

## CONFERENCE PROGRAM

## Sunday - June 24, 2018

17:00-19:00  
Conference Registration

## Monday - June 25, 2018

07:00-10:00  
Conference Registration and Welcome Coffee

## Plenary Session 1

ROOM – KONAK 2&amp;3

10:00 – 10:30

## Opening Speeches

C. Ozgur Colpan, *Conference Chair*Ibrahim Dincer, *Founding Chair*Erdal Çelik, *Rector of Dokuz Eylul University (To be confirmed)*Aziz Kocaoğlu, *Mayor of Izmir Metropolitan Municipality (To be confirmed)*

ROOM – KONAK 2&amp;3

10:30 – 12:00

## Keynote Talks

Session Chair: İlhami Yıldız

Feridun Hamdullahpur

"Low Carbon Innovation for an Electricity Dependent World: Open Energy Access"

Kevin Trenberth

"Extreme Weather and the Changing Climate"

12:00 - 14:00

Lunch

## Monday - June 25, 2018

## Parallel Sessions 1

	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Climate Change, Invention and Innovation Session Chair: İlhami Yıldız	Sustainable Transportation and Global Warming – I Session Chair: GülDEM Cerit	Fuel Cells Session Chair: Huseyin Devrim	Exergy Analysis of Energy Systems - I Session Chair: Arif Hepbasli
14:00 - 15:40	<p><b>Special Talk:</b> "Climate Change as a Forcing Function in Agri-Food and Energy Innovation" <u>I Yıldız</u></p> <p><b>#291</b> "Understanding and Perceptions of Climate Change: A Perspective of University Stakeholders" <u>B Demirel, S Duman, N Bıçakçioğlu, C Madran, Y Arbak, B Sümer, S Ozkul, T Baran, G Onuşuel Gül, O Fıstıkoğlu, A Gül, A Özgenç Aksoy, M Doğan &amp; F Barbaros</u></p> <p><b>#374</b> "Thermal Anomalies in the Mediterranean and in Asia Minor (1951-2010)" <u>R Twardosz &amp; U Kossowska-Cezak</u></p> <p><b>#355</b> "Sustainable Energy and GHG Mitigation Practices In Izmir" <u>C Tükel</u></p> <p><b>#319</b> "Regional Planning of North Kayong Regency Toward Maritime and Coastal Tourism as an Instrument to Mitigate the Climate Change and to Unlock the Potential of Economic Growth in Remote Area Location" <u>JA Tamuzi</u></p>	<p><b>#418</b> "New Touch on Zero Emission Public Transportation with Electric Buses" <u>MK Mutu, MY Ertaş &amp; B Üleş</u></p> <p><b>#233</b> "The Effect of Driving Patterns on the Life Cycle Assessment and Fuel Cell Degradation on Hydrogen Fuel Cell Vehicles" <u>P Ahmadi, P Hanafizadeh, M Ashjaei &amp; H Ganjehsarabi</u></p> <p><b>#200</b> "Appropriate Propellers with Diesel Electric Propulsion System to Reduce Emissions" <u>M Pamık, CÖ Bilir Fidan, K Ziyilan, E Fikir &amp; M Nuran</u></p> <p><b>#406</b> "Hydrogen as a Sustainable Transportation Fuel to Combat Global Warming" <u>C Acar &amp; I Dincer</u></p> <p><b>#366</b> "System Simulation of a Parallel Hybrid Vehicle Powertrain for the Effects of Gear Ratios on Exhaust Emissions and Fuel Consumption" <u>MU Karaoğlu, NS Kuralay &amp; CO Colpan</u></p> <p><b>#238</b> "Thermodynamic Modelling of an ORC System Utilizing Waste Heat of a Marine Vessel" <u>A Erdoğan, O Konur, SA Korkmaz, CO Colpan &amp; OY Saatcioglu</u></p>	<p><b>#044</b> "Development of Self-Humidified Composite Membrane for PEM Fuel Cell Application" <u>UB Çaçan, Y Devrim &amp; N Özkan</u></p> <p><b>#045</b> "Development of High-Performance Catalyst for High-Temperature PEM Fuel Cell Application" <u>ED Arica &amp; Y Devrim</u></p> <p><b>#003</b> "Synthesis and Characterization of Graphene/Multi-Walled Carbon Nano-tube Supported PtRu Catalyst for High-Temperature PEM Fuel Cell" <u>GU Alpaydin, ED Arica, Y Devrim &amp; CO Colpan</u></p> <p><b>#314</b> "Life Cycle Comparison of Solid Oxide Fuel Cells Fed by Natural Gas, Hydrogen, Ammonia and Methanol for Combined Heat and Power Generation" <u>Y Bicer &amp; F Khalid</u></p> <p><b>#389</b> "An Electrical Network Connected Fuel Cell Based on Multilayer Feed Forward Neural Network (MLFFN)" <u>R Dehini &amp; B Brahim</u></p> <p><b>#049</b> "Development of a Thermodynamic Model for a Direct Methanol Fuel Cell System" <u>AC İnce &amp; CO Colpan</u></p>	<p><b>#172</b> "Assessment of NO<sub>x</sub> Emissions of the Scimitar Engine at Mach 5 Based on a Thermodynamic Cycle Analysis" <u>T Tanbay &amp; A Durmayaz</u></p> <p><b>#183</b> "Exergetic Performance of Building Attached Photovoltaic Power Plant Settled in Olive Oil Production Company" <u>E Bozoglan, M Cubukcu, E Sağlam &amp; AE Ogutcen</u></p> <p><b>#234</b> "4-E (Energy, Exergy, Exergoeconomic, and Exergoenvironmental) Analysis of a Parabolic Trough Collector Using a Converging-Diverging Receiver Tube" <u>TAH Ratlamwala, EC Okonkwo &amp; M Abid</u></p> <p><b>#313</b> "Can Feedwater Repowering Increase the Exergetic Efficiency of a Coal Fired Thermal Power Plant?" <u>AA Erdogan &amp; MZ Yilmazoglu</u></p> <p><b>#315</b> "First Results of a Small Scale Sorptive Coated Heat Exchanger Structure" <u>T Uçok Erkek, A Gungor, H Fugmann, A Morgenstern &amp; P Di Lauro</u></p> <p><b>#321</b> "Exergy and Energy Analysis of Concentrating Photovoltaic Thermal (CPVT) System Using Nucleate Boiling Heat Transfer (NBHT) Thermal Management for Multigeneration" <u>SA Khan, Y Bicer &amp; M Koc</u></p>

15:40-16:00 Coffee Break and Poster Session	
Poster Session 1 – Foyer Area Session Coordinator: Ayca Tokuç	
15:40-16:00	<p>#015 "Optimum Insulation Thickness for Cooling Applications Using Life Cycle Integrated Economic Analysis" <u>E Açikkalp</u>, <u>S Yerel Kandemir</u>, <u>Ö Altuntaş</u> &amp; <u>TH Karakoç</u></p> <p>#026 "Numerical Study of The Effects of Surface Riblets on Boundary Layer Turbulence" <u>G Yasal</u>, <u>MI Yaras</u> &amp; <u>CO Colpan</u></p> <p>#030 "Sorption of Toxic Emissions of Flue Gas on Active Carbon of Microwave Acted in Post Combustion" <u>YI Tosun</u></p> <p>#037 "Energy, Exergy and Exergoeconomic Analyses of a Solar Refrigeration Cycle Using Nano-fluid and Energy Storage" <u>H Asgharian</u>, <u>E Baniasadi</u> &amp; <u>CO Colpan</u></p> <p>#041 "Energy Efficiency Strategic Approach Considering Sustainability Economic Criteria for Ship Management" <u>MZ Söğüt</u> &amp; <u>O Çetin</u></p> <p>#042 "Effects of Low Carbon Technologies in Carbon Management of Integrated Buildings: A Case Study" <u>MZ Söğüt</u>, <u>H Mutlu</u> &amp; <u>TH Karakoc</u></p> <p>#379 "Large-Scale Microalgae Cultivation: A Potent Solution Against Global Warming" <u>G Turan</u>, <u>M Isar</u> &amp; <u>S Cirik</u></p> <p>#381 "Potential of Intensive Seaweed Aquaculture Against Global Warming" <u>G Turan</u>, <u>M Isar</u> &amp; <u>S Cirik</u></p> <p>#423 "Design and Analysis of a Combined Floating Photovoltaic System for Electricity and Hydrogen Production" <u>M Temiz</u> &amp; <u>N Javani</u></p> <p>#433 "Comparative Evaluation of Emissions Arising from the use of Various Fuels in a Combined Cycle" <u>M Ozturk</u> &amp; <u>I Dincer</u></p> <p>#434 "Usage of Hybrid Electric and Fuel Cell Electric Propulsion Systems in Air Vehicles" <u>E Yildirim</u>, <u>H Yamik</u> &amp; <u>TH Karakoc</u></p> <p>#435 "Environmental Impact Assessment of Lignite Drying in a Power Plant" <u>O Oruç</u> &amp; <u>I Dincer</u></p>

## Monday - June 25, 2018

## Parallel Sessions 2

	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Energy Storage Systems - I Session Chair: M Ziad Saghir	Bioenergy Session Chair: Levent Çolak	Wastewater Management - I Session Chair: Delia T Sponza	Climate Change & Health Issues Session Chair: İsmail Ekmekçi
16:00 – 18:00	<p><b>Special Talk:</b> "An Innovative Fluid Mixture for Heat Enhancement/Storage" <u>MZ Saghir</u></p> <p>#56 "Study of Energy Efficiency of a Drying Unit with a Solar Dryer and Energy Storage System for Fruit and Vegetable Drying Process" <u>H Atalay, MT Çoban &amp; B Yüksel</u></p> <p>#120 "Efficiency Analysis of PCM Added Cold Store" <u>GA Kılıç, E Yalçın &amp; AA Aydın</u></p> <p>#375 "Thermo-economic Assessment of a Solar Based Ejector Absorption Cooling System with Thermal Energy Storage: A Case Study for Al-Jofra City in Libya" <u>S Yosaf &amp; H Özcan</u></p> <p>#386 "Experimental and Numerical Investigation of 18650 Lithium-Ion Battery Cells" <u>A Celik, S Gocmen, H Coban, M Bestav, A Ereğ, A Goren &amp; MA Ezan</u></p>	<p>#066 "Steam Gasification of Almond Shell" <u>S Dulger İrdem, S Ucar &amp; J Yanik</u></p> <p>#094 "Disposal of Laying Hen Manure with Bubbling Fluidized Bed Reactor in Combined Heat and Power System" <u>E Cebeci, G Gürlek &amp; TO Yılmaz</u></p> <p>#113 "Exergetic, Exergoeconomic, and Environmental (3E) Analysis of a Trigeration System Driven by a Biomass Gasifier, Gt and S-CO<sub>2</sub>" <u>E Gholamian, P Hanafizadeh &amp; P Ahmadi</u></p> <p>#272 "Modelling, Characterization and Optimization of Torrefied Pine Wood for High Energy-Yielding and Regression Model Analysis" <u>B Keivani, S Yedigir Gültekin &amp; H Olgun</u></p> <p>#057 "Conversion of Seaweeds into Hydrochars" <u>IC Kantarli, M Pala, Y Yildirim &amp; J Yanik</u></p> <p>#416 "Thermodynamic and Environmental Impact Evaluations of a Novel Biomass Gasification Based Integrated System" <u>YE Yüksel, M Öztürk &amp; I Dincer</u></p> <p>#384 "Direct Conversion of Waste Biomass to 5-Hydroxymethylfurfural and Levulinic Acid over Carbon Based Sulfonated Solid Acid Catalyst" <u>BK Özsel, D Öztürk &amp; B Niş</u></p>	<p>#060 "Photodegradation of Olive Mill Wastewater with Sunlight Using Nano-ZnO-SiO<sub>2</sub> Composite, its Reusability and the Quality of Treated Water" <u>Ç Ulusoy &amp; DT Sponza</u></p> <p>#039 "Anaerobic Digestion of High Salinity Wastewater and Methane Production" <u>N Sinbuathong, M Leadvilai &amp; B Sillapacharoenkul</u></p> <p>#023 "Investigation of the Main Chemical Components and Biomass Productivities of <i>Chlorella Vulgaris</i> in Controlled Environment Minkery Wastewater" <u>Y Ji &amp; I Yildiz</u></p> <p>#331 "Catalytic Treatment of Opium Alkaloid Wastewater via Hydrothermal Gasification" <u>N Cengiz, M Sağlam, M Yüksel &amp; L Ballice</u></p> <p>#103 "Bioremediation of Minkery Wastewater and Astaxanthin Production by <i>Haematococcus Pluvialis</i>" <u>Y Liu &amp; I Yildiz</u></p> <p>#061 "Removal of Phenolic Compounds from Olive Mill Wastewater with Sunlight Irradiation Using Nano-ZnO-SiO<sub>2</sub> Composite" <u>Ç Ulusoy &amp; DT Sponza</u></p>	<p>#078 "Destruction of Estrogens Using Photocatalytic Process as Reinforce Treatment Systems" <u>G Matin, N Kargar, AA Matin, AR Amani-Ghadim &amp; HB Buyukisik</u></p> <p>#156 "Global Warming is Increasing the Risk of Re-emergence of Malaria in Romania" <u>ML Ivanescu, I Bodale, C Roman D Acatrinei, A Campan &amp; L Miron</u></p> <p>#179 "Climate Change and Health: Preparedness and Perceptions of Health Professionals" <u>MY Colak &amp; L Colak</u></p> <p>#215 "Estimating Public Health Preparedness for Global Warming" <u>MK Rad &amp; Ali Ardalan</u></p> <p>#217 "Indirect Health Effects of Climate Change in Iran: A Narrative Review" <u>A Ardalan, A Mousavi &amp; MK Rad</u></p> <p>#437 "The Determining Vehicle Emissions and Its Impact on Passenger Health During the Car and Passenger Operations on Ro-Ro and Ferry Ships" <u>M Suner, E Yalçın &amp; T Turker</u></p>
	19:30-22:00 Welcoming Dinner Historical Gas Factory Cultural Centre <i>The buses will leave in front of the conference hotel at 18:45</i>			

## Tuesday - June 26, 2018

## Plenary Sessions 2

ROOM – KONAK 2&amp;3

## Keynote Talks

Session Chair: Feridun Hamdullahpur

Jose Luis Sanchez

"Atmospheric Variability During the Warm Season in Southwest Europe"

Jiří Jaromír Klemeš

"Sustainability and Complex Systems Thinking to Deal with the Global Warming – Process Integration Extensions and Environmental Footprints Implementations"

Ibrahim Dincer

"Hydrogen Energy Options in Combating Global Warming"

11:15-11:40

## Coffee Break and Poster Session

## Poster Session 2 – Foyer Area

Session Coordinator: Ayca Tokuç

- #070 "Application of Aspen Plus to Renewable Hydrogen Production from Glycerol by Steam Reforming" *D Ünlü & N Durmaz Hilmioglu*
- #071 "Hydrogen Separation Using Graphene Nanoplate Incorporated Poly (Dimethyl Siloxane) Membrane" *FU Nigiz & N Durmaz Hilmioglu*
- #092 "Investigation of Emission Inventory for Cement Production Based on Thermal Irreversibility" *MZ Söğüt, K Synylo & TH Karakoç*
- #151 "Effect of Hydrogen Reduction on Transparent Conductive ITO Electrodes" *G Gokceli & N Karatepe*
- #168 "Investigation of Modified Graphite as Anode Material for Lithium-Ion Batteries" *N Akin, G Gokceli, O Eksik & N Karatepe*
- #257 "An Aircraft Fuel System Energy and Exergy Analysis with Two Different Precooler Setpoint" *M Yilanli, Ö Altuntaş & E Acikkalp*
- #290 "Lethal Dose Determination in Some Commonly Consumed Herbal Medicines in Kano State, Nigeria" *A Umar & M Yau*
- #296 "Experimental Investigation of Effectiveness Improvement Vapor Compression Cycle with Flash-Gas By-Pass" *AE Özgür & M Manır*
- #305 "From the End of Kyoto Commitment Term to Present the World and Turkey Wind Power Installation and Evaluation of Wind Energy Future" *F Temel, K Basaran & N Cetin*
- #307 "Community Risk Awareness and Perceptions Towards Natural Disasters: An Assessment of Awaran Earthquake Affected Communities of Balochistan" *MY Lasi & ZA Lehri*

## Tuesday - June 26, 2018

## Parallel Sessions 3

	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Refrigerants & Refrigeration Systems - I Session Chair: Mohamed S. Hamed	Climate Change Impact Session Chair: Kevin Trenberth	Sustainable Buildings - I Session Chair: Ayça Tokuç	Waste Management - I Session Chair: Nusara Sinbuathong
11:40 - 13:00	<p>#101 "Investigation of System Efficiency and Cooling Capacity Degradation Based on the Fouling Effect in Air-Cooled Condensers" <u>E Yalcin</u>, G. Alevay Kilic, S Kaya, MZ Söğüt &amp; TH Karakoc</p> <p>#135 "Retrofitting of R-22 Air Conditioning System with R1234ze(E)" <u>AG Devocioğlu</u> &amp; <u>V.Oruç</u></p> <p>#221 "Heat Transfer and Exergy Study on a Rotary-Type Magnetic Cooler" <u>S Çelik</u> &amp; <u>O Ekren</u></p> <p>#153 "Energy and Exergy Analysis of Heat Exchanger for Wastewater Aided Refrigeration Systems" <u>İ Karaçaylı</u>, Y Canlı, L Altay &amp; A Hepbaşlı</p> <p>#170 "Exergoeconomic Analysis of an Industrial Cogeneration Cooling System Operating with Refrigerant R-410a Powered by Natural Gas Fuel" <u>C Yılmaz</u> &amp; E Kocakuş Oluğ</p>	<p>#102 "Tropical Cyclone Activity in Northwest Pacific and its Relationship with Sea Surface Temperature" <u>J Kang</u> &amp; Z Chen</p> <p>#239 "Correlations Between the Water Levels of Lakes Beyşehir and Marmara With Sunshine Duration and Time Series of Sunspot Numbers" <u>U Yıldırım</u>, IO Yılmaz, M Beklioğlu &amp; BG Akinoglu</p> <p>#077 "Adaptation Strategies for Sea Level Rise in Coastal Cities of Turkey" <u>Ç Ercanlı</u>, G Savaşır, A Tokuç &amp; A Altınörs Çırak</p> <p>#328 "Assessment of Climate Change Impact on Soil Redistribution over the Last Years in the Northwestern Moroccan Agrosystems Basing on Caesium-137 Measurements" <u>M Moustakim</u>, M Benmansour, A Zouagui A Noura, Z Benkdad &amp; B Damnati</p> <p>#068 "The Impact of Climate Change on the Performance of Flexible Pavements" <u>A Abdelaziz</u>, CH Ho &amp; D Zhang</p>	<p>#033 "Impact of Climate Change on Indoor Thermal Comfort for Historic Libraries in Mediterranean Climate Zone" <u>C Turhan</u>, Z Durmuş Arsan &amp; G Gökçen Akkurt</p> <p>#036 "Impact of High Thermal Mass in Future Energy Consumption: Case Study in Adobe Brick House in Konya" <u>EG Yöney</u> &amp; Z Durmuş Arsan</p> <p>#054 "The Impacts of Window to Wall Ratio and Orientation on Building Energy Consumption and CO<sub>2</sub> Emissions Under Climate Change" <u>M Gerçek</u> &amp; İ Güçü</p> <p>#067 "Daylight Performance of High-Rise Building as Parameter for Energy Management" <u>DB Hamidabad</u> &amp; H Begeç</p> <p>#127 "Photobioreactors as Potential Tools for Environmentally Friendly and Sustainable Buildings" <u>A Inam</u> &amp; SS Oncel</p>	<p>#046 "A Case Study of the Green Index Assessment for an Industrial and a Municipal Wastewater Treatment Plant in Turkey" <u>P Yapıcıoğlu</u> &amp; Ö Demir</p> <p>#251 "Innovation Platforms as an Approach to Address Environmental Implications of Crop Stubble Burning in Pakistan" <u>W Ahmed</u>, Q Tan, <u>S Ali</u> &amp; N Ahmad</p> <p>#282 "Municipal Solid Waste Based Multigeneration System for Different Districts of Karachi" <u>TAH Rattamwala</u>, SI Ali, A Riaz &amp; SM Hamza</p> <p>#187 "Evaluation of Electricity Generation Option from Animal Waste in Trakya Region of Turkey" <u>B Özer</u> &amp; İ Tikiz</p> <p>#247 "Advancement of Environmental Sustainability in Institutional Buildings through Waste to Energy Technology: Case Study" <u>J Prince</u>, M Compton, L Vogel &amp; B Rezaie</p>
	13:00-14:00 Lunch			

Tuesday - June 26, 2018				
Parallel Sessions 4				
	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Electrochemical Systems for Energy Conversion and Storage Session Chair: Meng Ni	Sustainable Buildings - II Session Chair: Jiří Jaromír Klemeš	Biomass and Biogas Session Chair: Nilüfer Hilmioğlu	Global Warming Causes & Models Session Chair: Ivanescu Maria Larisa
14:00 - 15:40	<p><b>Special Talk:</b> "Development of High Performance Direct Carbon Solid Oxide Fuel Cells for Efficient Energy Conversion" <u>M Ni</u></p> <p>#165 "Ionomer Dispersy in Electrode Layer on Fuel Cell Performance and Durability" <u>CS Kim &amp; D Shin</u></p> <p>#371 "Marine Hydrogen Power Platforms a Step to a Sustainable Future" <u>YM Amani &amp; P Parikh</u></p> <p>#173 "Numerical Analysis of a Model Solid Oxide Fuel Cell (SOFC) by using Low Calorific Value Coal Gases" <u>M Ilbaş &amp; B Kümük</u></p> <p>#053 "Bimetallic Catalyst Preparation via Supercritical Carbon Dioxide for Electrooxidation of Methanol" <u>E Erüna, F Ulusal, F Tezcan, B Güzel &amp; G Kardaş</u></p>	<p>#229 "Economic and Environmental Analysis of the Thermal Insulation Application on the Roof of International Hasan Polatkan Airport" <u>MK Akyüz, Ö Altuntaş, MZ Söğüt, S Kurama &amp; TH Karakoç</u></p> <p>#280 "A Critical Review of the Impact of Global Warming on Overheating in Buildings" <u>M Adlington</u></p> <p>#087 "Environment Standards Policies and Strategies Sustainable Building Technology in Mexico" <u>DC Avila</u></p> <p>#348 "Straw-Bale Construction in Sustainable Architecture" <u>M Altin &amp; AV Orhon</u></p> <p>#350 "Investigating the Effectiveness of Thermal Buffer Zone in Buildings" <u>AM Al-Mansour &amp; MS Hamed</u></p> <p>#150 "Bio-Active Facade System Symbiosis as a Key for Eco-Beneficial Building Element" <u>SS Oncel</u></p>	<p>#085 "Hydrochars as Soil Amendment" <u>A Toptas Tag, G Duman, S Ucar &amp; J Yanik</u></p> <p>#134 "Effect of Particle Size on the Thermal Decomposition Characteristics of the Five Waste Wood Samples" <u>S Yurdakul &amp; M Yilmaz Civan</u></p> <p>#181 "Simulation of Techno-economical and Environmental Impact of Biogas Usage in Gas Engine Cogeneration Applications" <u>L Colak &amp; E Sevinc</u></p> <p>#199 "Biogas Production from Sunn Hemp" N Sinbuathong, R Khun-Anake &amp; <u>S Sawanon</u></p> <p>#325 "Biodiesel Production Using Cation Exchange Resins at Different Ionic Forms" <u>NJ Falzi, T Güngören Madenoğlu, M Yüksel &amp; N Kabay</u></p> <p>#326 "Anaerobic Fermentation of Water Lettuce (Pistia Straites L.) for Biogas Production" T Güngören Madenoğlu, <u>NJ Falzi, N Kabay, R Kumar, A Güneş, T Pek &amp; M Yüksel</u></p>	<p>#189 "Estimation of Emissions from Crop Residue Burning Using Remote Sensing Data" <u>K Gülçek Bahşi, B Şalli, D Kılıç &amp; E Sertel</u></p> <p>#316 "Elevation Related Climate Warming on The Tibetan Plateau" <u>M Du, J Liu, Y Li, F Zhang, L Zhao, B Niu, Y He, X Zhang, S Yonemura &amp; Y Tang</u></p> <p>#396 "On Some Climate Change Specifics on the Territory of Georgia" <u>T Davitashvili</u></p> <p>#399 "Dust Influence on Georgian Climate" <u>I Davitashvili</u></p> <p>#270 "Global Warming are We Missing Some Important Factors" <u>P Somerville</u></p> <p>#21 "In the Light of our "Discovery of Antimatter", The only Solution of Global Warming, Ozone Hole and All Environmental Problems" <u>M Elkholy</u></p>
	15:40-16:00 Coffee Break and Poster Session			

Poster Session 3 – Foyer Area  
Session Coordinator: Ayca Tokuç

15:40 - 16:00	#246	"Adaptation of a Plant Species in the Face of Climate Change" <u>A Soulimane</u> & <u>H Stambouli</u>
	#252	"New Geothermal Air-Cooler: Application in the Region of Biskra, Algeria" <u>A Rouag</u> , <u>A Benchabane</u> , <u>A Labeled</u> & <u>CE Mehdid</u>
	#263	"Urban Green Roofs for Global Warming Problems" <u>H Inan</u> & <u>ZY Avdan</u>
	#266	"Physico-Chemical Characterization and Study of the Adsorbent Capacities of a Biomaterial. Application for the Elimination of Industrial Pollutants" <u>N Mohammed</u> , <u>H Nadjia</u> , <u>T Mohamed</u> , <u>L Amina</u> & <u>B Meriem</u>
	#283	"Design and Fabrication of Automatic Roti Maker" <u>T Younas</u> , <u>MS Memom</u> , <u>H Raza</u> , <u>K Ur-Rehman</u>
	#289	"Quantitative Determination of Heavy Metals in Some Commonly Consumed Herbal Medicines in Kano State, Nigeria" <u>A Umar</u> , <u>M Yau</u> , <u>S Garba</u> & <u>MD Faruruwa</u>
	#334	"Numerical Modeling of a Batch Catalytic Reactor for Hydrogen Production from Ammonia Borane" <u>C Yuksej</u> & <u>CO Colpan</u>
	#340	"Silver (I) Removal from Aqueous Media: Investigation of Physicochemical Parameters of Adsorption onto Polymeric Adsorbents for Water Treatment" <u>Ö Öztürk</u> , <u>A Kuresh</u> , <u>S Sözügeçer</u> , <u>A Olgun</u> & <u>A Kara</u>
	#342	"Physicochemical Research for Adsorption of Acid Red-114 from Aqueous Solution with Novel Polymer Microspheres" <u>A Kuresh</u> , <u>Ş Özel</u> , <u>S Sözügeçer</u> , <u>A Olgun</u> & <u>A Kara</u>
	#343	"The Cross-Linked Polymer Spheres for Removal Acid Orange 8 from Aqueous Solutions" <u>D Gülgün</u> , <u>KN Yildiz</u> , <u>S Sözügeçer</u> , <u>A Olgun</u> & <u>A Kara</u>
	#364	"Calcium Sulfate – Calcium Oxide Based Thermochemical H <sub>2</sub> O Splitting for Solar Hydrogen Production" <u>RR Bhosale</u> & <u>G Takalkar</u>
#428	"Thermodynamic Modelling of Natural Circulation Loop Assisted Cooling System for Home Type Freezer" <u>HD Koca</u> , <u>AM Genc</u> , <u>ZH Karadeniz</u> & <u>O Ekren</u>	



## Tuesday - June 26, 2018

## Parallel Sessions 5

	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Greenhouse Gas Emissions & Reduction Session Chair: Ilgi Karapinar	Hydrogen Energy & Fuel Cells Session Chair: Yilser Devrim	Solar Energy - I Session Chair: T. Hikmet Karakoç	Environmental Issues Session Chair: Mingyuan Du
16:00 - 18:00	<p>#047 "Sludge-Derived Biochar Application for the Reduction of Greenhouse Gas Emissions: A Review" <u>Ö Demir &amp; P Yapıcıoğlu</u></p> <p>#192 "Energy and Economic Factors Affecting Carbon Dioxide Emissions in Sudan: An Econometric Analysis (1969-2015)" <u>ESE Mohamed</u></p> <p>#193 "Effects of H<sub>2</sub>O Content on a Non-Premixed Bioqas Flame Characteristics and Emissions" <u>M Şahin &amp; M İlbaş</u></p> <p>#284 "A Study on the Review and Evaluation of Operational Methods Used to Reduce Greenhouse Gas Emissions in Existing Ships" <u>AY Kaya &amp; KE Erginer</u></p> <p>#310 "Fugitive Methane Emission Measurement from Regulators and Counters of Urban Customers" <u>S Seif, S Yousefzadeqan, EH Ghalehsalimi &amp; A Jahanbazi Goujani</u></p> <p>#213 "Following Carbon Dioxide Concentration and Consequences of its Zero Emission on the Environmental Ecosystem" <u>AA El-Mellqi</u></p>	<p>#345 "Optimization of Composition TiB<sub>2</sub>-BN Composites as Cathode Materials for Aluminum Electrolysis" <u>EE Songül &amp; I Duman</u></p> <p>#346 "Comparative Analysis of PV-PEM Fuel Cell Hybrid System Based on PEM Water and Methanol Electrolysis" <u>Y Budak &amp; Y Devrim</u></p> <p>#370 "Investigation of Hydrogen Production by Hydrolysis of Ammonia Borane Using PT/MWCNT Catalyst" <u>K Aktar, ED Arica &amp; Y Devrim</u></p> <p>#398 "Poly (Vinyl Alcohol)/Nafion Nanofibrous Membranes for the Use in Direct Methanol Fuel Cells" <u>RE Zizhou, A Çay, EP Akçakoca Kumbasar &amp; CO Colpan</u></p> <p>#330 "Thermodynamic Modeling of a Natural Gas-Fueled HT-PEMFC Based Cogeneration System" <u>Y Nalbant, CO Colpan &amp; Y Devrim</u></p> <p>#385 "Power Control of Fuel Cell Connected to Power System" <u>H Glaoui</u></p>	<p>#064 "Simulation for Techno-Economic and Environmental Effects of Heat and Electricity Generation from Solar Energy" <u>L Colak &amp; CC Tutasi</u></p> <p>#139 "Prediction of Solar Energy Potential with Artificial Neural Networks" <u>B Goksu, M Bayraktar &amp; M Pamik</u></p> <p>#146 "Thermodynamic Modelling of a Seawater Cooled Foldable PV Panel System" <u>O Konur, SA Korkmaz, O Yuksel, Y Gulmez, A Erdoğan, KE Erginer &amp; CO Colpan</u></p> <p>#154 "A New Approach for Solar Radiation Forecast: Case of Algeria" <u>K Abdeladim, A Razagui, S Semaoui, S Bouchakour, A Hadj Arab &amp; S Boulahchiche</u></p> <p>#155 "Development of Photovoltaic Cells" <u>D Çoban Özkan A Türk &amp; E Çelik</u></p> <p>#175 "Solar Energy for Steam Requirement of Concentrated Sour Cherry Juice Production" <u>N Colak-Gunes, E Gungor &amp; M Gunes</u></p> <p>#425 "Thermodynamic Analysis of Solar Assisted Absorbtion Refrigeration Systems for Different Refrigerant Couples" <u>O Kizilkan &amp; H Yilmaz</u></p>	<p>#114 "Photodegradation of Ciprofloxacin and Ofloxacin Antibiotics and their Photo-Metabolites with Sunlight" <u>P Alicanoğlu &amp; DT Sponza</u></p> <p>#125 "Spatial Distribution of PAH and PCBS in Urban Surface Dust in Kocaeli" <u>M Yilmaz Civan, UM Kara &amp; B Başaran</u></p> <p>#201 "Calculating Land Surface Temperature Using Landsat 8 Data" <u>G Kaplan &amp; U Avdan</u></p> <p>#436 "Exergoenvironmental Analysis of a Solar Tower Based Integrated System: Comparison with Various Fuels" <u>F Sorqulu &amp; I Dincer</u></p> <p>#303 "Determination of the Carbon Footprint of Ports" <u>N Baycan &amp; Y Pehlivan</u></p> <p>#359 "An Arid Time in the Western Black Sea: The Middle Eocene Evaporites" <u>S Sen &amp; G Tuncer</u></p> <p>#415 "Positive Environmental Effects of Using Rare Earth Elements Against Global Warming" <u>H Tekin &amp; IC Yilmaz</u></p>
	19:30 –22:00 Gala Dinner Hotel Wyndham Grand Izmir Ozdilek - Brasserie Restaurant			

## Wednesday - June 27, 2018

## Parallel Sessions 6

	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Solar Energy - II Session Chair: Aytaç Gören	Modeling of Energy Systems- I Session Chair: Ziad Saghir	Sustainable Buildings - III Session Chair: David Carlos Avila	Energy Policies & Strategies Session Chair: Ahmet Durmayaz
09:00 - 10:40	<p>#226 "Solar Radiation Estimation Model and Design of a Two Axis Sun Tracker for Dokuz Eylul University Campus Area" <u>T Ünver</u> &amp; A Gören</p> <p>#254 "Validation of Forecasted Solar Radiation by WRF and Calculated by libRadtran Models Using Merra-2 Database" <u>A Razaqul</u>, K Abdeladim, S Semaoui, S Bouchakour, A Hadj Arab &amp; S Boulahchiche</p> <p>#255 "Effect of Using Photovoltaic Power Systems in Sustainable Energy Action Plan of a Big County Municipality in Turkey" <u>M Biter</u> &amp; M Cubukcu</p> <p>#267 "Energetic and Exergetic Analysis of a Novel Multi-Generation System Using Solar Power Tower" <u>M Abid</u>, V Adebayo &amp; U Atikol</p> <p>#273 "An Improved System Design for Solar Boats" <u>KE Erginer</u>, Y Gülmez, O Konur, E Fikir, B Göksu, KD Kaya, M Pamik, O Yüksel &amp; SA Korkmaz</p>	<p>#161 "Improving Energy Efficiency in Turkey: A Case Study for Textile Industry" <u>B Özer</u> &amp; B Güven</p> <p>#264 "Sustainability Study of Ammonia Combustion in a Gas Turbine" <u>SK Ayaz</u> &amp; Ö Altuntaş</p> <p>#275 "Development of a Methodology for Applying Industry 4.0 to Industrial Tunnel Furnace for Sustainable Production" <u>G Tahtalı</u> &amp; H Olgun</p> <p>#341 "Numerical Analysis of Diesel Engine Performance and Exhaust Emissions with Diesel-Ethanol Fuel Blends" <u>KD Kaya</u>, K Bayramoğlu, <u>S Yilmaz</u> &amp; M Nuran</p> <p>#368 "Strain-Driven Piezoelectric Energy Harvester for Intelligent Tires" <u>R Esmaeeli</u>, H Aliniagerdroudbari, SR Hashemi, M Alhadri, W Zakri, <u>C Batur</u> &amp; S Farhad</p> <p>#392 "Analysis and Optimization Proposal of a Typical Building in Tehran Using TRNSYS Software" <u>E Gholamian</u>, P Hanafizade, P Ahmadi &amp; N Javani</p> <p>#417 "Comparative Evaluation of Coal Gasification Based Integrated System" <u>YE Yüksel</u>, M Öztürk &amp; I Dincer</p>	<p>#361 "Sustainability Assessment of an Integrated Net Zero Energy House" <u>A Abu-Rayash</u> &amp; I Dincer</p> <p>#372 "Exploring the Current Status of Construction Industry in Auckland: Are We Doing Enough?" <u>A Ghaffarianhoseini</u>, A Ghaffarianhoseini, J Tookey &amp; N Naismith</p> <p>#352 "Alternative Building Materials for Sustainable Construction" <u>AV Orhon</u> &amp; M Altın</p> <p>#353 "Smog-Eating Building Facades for Air Pollution Remediation" <u>AV Orhon</u></p> <p>#390 "The Perception of Natural and Built Environment of Secondary School Students" <u>E Güller</u>, A Tokuç, G Köktürk, K Savaşır, M Çiftçili, A Aşıkoğlu, LG Gürsoy, C Taşpınar &amp; ZS Güneş</p> <p>#410 "Rehabilitating the Carbon Cycle with Bio-design in Architecture" <u>O Kırdök</u>, D Altun, D Dokgöz &amp; A Tokuç</p>	<p>#072 "Social and Environmental Impact of Hydroelectric Power Plants" <u>H Hassoy</u></p> <p>#317 "IAEA Support on Nuclear Cogeneration for Climate Change Mitigation" <u>R El-Emam</u> &amp; I Khamis</p> <p>#304 "Can Nuclear Energy be Considered as a Viable Alternative within the Context of Global Warming?" <u>E Bilgiç</u> &amp; O Gündüz</p> <p>#088 "Energy Housing Policies and Strategies as a Solution for the Climate Change Impact" <u>S Arias</u></p> <p>#231 "Transition to Renewable Electricity and Heating Production in Six EU Countries" <u>S Petrović</u>, M Hummel, T Fleiter, R Büchele, M Münster, L Kranzl &amp; K Karlsson</p> <p>#424 "Hydro-power Energy Storage: A Case Study for Izmir City, Turkey" <u>O Kizilkan</u> &amp; MA Ezan</p>
	10:40-11:00 Coffee Break and Poster Session			

Poster Session 4 – Foyer Area		
Session Coordinator: Ayca Tokuç		
10:40-11:00	#050	"Solenco Powerbox: Revolutionizing the world of Energy today" <i>H.Vandenborre &amp; F.Lopez</i>
	#052	"Climate Changes and Hydrological Evaluation of Potential Water Consumption Dams in Küçükmenderes Coastal Basin" <i>A.Erdenir Silay, D.Yaşar &amp; S.Adalıǧlu</i>
	#152	"Synthesis of Carbon Nanotubes via Chemical Vapor Deposition Method on Silica Particles for Lithium Ion Battery Anode Materials" <i>S.Özen, R.Yavuz &amp; N.Karatepe</i>
	#158	"Contribution of Remote Sensing for Geological Study of the South – East of Constantine Basin, North of Algeria" <i>S.Moussa</i>
	#220	"Characterizing Riparian Wetland Soils from an Agricultural Watershed: Implications for Carbon Storage" <i>ZY.Avdan, EA.Albek &amp; W.Stringfellow</i>
	#242	"The Evaluation of Safety Barriers Using the Method Lopa Case: Haoud Berkaoui in Sonatrach" <i>H.Samia &amp; GS.Eddine</i>
	#243	"Methods to Recover the Flared Gas and Its Impact on the Climate Change" <i>H.Samia &amp; GS.Eddine</i>
	#265	"Comparative Study Between Dry and Wet Modes in Hybrid Cooling Tower for a Solar Adsorption Cooling System" <i>MA.Kheireddine, A.Rouag, A.Labed, A.Benchabane &amp; CE.Bensaci</i>
	#281	"Environmental Impact Evaluation of an Integrated Energy System for a Sustainable Community" <i>A.Hasan &amp; I.Dincer</i>
	#344	"The Cross-Linked Magnetic Copolymer Microparticles for Adsorption of Acid Violet 7" <i>G.Turhan, KN.Yıldız, A.Olgun &amp; A.Kara</i>
	#351	"A Comparison of Adsorption Capacity of Ulexite and a Waste Containing Ulexite Impurity for the Removal of Basic Dye from Aqueous Solution" <i>A.Olgun, A.Kara, P.Sevinç, M.Günçör, E.Özdemir &amp; S.Sozügecer</i>
	#358	"Design, Optimization and Feasibility Analysis of Geothermal Heat Pump for Cooling and Heating Demand of an Office Building in Islamabad Case Study for Pakistan" <i>MAziz, SA.Khan &amp; M.Koc</i>
	#429	"Monodisperse Palladium-Cobalt Alloy Nanoparticles Assembled on Graphene Oxide as Highly Effective Catalyst for the Dimethylamine Borane (DMAB) Dehydrocoupling" <i>B.Şen, A.Aygün, A.Şavk, S.Karahan Gülbay &amp; F.Şen</i>
	#430	"Carbon Based Bimetallic Palladium-Nickel Alloy Nanohybrids As Highly Effective Catalyst for The Dehydrocoupling of Dimethylamine Borane (DMAB)" <i>B.Şen, A.Aygün, A.Şavk, S.Karahan Gülbay &amp; F.Şen</i>

Wednesday - June 27, 2018				
Parallel Sessions 7				
	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Hydrogen Production Session Chair: Ebru Çokay	Solar Energy - III Session Chair: Tahir Ratlamwala	Refrigerants & Refrigeration Systems - II Session Chair: Aytunç Erek	Sustainable Transportation and Global Warming - II Session Chair: Mustafa Nuran
11:00 - 12:40	<p>#295 "Biohydrogen Production from Acid Hydrolyzed Wastewater Treatment Sludge by Dark Fermentation" <i>O Balcan &amp; I Karapinar</i></p> <p>#025 "Microarray Analysis of High Light Intensity Stress on Hydrogen Production Metabolism of <i>Rhodobacter Capsulatus</i>" <i>M Gürçan, H Koku, İ Eroğlu &amp; M Yücel</i></p> <p>#076 "Hydrogen Production from Coffee Waste" <i>H Cay, G Duman &amp; J Yanik</i></p> <p>#287 "Numerical Investigations of Hydrogen-Rich Syngases Under Distributed Combustion Conditions" <i>S Karyeyen &amp; M Ilbas</i></p> <p>#297 "Continuous Dark Fermentative Biohydrogen Production by Anaerobic Sludge Immobilized on Polyester Fiber Beads in Packed Bed Bioreactor" <i>RT Pamuk, F Karaosmanoglu, P Gokfiliz-Yildiz &amp; I Karapinar</i></p> <p>#422 "Modelling of Aluminium Electrolysis Cell" <i>EE Songül &amp; İ Duman</i></p>	<p>#278 "Experimental Investigation on Heat Transfer Coefficient and Thermal Efficiency of Solar Air Heaters Having Different Baffles" <i>CE Bensaci, A Moumami, A Labeled &amp; MA Kheireddine</i></p> <p>#327 "Performance of a Vented Solar Chimney" <i>H Baş &amp; A Tokuç</i></p> <p>#362 "Co-Precipitated Nanostructured Silver Doped Ceria Redox Material for Solar Thermochemical Conversion of H<sub>2</sub>O/CO<sub>2</sub>" <i>G Takalkar &amp; RR Bhosale</i></p> <p>#349 "Use of Timber in Solar Architecture" <i>M Altun</i></p> <p>#356 "Simulation-Based Mathematical Model of a Solar Powered DC Motor for UAV Applications" <i>I Turk, I Yazar, UB Filik &amp; TH Karakoc</i></p> <p>#363 "Solar Thermochemical H<sub>2</sub>O/CO<sub>2</sub> Splitting Using Sol-Gel Derived Magnesium Ferrite" <i>RR Bhosale &amp; G Takalkar</i></p>	<p>#412 "A Numerical Model for Condensers and Evaporators" <i>IF Yilmaz, J Duquette &amp; MA Ezan</i></p> <p>#222 "Parametric Investigation of Supercritical Refrigeration Cycle for R744 And R170" <i>AU Atmaca, A Erek, MT Çoban &amp; O Ekren</i></p> <p>#123 "CFD Simulation of the Peltier Effect in a Refrigerator Design" <i>MA Akdemir, A Yilanci &amp; E Cetin</i></p> <p>#409 "A Novel Numerical Approach for an Axial Reciprocating Magnetic Regenerator" <i>T Akis, MA Ezan, S Çelik, A Hamad, E Yanik, O Ekren &amp; A Yilanci</i></p> <p>#227 "Thermodynamic Assessment of Ejector Expansion Refrigeration Cycle under Reversible Ejector Assumption" <i>AU Atmaca, A Erek &amp; O Ekren</i></p> <p>#427 "Modeling the Thermal Performance of Phase Change Material Slurries (PCMS) in Laminar Falling Films" <i>M Radwan &amp; N Rodwan</i></p>	<p>#191 "Cost Formation of Exhaust Emissions for GE90 Turbofan Engines Used on Commercial Aircrafts" <i>O Balli</i></p> <p>#010 "Thermal Design and Testing of Mini-Scaled Heat Sink for 400 W Thermoelectric Generator Driven by Exhaust-Gas from Vehicle Engine" <i>MK Mansour</i></p> <p>#074 "Climate Change Effects on Arctic Shipping Route" <i>S Yirmibesoglu, O Oktar &amp; B Ozsoy</i></p> <p>#124 "Role of Large Penetration of Electric Car in Increasing System Flexibility with Large Share of Renewable Resources in Low-Carbon Strategy of the Republic of Croatia" <i>Ž Tomšić, S Raos &amp; I Rajsi</i></p> <p>#138 "Estimation of Propulsion Thruster Power on LNG-Fueled Marine Vessels with Artificial Neural Networks" <i>M Bayraktar, B Goksu, K Bayramoglu &amp; S Yilmaz</i></p> <p>#008 "Short Remarks to the Over-Glorified using Electric or Hydrogen-Driven Cars" <i>R Petela</i></p>
	12:40-13:40 Lunch			
	13:40-14:00 Awards Ceremony – KONAK 2&3			

## Wednesday - June 27, 2018

## Parallel Sessions 8

	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Life Cycle Assessment of Energy Systems Session Chair: Celal Batur	Exergy Analysis of Energy Systems - II Session Chair: Behnaz Rezaie	Wind Energy Session Chair: Arif Hepbaşlı	Chemical Aspects - I Session Chair: Ebru Erünal
14:00 - 15:40	<p>#171 "Optimum Energy Evaluation and Life Cycle Cost Assessment of a Hydrogen Liquefaction System Assisted by Geothermal Energy" <u>C Yilmaz</u></p> <p>#236 "Life Cycle Saving of the Buildings in Turkey Related to Energy Consumption due to Outer Wall Insulation" <u>O Kon &amp; I Caner</u></p> <p>#383 "A Constructal Flow Field Layout for Direct Methanol Fuel Cells" <u>H Ganjehsarabi, D Ouellette, M Ercelik, CO Colpan</u></p> <p>#400 "A Well to Pump Life Cycle Environmental Impact Assessment of Hydrogen Production Routes" <u>O Siddiqui &amp; I Dincer</u></p> <p>#401 "Life Cycle &amp; Cost Analysis (LCCA) for Microalgae Production: A Case Study of Pilot Scale Application" <u>EO Koroğlu, H Elcicek, H Yoruklu, B Ozkaya &amp; A Demir</u></p> <p>#022 "Life Cycle Assessment of Portland Cement Production in Algeria" <u>A Makhlouf, G Quaranta, H Cheniti &amp; Z Mekti</u></p>	<p>#055 "Exergetic and Environmental Analyses of Turbojet Engine" <u>B Yuksel, O Balli, H Gunerhan, A Hepbasli &amp; H Atalay</u></p> <p>#062 "Resolving the Non-Productive Periods of Solar Chimney by Integrating with Waste-to-Energy Plant" <u>A Habibollahzade, E Houshfar, A Behzadi, E Gholamian &amp; M Ashjaee</u></p> <p>#099 "Exergetic Irreversibility and CO<sub>2</sub> Emission Analysis Based on Different Sea Temperature in the Diesel Engine of Cargo Ship" <u>MZ Söğüt, S Ozkaynak &amp; TH Karakoç</u></p> <p>#180 "Energy and Exergy Analyses of Two-Stage R744 Cycle with Intercooler" <u>F Yilmaz, R Selbaş &amp; M Öztürk</u></p> <p>#354 "Energetic and Exergetic Performance Evaluation of Ge90-115b High Bypass Turbofan Engine for Different Fuel Usage" <u>O Balli, Y Sohret, TH Karakoç</u></p> <p>#360 "Thermal Modelling of a Parabolic Trough Solar Collector Integrated Biomass Based Organic Rankine Cycle System" <u>O Calli, CO Colpan &amp; H Gunerhan</u></p>	<p>#388 "Wind Energy and Uncertainty" <u>B Özerdem</u></p> <p>#212 "Numerical Investigation of Solidity Effects on a 3 Bladed Vertical Axis Wind Turbine" <u>A Şimşek, S Tekşin &amp; SO Akansu</u></p> <p>#320 "Design and Thermodynamic Analysis of an Integrated Concentrated Solar Power (CSP) &amp; Concentrated Photovoltaic/Thermal (CPV/T) and Wind to Thermal Energy Conversion (WTEC) System for Multigeneration" <u>N Sezer, Y Biçer &amp; M Koç</u></p> <p>#357 "Development and Analysis of a Solar and Wind Energy-Based Sustainable Poly-generation System for Remote Locations" <u>M Luğman, Y Bicer, T Al-Ansari</u></p> <p>#393 "Theoretical Investigation of Buoyant Airborne Wind Turbines for a Model and Prototype in terms of Quantity of Helium for Balance Conditions" <u>K Bilen, SD Erhan, S Bektaş, G Çimendağ &amp; O Erdoğan</u></p> <p>#105 "Wind Farm Potential Sites Identification and Prioritization for Sustainable Energy Diversification in Zambia: GIS Analytic Based Approach" <u>M Mwanza &amp; K Ülgen</u></p>	<p>#083 "Carbon Footprint of Sol-Gel Method Applied for Flame Retardancy of Cotton Fabric" <u>Y Unvar, E Sergin, A Aksit &amp; E Kilic</u></p> <p>#176 "Kinetics and Mechanism of Reaction Between Carbon Disulfide and New Aqueous Amine Solutions" <u>O Yüksel Orhan, FN Cihan, H Yavuz Ersan &amp; E Alper</u></p> <p>#186 "Novel CO<sub>2</sub>-Capture Solvents Comprising Carbonic Anhydrase and Sterically Hindered Amines: Kinetic Studies" <u>O Yüksel Orhan, FN Cihan, H Yavuz Ersan &amp; E Alper</u></p> <p>#195 "Conversion of Model Cellulose into Value Added Products Using Deep Eutectic Solvent Formed by Choline Chloride and Oxalic Acid" <u>M Sert</u></p> <p>#245 "Influence of the Nature of Heat Treatment on Catalysts Based on Gold Nanoparticles in the Selective Oxidation of Organic Molecules" <u>R Soulimane, S Kherbouche, A Hakkoum &amp; R Bachir</u></p> <p>#259 "Optimization of Energy Consumption for Oil Removal from Aqueous Solution using Electrochemical Process" <u>M Tir &amp; M Nedjhioui</u></p>
	15:40-16:00 Coffee Break and Poster Session			

Poster Session 5- Foyer Area  
Session Coordinator: Ayca Tokuç

15:40-16:00	<p>#002 "Energy and Sustainable Development: Socio-Economic of Implementing New Technologies" <u>A Omer</u></p> <p>#009 "Design and Development of Energy Efficient Twin Mode Domestic Improved Biomass Cookstove" <u>NLPanwar</u>, H Kumar, AS Paul</p> <p>#011 "Effect of Steam Injection into Incinerator on Thermal Decomposition of Waste Refrigerant (HFC-134a)" <u>TI Ohm</u>, JS Chae &amp; SH Moon</p> <p>#018 "Contribution to the Development of Algae Production Processes for Biodiesel Production" <u>S Ziqhmi</u>, S Ladjel, MB Goudjil, SE Bencheikh</p> <p>#019 "Critical Management of Water Resources for Global Warming" <u>K Islam</u></p> <p>#028 "Investigation of the Relationship Between Urmia Lake Drying and Dust Storms" <u>B Feizizadeh</u>, A Naboureh &amp; M Moharrami</p> <p>#035 "Refining of Used Motor Oil Using Solvent Extraction" <u>H Izza</u></p> <p>#048 "Effects of Climate Change on Izmir Water Resources" <u>D Yaşar</u> &amp; S Adalığlı</p> <p>#268 "Investigation into the Energetic Algerian Sahara Potential for Cooling Systems Applications; Feasibility, Obstructions and Sustainable Solutions" <u>A Labed</u>, A Rouag, CE Bensaci, A Kheireddine, A Benchabane &amp; N Moummi</p> <p>#312 "1D, 2D and 3D Simulations of a Direct Methanol Fuel Cell to Study Methanol and Water Crossover Through the Membrane" <u>S Sharifi</u>, R Rahimi, D Mohebbi-Kalhari &amp; CO Colpan</p> <p>#395 "Degradations in Porous Components of a Proton Exchange Membrane Fuel Cell Under Freeze-Thaw Cycles" A Ozden, S Shahgaldi, J Zhao, X Li &amp; F Hamdullahpur</p> <p>#407 "Innovative Catalyst Synthesis and Performance Tests on Direct Alcohol Fuel Cells" <u>EB Cetin</u>, CO Colpan &amp; E Erunal</p> <p>#431 "Photovoltaic Panel Efficiency Modeling for Solar Powered Vehicle" <u>TB Korkut</u>, A Gören &amp; MA Ezan</p> <p>#432 "Integrated Building Entropy Production Considering Main Distribution Line with System Preference" <u>MZ Söğüt</u>, I Ekmekci &amp; TH Karakoc</p>
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## Wednesday - June 27, 2018

## Parallel Sessions 9

	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Modeling of Energy Systems - II Session Chair: Barış Özerdem	Atmospheric Changes Session Chair: Jose Luis Sanchez	Computational Fluid Dynamics Session Chair: Mustafa İbaş	Geothermal Energy Session Chair: Dilek Kumlutaş
16:00 - 18:00	<p>#137 "Energy Efficiency Estimation of Induction Motors with Artificial Neural Networks" <u>M Sertsöz</u>, <u>M Fidan</u> &amp; <u>M Kurban</u></p> <p>#148 "Energy Analysis of a Vacuum Fresh Water Generator on a Commercial Vessel" <u>O Yuksele</u>, <u>Y Gulmez</u>, <u>O Konur</u>, <u>SA Korkmaz</u>, <u>A Erdoğan</u> &amp; <u>CO Colpan</u></p> <p>#178 "Thermodynamic and Environmental Assessment of Coal Gasification-Based Multigeneration System" <u>F Yilmaz</u>, <u>M Öztürk</u> &amp; <u>R Selbaş</u></p> <p>#244 "Performance Analysis of a Combined Heat and Power System Driven by Stirling Engine at Different Rotational Speeds" <u>M Chahartaghi</u>, <u>M Sheykhi</u> &amp; <u>P Ahmadi</u></p> <p>#248 "Sustainable Filtration Options for Cooling Towers" <u>T Young</u> &amp; <u>B Rezaie</u></p> <p>#258 "Techno-Economic Optimization of Grid-Tied Hydrogen-Renewable-Based Power Plant with Management Strategy" <u>H Tebibel</u></p> <p>#082 "The Effect of Wind Speed and Temperature Changes on Performance of Pavements: Finite Element Analysis" <u>Chun-Hsing Ho</u>, <u>A Abdelaziz</u> &amp; <u>H Dai</u></p>	<p>#237 "Spatio-Temporal Variability of Temperature Extremes in the Marmara Region (NW Turkey)" <u>H Baltacı</u></p> <p>#311 "Past and Projected Variation of Aerosol (Dust), Temperature and Precipitation Over Eastern Mediterranean Basin" <u>K Oğuz</u> &amp; <u>BS Akin</u></p> <p>#207 "The Causes of Global Warming on a Short Time Scale and the Law of Global Climate Change on a Long Time Scale" <u>CX Zhong</u></p> <p>#218 "Urban Heat Island Analysis Using the Landsat 8 Satellite Data: A Case Study in Fethiye, Turkey" <u>N Demircioğlu Yildiz</u>, <u>G Kaplan</u>, <u>ZY Avdan</u> &amp; <u>U Avdan</u></p> <p>#414 "Generated Electricity Based Hourly and Daily Intensity of CO<sub>2</sub> Emissions" <u>C Coskun</u></p> <p>#438 "Changes of Power Depending on Different Factors During the Navigation of the Ship, Fuel Consumption and Emission Analysis" <u>M Suner</u> &amp; <u>EY Yoruk</u></p>	<p>#411 "Numerical Study on Photovoltaic/Thermal Systems with Extended Surface" <u>C Kalkan</u>, <u>J Duquette</u>, <u>A Yilanci</u>, <u>S Yilmaz Balaman</u> &amp; <u>MA Ezan</u></p> <p>#112 "Numerical Study of Thermal Transport in a Flat-Plate Solar Collector Using Novel Absorber Plate" <u>H Hamzah</u>, <u>SI Hasan</u> &amp; <u>S Küçüka</u></p> <p>#269 "CFD Analysis of a Borehole Heat Exchanger Performance" <u>L Bilir</u> &amp; <u>N Yildirim</u></p> <p>#300 "The Effects of Equivalence Ratio on a Downdraft Plasma Coal Gasifier" <u>B Ibrahimoglu</u> &amp; <u>MZ Yilmazoglu</u></p> <p>#408 "Numerical Investigation of Thermal Hydraulic Effect of Plate Number of Brazed Plate Heat Exchangers" <u>C Senkal</u> &amp; <u>Ç Kök</u></p> <p>#413 "Numerical Modeling of Heat Transport in Firefighter Clothing and Human Skin" <u>D Yilmaz</u>, <u>CO Colpan</u> &amp; <u>S Kucuka</u></p> <p>#421 "Numerical Modelling and Designing of Air Channel for Cooling Process During Casting" <u>M Sevim</u>, <u>D Timur</u>, <u>I Sener</u> &amp; <u>HF Simsek</u></p>	<p>#059 "Thermodynamic Analysis and Assessment of a Geothermal Cooling System for a House" <u>B Ozcan</u>, <u>T Tacer</u>, <u>IE Aykurt</u>, <u>M Akpak</u>, <u>N Yildirim</u>, <u>HG Ozcan</u> &amp; <u>A Hepbasli</u></p> <p>#241 "Geothermal and Solar Energy Based Multigeneration System for a District" <u>TAH Rattlamwala</u>, <u>S Waseem</u>, <u>AA Bham</u> &amp; <u>Y Salman</u></p> <p>#286 "Energy and Exergy Analysis of a Combined Solar and Geothermal Energy-Based Integrated System for Multigenerational Purposes" <u>TAH Rattlamwala</u>, <u>M Dawood</u>, <u>MF Ejaz</u> &amp; <u>A Tanzeel</u></p> <p>#292 "Geothermal and Solar Energy Amalgamated Multigeneration System Escorting Diverse Needs of a District" <u>TAH Rattlamwala</u>, <u>AA Raja</u>, <u>SR Jaffry</u> &amp; <u>U Zafar</u></p> <p>#302 "Exergetic Analysis of a Geothermal Power Cycle Using Alternative Working Fluids" <u>M Altinkaynak</u>, <u>AE Özgür</u> &amp; <u>HC Bayrakçı</u></p>
	19:00-21:00			
	Boat Trip on the Bay of Izmir with the Nostalgic Bergama Ship The buses will leave in front of the conference hotel at 18:45			

## Thursday - June 28, 2018

## Parallel Sessions 10

	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Wastewater Management - II Session Chair: Serkan Eker	Sustainable Transportation and Global Warming - II Session Chair: Amirhosein Ghaffarianhoseini	Waste Management - II Session Chair: İlhami Yıldız	Chemical Aspects - II Session Chair: Rami El-Emam
09:00 - 10:40	<p>#104 "Determining the Effects of Acetate and NaCl Concentrations on the Astaxanthin Production of <i>Haematococcus Pluvialis</i> Using Response Surface Methodology" <i>Y Liu &amp; I Yıldız</i></p> <p>#117 "Comparison of Some Conventional and Photocatalytic Treatment Process Cost: Toxicity Analysis to Some Nanoparticles" <i>DT Sponza &amp; N Erdincmer</i></p> <p>#177 "Treatment of Palm Oil Mill Effluent from Palm Oil Processing Industries to Provide Clean Water and Sustainable Social Benefit in Indonesia" <i>I Hidayat &amp; A Pala</i></p> <p>#086 "Determination of Polycyclic Aromatic Hydrocarbons in Treated Waste Water and Removal Processes Using Photocatalytic System" <i>N Kargar, G Matin, AR Amani-Ghadim, AA Matin &amp; HB Buyukisik</i></p>	<p>#169 "A Numerical Investigation of Valve Lift Effects on Marine Diesel Engine and Emission Prediction" <i>K Bayramoğlu, KD Kaya, S Yılmaz, M Bayraktar &amp; B Göksu</i></p> <p>#075 "Changes of Sea Ice Extent Studies in Turkish Antarctic Expedition-I" <i>S Yirmibesoglu, O Oktar &amp; B Ozsoy</i></p> <p>#182 "Sustainable Transportation System Design for Unilever Turkey" <i>M Colak, İY Utku, D Ozmisir, A Boz, T Aydogdu, MC Didis &amp; E Nadar</i></p> <p>#190 "Comparative Life Cycle Assessment of a Gasoline, Fuel Cell and Two New Electric Vehicles" <i>MF Ezzat &amp; I. Dincer</i></p> <p>#133 "NEO energy: The hybrid solution" <i>F Mumtaz &amp; A Saeed</i></p> <p>#210 "Investigation of Energy Efficiency on Voyage and New Techniques" <i>K Özgüç &amp; G Bektaş</i></p>	<p>#308 "Fate and Transformation of EDC in Wastewater Treatment Plants and their Possible Adverse Effects on Different Organisms" <i>SC Tüzün &amp; I Karapinar</i></p> <p>#309 "Optimization of Torrefaction Conditions of Sunflower Seed Wastes for Improving Solid Characteristics" <i>B Cabuk &amp; H Olgun</i></p> <p>#339 "Biochar from Olive Wastes" <i>G Balmuk, H Cay, G Duman, IC Kantarli &amp; J Yanik</i></p> <p>#402 "Investigation of Microbial Communities in the Field-Scale Co-Composting of Sewage Sludge and Organic Municipal Solid Wastes" <i>S Yıldız, EO Koroglu, A Demir, B Ozkaya &amp; OA Arkan</i></p> <p>#285 "Effect of Climate Transition on the Vegetative Cycle of Crops in Setif Region" <i>F Mohamed</i></p>	<p>#403 "Developing Halogen-Free Polystyrene with Enhanced Fire Resistance" <i>E Erünal &amp; C Paulik</i></p> <p>#322 "Transport Actif of Heavy Metals by Liquid Membrane Constituted of a Two Extractants Mixture" <i>S Chelouaou &amp; F Hassaine-Sadi</i></p> <p>#323 "Polyether Sulfone Supported Chitosan Ultrafiltration-Membrane" <i>A Zakmout &amp; F Hassaine-Sadi</i></p> <p>#373 "Photocatalytic Degradation of Methyl Orange as a Model Organic Pollutant by Ag/Mesoporous TiO<sub>2</sub> Under Visible Light Irradiation" <i>H Chaker, L Cherif-Aouali &amp; S Fourmentin</i></p> <p>#404 "Different Statistical Models of Biochemical Methane Potential (BMP) for Different Substrate to Inoculum Ratio" <i>H Civelek Yoruklu, E Korkmaz, N Manav Demir, B Ozkaya &amp; A Demir</i></p> <p>#405 "Bioenergy Production from <i>Chlorella Vulgaris</i> and <i>Nannochloropsis Oculata</i> Cultivated in a Pilot Scale System" <i>H Civelek Yoruklu, T Genc, EO Koroglu, A Demir &amp; B Ozkaya</i></p>
	10:40-11:00 Coffee Break			



## Thursday - June 28, 2018

## Parallel Sessions 11

	ROOM – PUNTA	ROOM – PUNTA CLUB	ROOM – KONAK 1	ROOM – FOÇA
	Environment Policies & Strategies Session Chair: Nader Javani	Energy Conversion & Storage Session Chair: Yaqub Amani		Water Resources & Management Session Chair: M Akif Ezan
11:00 - 12:40	<p>#004 "Biologically Based Network Design with Ants for Route Planning" <i>G Köktürk, A Tokuç, TD Altun, FF Özkaban, ÖA Çakır, T Teskin Gündoğdu, İ Deniz, A Şendemir Ürkmez</i></p> <p>#174 "Networks as a Tool for Coping with Climate Change Climate Action Network (CAN)" <i>Z Savaşan</i></p> <p>#228 "Plastics Recycling and Environment" N Bano, T Younus, F Shoaib, <i>D Rashid &amp; N Jaffri</i></p> <p>#324 "Utilizing Cultural Heritage for Climate Change Adaptation Strategies" <i>CI Gencer</i></p> <p>#249 "Environmental Conservation of Siachen Glacier Through Transboundary Peace Park: An Attitudinal Conflict Resolution Approach" <i>S Ali, H Xu, W Ahmed &amp; N Ahmad</i></p> <p>#293 "Economic Assessment of Phase Change Materials in Buildings" <i>M Asker, E Alptekin, A Tokuç, MA Ezan &amp; H Ganjehsarabi</i></p> <p>#100 "Polar Code for the Polar Regions" <i>M Krhll &amp; B Ozsoy</i></p>	<p>#391 "Development of Phase Change Material/Diatomite Nanocomposites for Thermal Energy Storage" <i>Y Konuklu, O Ersoy &amp; F Erzin</i></p> <p>#394 "Energy Storage Materials: Sepiolite/Phase Change Material Nanocomposites" <i>Y Konuklu, O Ersoy &amp; F Erzin</i></p> <p>#397 "Technical Assessment of a Fuel Cell-Battery Hybrid Drive Power System: A System Dynamics Approach" <i>SA Korkmaz, CO Colpan &amp; AG Cerit</i></p> <p>#365 "Enviro-economic Analysis of Augmentation of a Solar-Thermal Power Plant for a Cogeneration System in Yazd, Iran" <i>A Pirmohamadi, M Ghazi &amp; D Hassanpour</i></p> <p>#276 "Heat Exchange Experiment from Liquid to Gas" <i>P Somerville</i></p> <p>#063 "Exergy and Exergoeconomic Assessment of Tehran's Waste to Energy Power Plant" <i>A Behzadi, E Houshfar, A Habibollahzade, E Gholamian &amp; M Ashjaee</i></p> <p>#426 "Performance Investigation of a Solar Tower Assisted CO<sub>2</sub> Gas Cycle with Integrated ORC" <i>A Erdogan, O Kizilkan, CO Colpan &amp; S Nizetic</i></p>		<p>#029 "Impact of Septic Tank on the Ground Water at Sidi Ayache Region in the Province of Kenitra, Morocco" <i>S El Halas</i></p> <p>#038 "Behavior of Groundwater from Semi-Arid Area Face the Global Change" <i>M Bahir, S Ouhamdouch &amp; M Ait-Tahar</i></p> <p>#288 "Heavy Metals Pollution of Surface Water and Sediment of Watari Reservoir, Kano State, Nigeria" <i>GA Adamu, MS Sallau, S Idris &amp; EB Agbaji</i></p> <p>#301 "Stream Network Modelling from Aster GDEM Using ArcHydroGIS: Application to the Upper Moulouya River Basin (Eastern, Morocco)" <i>K Dianj, K Ilias, T Hassan &amp; Z Mahmoud</i></p> <p>#329 "Quantification of Water Erosion at the Level of the High Atlas of Morocco, Pilot Study at the Scale of the Ourika Basin" <i>HA Ougougdal, MY Khebiza &amp; M Messouli</i></p> <p>#079 "Effect of Hydrogen Enrichment on the Exergy Efficiency of Blended Methane-Hydrogen Mild Combustion" <i>A Khanlari, A Salavati-Zadeh, M Mohammadi, V Esfahanian &amp; SBN Najafi</i></p>
	12:40-13:00 Closing Remarks at Konak 2&3			
	13:00-14:00 Lunch			
	13:30 – 19:00 Optional Tour - Ephesus, Virgin Mary and The Basilica of St. John Excursion			