitabine And Polydatin Over Human Pancreatic Carcinoma Cells (Panc-1)	
Merve Yavuz	Investigation Of The Cytotoxic Effect Of A Kojic Acid Derivative "Kojylmethyl Dichlorobenzyl Piperazine" On Various Cancer Cell Lines	
Abdulsalam Redhwan	Production Of Cellulose Microfiber From Populus Nigra L. (Kavak) And Conversion To An Industrial Product	
Ahmet Öz	Cytotoxic Effect Of Carya Illionoinensis Ethanoled Shell Extracts On Various Cancer Cell Lines	
Banu Doğan	Secondary Metabolites And Production Ways	
IMASCON Session 1.2 / 14:00 – 15:15	**Hall : 2**	**19 June 2020**
SESSION CHAIR : Assoc.Prof.Dr.Arif ÖZKAN		
Birol Emekli	Sentiment Analysis With Deep Learning Methods Of Published Turkish Tweets For Gsm Operators	
Volkan Küçüköner	Comparing And Measuring The Images Processed In Forensic Information Evidence Investigations	
Hasan Hakan Genç	Using Of Cloud-Based Quantum Computer Programming Platforms For High Precision Floating Point Calculations	
Sungu Murat Gedikoglu	Using Collaborative Filtering Methods For Products Recommendation Intended For To Customers	
Anıl Kurt	Comparing Of Performances Of Xgboost And Random Forest Algorithms Aimed At Network Based Intrusion Detection	

ORAL PRESENTATIONS		
19 June 2020	**SESSION 2**	**Time 15:30 – 16:45**
IMASCON Session 2.1 / 15:30 – 16:45	**Hall : 1**	**19 June 2020**
SESSION CHAIR : Assist.Prof.Dr.Sinan UĞUZ		
Nuray Şentürk	Classification And Evaluation Of Complaints Coming To Call Center By Text Mining Method	
Yasin Kalkavan	Comparison Of Lstm Deep Learning Method And Arima Time Series Method Through Car Rental Sector Data	
Mihriban Özsoy	Classification The Problems Of Municipal With Text Mining Method Using White Desk Data (Example Of Sakarya Metropolitan Municipality)	
Volkan Küçüköner	Image Processing In Computer Forensic Evidence Analysis	
Assist.Prof.Dr.Sinan Uğuz	A Web-Based System Design For Real-Time Temperature Data Monitoring	

IMASCON Session 2.2 / 15:30 – 16:45	**Hall : 2**	**19 June 2020**
SESSION CHAIR : Assist.Prof.Dr.Asiye ASLAN		
Assist.Prof.Dr. Asiye Aslan	Renewable Energy In Balikesir	
Assist.Prof.Dr .Zekeriyya Bahadır	Surfactant Microextraction Procedure For Preconcentration Chromium(VI) In Water Samples By Flame Atomic Absorption Spectrometry	
Yahya Gökberk Kartal	Pumice Addition To Basalt/Carbon/Glass Fiber Reinforced Tpe Matrix Composites: Mechanical, Tribological And Thermal Properties	
İnan Uğur Yüceer	Vortex Tube Effect In Energy Recovery At Natural Gas Pressure Reduction Stations	
Nurettin Bulan	The Effect Of Cutting Form And Cutting Tool Radius On Surface Roughiness In Milling Process	
IMASCON Session 2.3 / 15:30 – 16:45	**Hall : 3**	**19 June 2020**
SESSION CHAIR : Assoc Prof. Dr. Arif ÖZKAN		
Sena Kasım	Basket Analysis With FP-Growth Algorithm In Garment Industry (Men's Clothing Example)	
Noyan Tanrıver	Drone Supported Access Point For Disaster Situations	
Volkan Küçüköner	Interpretation And Presentation Of Images Processed In Forensic Information Evidence Analysis	
Seda Kılıçer	Investigation Of Study On Data Mining Applied To The Education Sector In Turkey	
Meltem Türkmen Küçük	Effects Of Project Manager's Team Management Features On Project Success In Software Projects	
ORAL PRESENTATIONS		
19 June 2020	**SESSION 3**	**Time 17:00 – 18:15**
IMASCON Session 3.1 / 17:00 – 18:15	**Hall : 1**	**19 June 2020**
SESSION CHAIR : Assist. Prof. Dr. Necmi ÖZDEMİR		
Özge Cura	Investigation Of Energy Consumption Of Auxiliary Enterprises In A Cement Factory	
Ulaş Köse	Heat Exchanger Design And Analysis For Milk Powder Production Process Needs In A Milk Factory	
Research Assist. Dr. Ömür Can Özgüney	Robust Control Of Seesaw Model	
Dr.Burak Gökalp	Fire On Board	
Yuşa Haktanır	Mechanical Gauge And Plug Gauge Analysis	
IMASCON Session 3.2 / 17:00 – 18:15	**Hall : 2**	**19 June 2020**
SESSION CHAIR : Prof. Dr. Hysen MANKOLLI		
Prof. Dr. Hysen Mankolli	Assessment Of Climate Area Based On Collected Data Of Precipitation	
Doç. Dr.Lyudmyla Symochko	Food Security Research: Ecological And Social Aspects	
Doç. Dr.Lyudmyla Symochko	Shiitake Mushroom Cultivation Using Sawdustbased Based Supplemented Substrate	
Prof. Dr.Olena Demyanyuk	Organic Soil Carbon Management In The Context Of Climate Change	

	And Food Security
IMASCON Session 3.3 / 17:00 – 18:15	**Hall : 3 19 June 2020**
SESSION CHAIR : Assoc. Prof. Dr. Hasan KAYA	
Fatih Dereoğlu	Predictive Maintenance Application And Vibration Analysis In Tissue Plants
Okan Yetik	Modification Of Surface Properties Of Shot Peened Ti6al4v Alloy By Grit Blasting
Mehmet Ali Ülker	Preliminary Design And Improvement Of A Turbojet Engine For Uav, Auav, Navigation Missiles And Tfx National Combat Aircraft
Murat Alan	Biosignal Classification And Disease Prediction With Deep Learning
Ömer Can Aydın	Design And Control Of Closed Loop Wind Tunnel
ORAL PRESENTATIONS	
19 June 2020	**SESSION 4** **Time 18:30 – 19:45**
IMASCON Session 4.1 / 18:30 – 20:00	**Hall : 1 19 June 2020**
SESSION CHAIR : Assist.Prof.Dr. Şule KUŞDOĞAN	
Assist.Prof.Dr. Şule Kuşdoğan	Investigation Of Ship Electrical System Design
Mahmut Özbay	Investigation Of Small Signal Stability With Pss-Avr In Multi-Machine Power Systems
Sadettin Burak Kılcı	Dynamic Parameter Identification For A Four Degree Of Freedom Autonomous Underwater Vehicle
Mohamad Nour Ahmad	Design Of Wideband Electromagnetic Cloak With Log-Periodic Patch Antenna Array
Mehmet Caner Başol	High Efficiency Constant Current Power Supply Design, Simulation And Implementation With Low Output Current Surge For Slim Led Luminaires
Abdullah Erkam Gündüz	Connector Position Detection Simulation Using Optical Time Domain Reflectometer Analysis
IMASCON Session 4.2 / 18:30 – 20:00	**Hall : 2 19 June 2020**
SESSION CHAIR : Assist.Prof.Dr.Tuğçe TEZEL	
Research Assist. Dr. Ömür Can Özgüney	Fuzzy-Pid Control Of Seesaw Model
Dr.Burak Gökalp	The Use Of Biodiesel Additive Ship And Aircraft Fuels In Diesel Engines
Türker Yetkin Özdemir	Static Structural Analysis Of A Cnc Milling Machine Tool For Micro Machining Processes
Assist.Prof.Dr.Tuğçe Tezel	Failure Analysis Of A Timing Belt Pulley
Zeki Yılbaşı	Insights Into The Biodiesel Derived From Hemp (Cannabis Sativa L.) Seed Oil As An Important Raw Material And Its Fuel Characteristics
Assist.Prof.Dr Zeliha Kamış Kocabıçak	Investigation Of Electric Motors Used In Electrical Vehicles
IMASCON Session 4.3 / 18:30 – 19:45	**Hall : 3 19 June 2020**
SESSION CHAIR : Assist.Prof.Dr. Serdar BİROGUL	
Özcan Ölçer	Investigation Of Earthquake Effect In Different Floor Types In Multi-Storey Concrete Building
Assoc.Prof.Dr. Ufuk Aydın	Lateral Heterogeneity Of Seismc Velocities And Attenuation

Gökay Gündüzalp	Investigation Of Dam Break Flood In The Basin By Two Dimensional (2d) Analysis: Melen River Study
Assoc.Prof.Dr. Ufuk Aydın	Lateral Variations Of Poisson's Ratio In Southeastern Anatolia
20 JUNE Saturday	
ORAL PRESENTATIONS	
20 June 2020	**SESSION 5** **Time 10.30 – 11:45**
IMASCON Session 5.1 / 10:30 – 11:45	**Hall : 1** **20 June 2020**
SESSION CHAIR : Assoc. Prof. Dr. Abdulkadir CENGİZ	
Kübra Çelik	Kaizen Applications In The Steel Sector To Reduce Safety Risks
Research Assist. Kübra Yılmaz	Evaluation Of Occupational Safety Cultures In Terms Of Occupational Safety Priority And Fatalism Of Afad And Firefighting Teams Of Emergency And Disaster Employees: The Case Of Çanakkale Province
Sedat Tayyar	Assessment Of Risk Factors, Hazards And Occupational Accidents Exposed By Personnel Working In Authorized And Special Services: A Case Study For Çanakkale Province
Büşra Cici	Evaluation Of Social Life Cycle Assessment Practices In Terms Of Worker Stakeholder Categories
Serkan Gürsoy	Industrial Noise Maps For Assessment Of Noise Level And Personal Exposure Levels: An Application For Machine Manufacturing Workshop
IMASCON Session 5.2 / 10:30 – 11:45	**Hall : 2** **20 June 2020**
SESSION CHAIR : Assoc. Prof. Dr. Ali TÜRKCAN	
Cihad Gültekin	Based On Sagnac Michelson Interferometer Distributed Fiber Optic Acoustic Sensor Network Harmonic Analysis
Mehmet Caner Başol	Current Remover Circuit Design, Simulation And Implementation For Led Drivers With High Output Current Fluctuation
Macit Aydın	Mathematical Analysis, Simulation And Implementation Of PFC Methods
Uğur Yücel	European Union And Renewable Energy Sources In The Electricity Generation In Turkey Investigation Of The Incentives
Serhat Taşer	Energy Saving Analysis Of Urban Transportation: The Case Of Akcaray
IMASCON Session 5.3. / 10:30 – 12:00	**Hall : 3** **20 June 2020**
SESSION CHAIR : Assist.Prof.Dr. Pınar ILGIN	
Assist.Prof.Dr.Zehra Ölçer	Enzyme Immobilization Studies In Electrochemical Biosensors For Fast And Sensitive Detection
Emine Demir	2- Ethylhexyl Ester: Synthesis, Structural Characterization And Lubrication
Ahmet Erdem	Preparation And Characterization Of Temperature Responsive Cationic Comb-Type Grafted POE-POP Based Hydrogel
Assist.Prof.Dr. Pınar Ilgın	Synthesis, Characterization And Drug Release Application Of Ph And Temperature-Sensitive Xanthan Based Ipn Hydrogels
Melika Pirhashemi	Dimer Diamine Containing Polyimide Foams
Numan Harımdar	Phenolic Compound Application For Obtaining Antibacterial Cotton

	Fabric
Dr. Omer GUNGOR	Synthesis and Structural Characterization of Novel (4-aminophenyl)sulfonyl-N-N-dimethylaniline Derivative of Calix[4]arene
ORAL PRESENTATIONS	
20 June 2020	**SESSION 6** **Time 12:00 – 13:30**
IMASCON Session 6.1 / 12:00 – 13:30	**Hall : 1** **20 June 2020**
SESSION CHAIR : Assoc. Prof. Dr. Ali TÜRKCAN	
Yakup Başol	Investigation Of Occupational Safety Applications In Furniture Manufacturing Sector
Sedat Tayyar	Evaluation Of Occupational Safety Cultures In Terms Of Management Commitment, Occupational Safety Priority, Employee Participation Of Technical Personnel Working In Automotive Authorized And Special Services
Research Assist.Kübra Yılmaz	Investigation Of The Effects Of Occupational Safety Supervisions On Firefighting And Afad Teams' Occupational Safety Cultures
Serkan Gürsoy	Preparation Of Noise Maps For Assessment Of Noise And Personal Exposure Levels Of A Furniture Production Workshop
Esra Yıldızbaşı	Prioritization Of Sectors Which Occurs To The Occupational Accident With The Fuzzy Multiple Criteria Decision Making Approach In The Context Of Risks
Lecturer. Dr. Ömer Güngör	Occupational Health And Safety Measures In Chemistry Research Laboratories
IMASCON Session 6.2 / 12:00 – 13:30	**Hall : 2** **20 June 2020**
SESSION CHAIR : Assist.Prof.Dr. Korkut AÇIKALIN	
Nur Gümüş	Development Of New Flame Retardant Chemicals By Using Urea Formaldehyde Resin On Particle Boards And Their Effects On Burning Times
Assist.Prof.Dr.Arif Mermer	Synthesizing Novel Thiazole-2-Imine Derivatives As Antiurease Agents: Machine Learning And Molecular Docking Study
Cihan Aktaş	The Importance Of Surface Activity In Fire Fighting Foam
Dr.Banu Aydın	Effects of Cholinergic and EGF Receptors Antagonists on HEPG2 and Steatotic HEPG2 Cell Proliferation
Assist.Prof.Dr.Korkut Açıkalın	Determination Of Kinetic Parameters For Olive Stone Pyrolysis By Applying Differential Methods On Thermogravimetric Analysis Data
IMASCON Session 6.3 / 12:00 – 13:30	**Hall : 3** **20 June 2020**
SESSION CHAIR : Assist. Prof. Dr. Uğur SOYKAN	
Şüheda Özel	3d Printing: The Next Revolution In Industrial Manufacturing
Assist.Prof.Dr.Uğur Soykan	Investigation Of Thermal Behavior And Mechanical Performances Of Ulexite Reinforced High Density Polyetylene (Hdpe) Composite Materials
Ümit Gencay Başcı	Metal Additive Manufacturing Tencnologies And Application Areas
Ömer Şengül	Comparison Of Experimental Data Of Some Thermal And Mechanical Properties Of Nano Carbon Particle And Graphite Reinforced Polypropylene Composite Material

Assist.Prof.Dr .Alper Kaşgöz	Variations In The Chain Structure Of Polypropylene During The Recycling Process And The Effects Of These Changes On Mechanical And Rheological Properties
Sıdıka Burcu Karaca	Titanium Dioxide Nano Powders Production By Microemulsion Technique
ORAL PRESENTATIONS	
20 June 2020	**Sessıon 7** / **Time 13:30 – 14:45**
IMASCON Session 7.1 / 13:30 – 14:45	**Hall : 1** / **20 June 2020**
SESSION CHAIR : Prof. Dr. Şükrü DURSUN	
Ebru Avcı Kaplan	Imported Coal Storage Area Wastewaters Recovery With Nanofiltration Processes
Hazal Katmiş	Evaluation Of Environmental Noise From High Speed Train
Havva Gülenç	Evaluation Of Environmental Noise At Airports
Mergengeldi Akmyradov	Studying Of Natural Gas Combustion System And Controlling Of Hardening Furnace With Plc
Prof. Dr.Şükrü Dursun	Light Pollution In Metropolitans And Its Environmental Effect
IMASCON Session 7.2 / 13:30 – 14:45	**Hall : 2** / **20 June 2020**
SESSION CHAIR : Assist.Prof.Dr. Gözde GÖZKE	
Assist.Prof.Dr. Gözde Gözke	Effect Of Particle Size On Pyrolysis Characteristics And Kinetics Of Sour Cherry Stone By Thermogravimetric Analysis
Nazlı Yenihan Yüzer	Development Of Membrane For Removing Of By-Product In Glycerin Carbonate Production
Seda Aygül	Effect Of Catalyst Reduction Parameter On Lactic Acid Production From Glycerin
Mehbare Doğrusöz	Investigation Of Pzt-5h And Pzt-8 Piezoelectric Materials On Cycling Stability Of Si-Mwcnt Anode Materials
Elif Canbaz	Anode Material Synthesis Via Hydrothermal Carbonization Of Hazelnut Shell
IMASCON Session 7.3 / 13:30 – 14:45	**Hall :3** / **20 June 2020**
SESSION CHAIR : Assist.Prof.Dr.Dilek ÖZBEYLI	
Nurefşan Akkuş	Novel Quaterner Gallium (Iii) And Indium (Iii) Phthalocyanines For Photodynamic Therapy
Assist.Prof.Dr.Dilek Özbeyli	Protective Effects Of Momordica Charantia Extract In Methotrexate Induced Liver Damage
Assist.Prof.Dr .Özlem Sevinç Kaya	Resonance Production Of Sextet Scalar Diquarks At The High-Luminosity Large Hadron Collider (Hl-Lhc)
Muzaffer Eroglu	Investigations Of A Capture Reaction Cross Sections On 121sb Isotope
Ress. Assit. Dr. İdris CANDAN	Effects of Metal Oxide Layer Deposition Technique on Organic Polymer Solar Cells Efficiency
IMASCON Session 7.4 / 13:30 – 14:45	**Hall :4** / **20 June 2020**
SESSION CHAIR : Dr. Aslı Günay BULUTSUZ	
Dr.Vedat Taşdemir	Experimental And Statistical Analysis Of Surface Roughness And Material Removal Rate After Turning Of H13 Tool Steel

Emin Övünç Şengün	Modelling Of Vibration Movement Of The Washing Machine Balancing Ring On A Single Axis By Smoothed Particle Hydrodynamics Method
Research Assist.Dr. Asli Gunay Bulutsuz	Newly Developed Degradable Metal Implant Materials
Ömer Şengül	Wheel Design For Vehicle Tires And Static Analysis With Finite Element Method (Fem)
Berkay Gönül	Investigation Of Sub-Surface Properties Of Shot Peened Aa1050 Alloy
ORAL PRESENTATIONS	
20 June 2020	**Sessıon 8** **Time 15:00 – 16:45**
IMASCON Session 8.1 / 15:00 – 16:45	**Hall : 1** **20 June 2020**
SESSION CHAIR : Barış BOZKURT	
Barış Bozkurt	Comparative Flow Analysis And Production Of Plastic Injection And Various Endothermic Chemical Blowing Agent Process
Kadir Bekar	Effect Of Samples Printed By 3d Printing Technologies With Different Parameters And Materials On Tensile Strength: Literature Research
Assist.Prof.Dr. Celalettin Yüce	Mechanical and Microstructural Properties of Cold Metal Transfer Welded 6082-T6 Aluminum Alloys
Ömer Şengül	Creating data for dynamic analysis on motorcycle radial tires for Sustainable Production
Berkay Gönül	Effect Of Shot Peening Parameters On Surface Morphology Of Aa1050 Aluminum Alloy
IMASCON Session 8.2 / 15:00 – 16:45	**Hall : 2** **20 June 2020**
SESSION CHAIR : Prof.Dr. Hasan AKAN	
Cebrail Eksik	Ethnobotanic Study Of Some Villages Of Artuklu, Omerli And Yesilli Districts In Mardin Province
Dr.Elvan Beyhan	Comparison Of Biotope Types In The Residential Areas Of Izmit
Nour Al Hasan	Evaluation Of Geofit Families In Harran University Herbarium (Harran)
Remziye Yayğın	Harran University (Osmanbey, Eyyübiye, Yenişehir Campuses) Determination Of Landscape Plants
Berfin Kılınç	In Vitro Activities Of Some Fungicides Against The Factor Of Neoscytalidium Dimidiatum Obtained From Pistachio In Şanlıurfa
Zülal Büyük	A Dietary Fiber Source: Coffee Silverskin And Its Properties
IMASCON Session 8.3 / 15:00 – 16:45	**Hall : 3** **20 June 2020**
SESSION CHAIR : Dr.Sait Ertürk	
Dr. Sait Ertürk	Depolanmiş Kuru İncirde Zararli Kuru İncir Kurdu [Ephestia Cautella (Walker, 1863) (Lepidoptera: Pyralidae)]'Na Karşi Sulfuryl Fluoride'in Etkinliği
Fatih Şahiner	Body Condition Score In Farm Horses; Isparta Example
İkram Çelik	Mobile Fire Surveillance Towers
Obey Alnaiem	Overview Of The Current Status Of Fisheries In Sudan
İkram Çelik	Use Of Personal Protektive Equipment In Forest Fires

Neslihan Atar	Factor Affecting On Natural Regeneration Success Of Taurus Cedar (Cedrus Libani A. Rich) In Antalya-Kaş Vicinity
İkram Çelik	Clothes Used In Forest Fires And Their Characteristics
IMASCON Session 8.4 / 15:00 – 16:30	**Hall : 4** **20 June 2020**
SESSION CHAIR : Assist.Prof.Dr . Celalettin KAYA	
Nurgül Ünal	Stability Of Lagged Differential Equations In Terms Of Hyres-Ulam
Büşra Aydın	Ulam Stability For First Order Dynamic Equations On Time Scale
Assist.Prof.Dr.Ali Aydoğdu	Subsethood Measure For Picture Fuzzy Sets
Nursabah Doğan	Introduction To Algebraic Geometric Codes
Başak Aldemir	Fixed Point Theorems On Partial Fuzzy Metric Spaces
Assist.Prof.Dr.Celalettin Kaya	Curves In Special Position For Algebraic Geometric Codes
ORAL PRESENTATIONS	
20 June 2020	**SESSION 9** **Time 16:30 – 17:45**
IMASCON Session 9.1 / 16:30 – 17:45	**Hall : 1** **20 June 2020**
SESSION CHAIR : Assist.Prof.Dr . Tufan DEMIREL	
Ezgi Bekar	Weighting Operational Risks In The Banking Sector
Rafia Öztopuz Eren	Energy Production Optimization With Fuzzy Goal Programming
Fatma Er	Comparison Of Machine Learning Techniques In Real Estate Valuation
Ozan Barlas	Analysis Of Football Competitions Using Machine Learning Methods
Assist.Prof.Dr.Tufan Demirel	Using Artificial Intelligence Approaches In The Solution Of Traffic Problems
IMASCON Session 9.2 / 16:30 – 18:00	**Hall :2** **20 June 2020**
SESSION CHAIR : Assoc.Prof.Dr.Demet AYDINOĞLU	
Ramazan Durgun	Effects Of Sintering Temperature On The Porous Structure And Distribution In Whitewares
Assoc.Prof.Dr.Demet Aydınoğlu	Synthesis, Characterization Of Montmorillonite Filled Carrageenan-Psyllium Composite Hydrogels And Investigation Of Their Use In Agricultural Water Management
Numan Harımdar	Developing Flammability Of Cotton Fabrics And Application Of Plasma Technology To Fabrics
Sercan Alkan	Aluminum – Soda Lime Silicate Glass Join
Beyza Biçer	The Effect Of Silicon Carbide Reinforcement On Magnesium Metal Matrix Composite Materials
Assist.Prof.Dr.Emre Tekay	Mwcnt/Sis/Eoc Thermoplastic Elastomer Based Nanocomposites: Electrical, Mechanical And Shape Memory Properties
IMASCON Session 9.3 / 16:30 – 18:00	**Hall :3** **20 June 2020**
SESSION CHAIR : Assit. Prof. Dr. İbrahim MUTLU	
Selay Kasap	Process Development By Failure Mode And Effect Analysis In An Automotive Company
Ezel Özkan	Determining Marketing Strategy In The Project / Valve Sector By Analytical Hierarchy Process Method

Selin Yalçın	Effects Of Neutrosophic Sets On Potential Process Capability Index
Research Assist. Muhammet Enes Akpinar	A Metaheuristic Based Disassembly Planning Model For An Electrical Device
Wael Khatib	The Integration Of Drone Delivery System In Last Mile Delivery Shipment On The National Postal Service (Ptt) Cargo Company In Ankara Province In Turkey – Depot Allocations And Truck-Drone Delivery Time Minimization
Murat Şahin	Designing Early Warning System For Deflection In Bend With The Image Processing Method
ORAL PRESENTATIONS	
20 June 2020	**SESSION 10** **Time 18:00 – 19:30**
IMASCON Session 10.3 /18:00 – 19:30	**Hall : 1** **20 June 2020**
SESSION CHAIR : Assist.Prof.Dr.Şebnem Düzyer Gebizli	
Assist.Prof.Dr.Şebnem Düzyer Gebizli	Characterization Of Surface And Electrical Properties Of Conductive Polyacrylonitrile/Carbon Black (Pan/Cb) Nanofibers
Elif Özdemir	The Effect Of Metal Nanoparticles Mixture On The Compatibilized Pe / Tps Blend Films
Ferda Civan Çavuşoğlu	Removal Of Metformin Hcl From Aqueous Solutions By Magnetic Multi-Walled Carbon Nanotubes
Gülsüm Özçelik	Removal Of Carbamazepine And Ibuprofen From Aqueous Media: Optimization, Kinetic, Equilibrium And Thermodynamic Studies
Nazlı Yenihan Yüzer	Investigation Of The Effect Of Poly (Vinyl Alcohol) Hydrogel Particles On The Esterifications Reaction
Assist.Prof.Dr .İzzet Paruğ Duru	Tracing Room Temperature Ferromagnetism In Nickel Boride Nanoparticles
IMASCON Session10.2 /18:00 –19:15	**Hall : 2** **20 June 2020**
SESSION CHAIR : Assoc .Prof. Dr. Hasan KAYA	
Selay Kasap	Evaluation Of The Effect Of Ship Working Conditions On The Staff By Fuzzy Analytical Hierarchy Process
Ezel Özkan	Evaluation Of Factors Affecting Student Success In Higher Education Institutions By Analytical Network Process (Anp)
Gürkan Işık	Analysis of One Level Acceptance Sampling Plans on Neutrosofic Poisson Distribution
Selin Yalçın	Derivation Of Actual Process Capability Index (Cpk) For Neutrosophic Sets
IMASCON Session 10.3 /18:00 – 19:15	**Hall 3:** **20 June 2020**
SESSION CHAIR : Assoc .Prof. Dr. Arif ÖZKAN	
Research Assist.Çağatay Taşdemirci	Robot Hand Design Using A 3d Printer
Cansu Var	Best Protection Against Coronavirus: Polypropylene Meltblown Surgical Face Masks
Sümeyra Alan	Effect Of Emotional Freedom Technique And Information On Mother's Anxiety Level Related To Neonatal Heel Prick Blood Sampling
Mühendis, Yasin İlhan	The Effect Of Biomedical Devices In Coronavirus Detection

Sümeyra Alan	Effect Of Emotional Freedom Technique And Information On Mother's Anxiety Level Related To Newborn Hearing Screening Test
Faruk Enes Oğuz	R Peak Detection Of ECG Signal Using Maximum Overlap Discrete Wavelet Transform

METOTREKSAT İLE OLUŞTURULAN KARACİĞER HASARINDA MOMORDICA CHARANTIA EXTRAKTININ KORUYUCU ETKİSİ

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Özet
Metotreksat (MTX), maligniteler ve romatizmal bozukluklarda yaygın olarak kullanılan bir kimyasaldır. MTX kullanımı oksidatif stres ve hepatotoksisiteye neden olabilir. Momordica charantia'nın (MC) antioksidan, hepatoprotektif ve antienflamatuar etkileri bilinmektedir. Çalışma, sıçanlarda metotreksat kaynaklı karaciğer hasarında MC sulu ekstraktının etkisini araştırmayı amaçlamaktadır. Gereç-Yöntem: Marmara Üniversitesi'nden etik onay alındıktan sonra sıçanlar (n=24), taşıyıcı kontrol (K), MTX ve MTX+MC ekstrakt (MC) grupları olarak 3 gruba randomize edildi. Karaciğer toksisitesi 1. günde tek bir MTX dozu (20 mg/kg/ip) ile indüklendi. Kontrol ve MTX grubuna 5 gün boyunca oral gavaj yoluyla damıtılmış su verilirken, MTX+MC grubuna 5 gün boyunca günde bir kez 300 mg/kg/po MC ekstresi (Immu-Nat, Türkiye) verildi. Hayvanlara 6. günde ötenazi uygulandı. İnflamatuar parametreler TNF-α düzeyleri ölçülerek değerlendirilirken, kaspaz 3 aktivitesi ile apoptoz değerlendirildi. Oksidatif durumun değerlendirmesi için süperoksit dismutaz (SOD) aktivitesi ölçüldü. Ek olarak, oksidatif DNA hasarı 8-hidroksi-2'-deoksi-guanozin (8-OHdG) seviye ölçümü ile analiz edilirken, transforme edici büyüme faktörü-P (TGF) düzeyi fibrotik aktivitenin bir göstergesi olarak ölçüldü. Sonuç: MTX grubunda 8-OHdG düzeyleri, Caspase-3 aktivitesi, TNF-a, ve TGF-β düzeyleri kontrol grubuna göre anlamlı olarak arttı (sırasıyla $p<0.001$, $p<0.01$, $p<0.001$, $p<0.05$)) bu değerler MC tedavisiyle anlamlı olarak azaldı (sırasıyla $p<0.05$, $p<0.05$, $p<0.05$, $p<0.01$). SOD aktivitesi MTX grubunda kontrol grubuna göre azaldı ($p<0.001$). Bu değer MC tedavisi yapılan MTX + MC grubunda MTX grubuna göre artmıştır ($p<0.01$). Sonuç: Tüm bu biyokimyasal sonuçlar Momordica charantia ekstraktının karaciğer dokusunda metotreksat ile oluşan hasarı; antioksidan enzim SOD'u artırarak, oksidatif DNA hasarını, inflamatuar aracı TNF-α'yı ve apoptozda rol alan pro-apoptotik enzim Caspase-3'ü azaltarak hafiflettiğini göstermektedir. Ayrıca, hepatik TGF-β içeriği ile değerlendirilen fibrotik aktivitede MTX ile gözlenen artış Momordica Charantia tedavisi ile belirgin şekilde azalmıştır.

Anahtar Kelimeler: Momordica charantia, Metotreksat, Oksidatif DNA hasarı, Hepatik Fibroz, Apoptoz, İnflamasyon

PROTECTIVE EFFECTS OF MOMORDICA CHARANTIA EXTRACT IN METHOTREXATE INDUCED LIVER DAMAGE

Abstract
Methotrexate (MTX) widely uses for malignancies and rheumatic disorder. However, MTX may cause oxidative stress and hepatotoxicity. The antioxidant, hepatoprotective and anti-inflammatory effects of Momordica charantia (MC) are known. The study aims to investigate the effect of MC aqueous extract in methotrexate-induced liver damage in rats. Material-Methods: After ethical approval from Marmara University, the rats were randomized into 3 groups (n=24) as vehicle control (C), MTX and MTX+MC extract (MC) groups. Liver toxicity was induced on day 1th with a single dose of MTX (20 mg/kg/ip). Distilled water was administered to the control and MTX group for 5 days by oral gavage, while the MTX+MC group was received MC extract (Immu-Nat, Turkey) at a dose of 300 mg/kg/po, once daily for 5 days. Animals were euthanised on the 6th day. Inflammatory parameters were evaluated by measuring TNF-α while apoptosis via caspase 3 levels was measured. Superoxide dismutase (SOD) activity was measured for oxidative status evaluation. Also, 8-hydroxy-2'-deoxy-guanosine (8-OHdG) levels were analysed for DNA damage while transforming growth factor-β (TGF-β) was measured as an indicator of fibrotic activity. Result: 8-OHdG levels, Caspase-3 activity, TNF-α and TGF-β levels were significantly increased in the MTX group compared to the control group ($p<0.001$, $p<0.01$, $p<0.001$, $p<0.05$, respectively) while these values, significantly decreased with the MC treatment

($p<0.05$, $p<0.05$, $p<0.05$, $p<0.01$, respectively). The SOD activity decreased in the MTX group compared with the control group ($p<0.001$). This value increased with MC treatment in the MTX MC group compared to the MTX group ($p<0.01$). Conclusion: All these biochemical results show that the Momordica charantia extract alleviated methotrexate-induced liver damage, by increasing SOD antioxidant enzyme and decreasing oxidative DNA damage, pro-inflammatory cytokine TNF-a and pro-apoptotic enzyme caspase-3. Besides, the increase in fibrotic activity assessed by the hepatic TGF-y content was reduced with Momordica charantia treatment.

Keywords: Momordica charantia, Methotrexate, Oxidative DNA damage, Hepatic Fibrosis, Apoptosis, İnflammation