



8<sup>TH</sup>  
INTERNATIONAL  
ADVANCED TECHNOLOGIES  
SYMPOSIUM

ENERGY TECHNOLOGIES

19.10.2017 THURSDAY/PERŞEMBE				
ENERGY TECHNOLOGIES				
	HALL-D		HALL-H	
	ID No	ARTICLE TITLE		ARTICLE TITLE
<b>CHAIR</b>	Prof. Dr. Mehmet ESEN		<b>CHAIR</b>	Prof. Dr. Cengiz YILDIZ
13.30-14.00	Invited Speaker Asst. Prof. Dr. Salwa BOUADILA		395	Çankırı drinking water treatment plant risk analysis <b>Zehra Gülten Altın*, İnci Sevgili, Barış Şimşek, Mustafa Dağ</b>
			1139	The Determination of the Heat Transmission Factor for Sports and the Determination of the Heat Transmission Factor of the Spinal Oxide Fluid <b>Halil İbrahim Variyenli, Mustafa Bahadır Özdemir, Kemal Özcan*</b>
14.00-14.15	16	Effect of wavelengths impedance spectroscopy of a vertical parallel junction silicon solar cell under monochromatic illumination <b>Gokhan Sahin*, Genber Kerimli</b>	409	The Effects of Reynolds Number on the laminar flow past two tandem cylinders with High Blockage in a Channel <b>Neslihan Güneş*, İrfan Karagoz, A. Alper Ozalp</b>
14.15-14.30	138	PEM Fuel Cell-Battery Hybrid Power System <b>Habip Şahin*, Hikmet Esen</b>	1127	Microbial Fuel Cell Manufacture With Pine Needles <b>Nurettin Çek*</b>
14.30-14.45	22	Effect of Modulation Frequency on the Photothermal and Temperature of a vertical parallel silicon solar cell under multispectral illumination <b>Gokhan Sahin*, Genber Kerimli</b>	422	Thermal Management of Portable Electronics with Phase Change Material: Application in Mobile Phone <b>Mustafa Y. Yazıcı*, Mehmet Sağlam, Mete Avcı, Orhan Aydın</b>
14.45-15.00	23	Best guess of energy generation forecasts <b>T. Solak, M.Tunç</b>	1032	Areal Data Comparing of Off-Grid Systems in Solar Energy Systems in Elazığ City <b>Aydın Dikici*, E. Eyüp Gülenoğlu</b>
15.00-15.20	<b>COFFEE BREAK</b>			<b>COFFEE BREAK</b>
<b>CHAIR</b>	Prof. Dr. Ebru KAVAK AKPINAR		<b>CHAIR</b>	Assoc. Prof. Dr. Resul ÇÖTELİ
15.20-15.35	36	Solar – Hydrogen Hybrid System for Renewable Energy Community <b>Yılser Devrim*, Kübra Pehlivanoğlu, Ayhan Albostan</b>	629	Numerical Investigation of Varying Temperature Values Depending on Height of Photovoltaic Modules <b>Abdullah Kapicioglu*, Hikmet Esen, Koray Karabulut, Ferhat Koca</b>



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15.35-15.50	471	Numerical Investigation of Flow and Heat Transfer on Half Spheres In a Channel <b>D. Engin Alnak*</b> , Ferhat Koca, Koray Karabulut	445	Investigation of the Effect of Insulation Thickness on Energy Saving by Using Thermography <b>Ertan Buyruk, Ferhat Kılınc, Koray Karabulut*</b> , Mustafa Caner, Aziz Erge Bostancı
15.50-16.05	89	Biogas and Energy Recovery from Industrial Wastewater: A Case Study for Dairy Industry <b>Pelin S. Yapıcıoğlu*</b> , Ayşe Filibeli	587	Investigation Of Catalytic Hydrogen Production By Polymer Supported Cu (II)–Schiff Base Complex <b>D. Kılınc*</b> , O. Şahin
16.05-16.20	869	The Effect of Different Tilt Angles on a PV/T Collector <b>E. Bakır*</b> , F. Bayrak, H.F. Öztop	463	Experimental and Numerical Investigation of the Effect of Rooftop on the Flow Characteristic Between Two Buildings <b>Deniz Gölbaşı, Ertan Buyruk, Besir Sahin, Koray Karabulut *</b> , Doğan E. Alnak
16.20-16.35	621	Extended Burnup With Grade Plutonium In Candu Reactor <b>Adem Acir, Sinem Uzun*</b>	751	Design of An Experimental Setup to Examine Natural Convection Heat Transfer <b>Filiz Özgen*</b> , Yasin Varol
16.35-16.50	90	Investigation of the Potential of Sewage Sludge as a Renewable Energy Source <b>Pelin Yapıcıoğlu*</b> , Özlem Demir	1098	A Sample Wind Turbine Design To Meet The Electrical Needs In Harput <b>S. Kilickap*</b> , M. Duranay, C. Yıldız
<b>20.10.2017 FRIDAY/CUMA</b>				
	<b>HALL-D</b>			<b>HALL-H</b>
<b>CHAIR</b>	<b>Prof. Dr. Ahmet KOCA</b>		<b>CHAIR</b>	<b>Assoc. Prof. Dr. Filiz ÖZGEN</b>
08.30-08.45	800	An Assessment of Lignocellulosic Wastes: Thermal Decomposition Behavior And Modeling of Tea Pulp At Non-Isothermal Conditions <b>Şeyda Taşar*</b> , Ahmet Özer	446	Thermodynamic Analysis Of A Solar Energy Based Biomass Gasification Process <b>F. Yılmaz*</b> , M. Öztürk, R. Selbaş
08.45-09.00	508	Optimum Model Determination For Solar Radiaton Coming On Horizontal Surface Of Uşak Province <b>M. Ersöz*</b> , A. Yıldız	437	Investigation of Particle Entrainment Characteristics of a Swirl Jet Impinging on Granular Layers <b>Erman Çelik, İrfan Karagoz*</b>
09.00-09.15	94	The Experimental Study of Nanofluids on a Flat-Plate Solar Collector <b>Nese Budak*</b> , Halit Lutfi Yucel, Cengiz Yıldız, Mehmet Kemal Isik	228	Beneficiation from Coal Washing Tailings and Biomass in Active Carbon and Humate mud production <b>Yıldırım Tosun*</b>



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09.15-09.30	50	A New Approach for Determining of Heat Load in Buildings <b>Kazım Kumaş, Arzu Şencan Şahin*, Erkan Dikmen</b>	253	The estimation of Wind Power with Feed-Forward Artificial Neural Network <b>Bulent Yanıktepe*, Sakir Tasdemir, A.Burak Güher</b>
09.30-09.45	527	Optimization of solar dish thermal efficiency for steam generation <b>Safa Skouri*, Karima Ghazouani, Salwa Bouadila</b>	534	Investigation of The Effect Of Building Direction on The Cooling Load Calculations <b>A.Yıldız*, M.A. Ersöz, T.B. İlki</b>
09.45-10.00	140	An Alternative Fuel For Internal Combustion Engines: Wood <b>Rasim Behçet*, Emre Gönel, Faruk Oral</b>	539	Thermodynamic analysis of geothermal based trigeneration system <b>Hasan Ozcan*, Alla İbrahim</b>
10.00-10.20	COFFEE BREAK		COFFEE BREAK	
CHAIR	Asst. Prof. Dr. Koray KARABULUT		CHAIR	Assoc. Prof. Dr. Asım BALBAY
10.20-10.35	141	The Energy Evaluation of The City of Malatya's Animal Waste Potential <b>Rasim Behçet*, Emre Gönel, A.M. Şahinaslan, Faruk Oral</b>	573	Design and Performance Analysis of a Virtual Body Mini Cyclone <b>M. Erman Çalışkan, İrfan Karagoz*, Atakan Avcı, Ali Sürmen</b>
10.35-10.50	300	Design of a PID Digital Controlled Convective Type Drying System <b>Asım Balbay*, Yunus Gonulacar, C. Saka, N. Selvitepe</b>	585	Natural Convection Heat Transfer in Linearly Heated or Cooled Trapezoidal Enclosure <b>Biol Şahin*</b>
10.50-11.05	177	Thermodynamic Performance Assessment Of A Solar Based Heat Pump System For Heating Application <b>Fatih Yılmaz*, Reşat Selbaş, Murat Öztürk</b>	597	Flow Boiling Characteristics in a Single Rectangular Minichannel <b>Burak Markal*, Ayse Candan, Orhan Aydın, Mete Avcı</b>
11.05-11.20	687	Fuzzy Logic Based Solar Radiation Calculation Method for Reflective Surface <b>V. Çoban*, S.C. Onar</b>	622	Effect of the Condenser Pressure of Thermal Power Plant Efficiency <b>Adem Acir, Sinem Uzun*</b>
11.20-11.35	214	Synthesis, Characterization and Thermodynamic Analysis of New Metal Nanocatalysts for Applicability to Direct Alcohol Fuel Cells <b>B. Gezer*, R. Saraç, U.Ayhan, H. Gök, S. Koz, O. Artun, Ü. Berköz, E. Başaran, O.Yılmaz</b>	779	A 3-D CFD Modelling of Different Flow Types for an Anode Supported Hydrogen Fed SOFC <b>Muhittin Bilgili*, Mehmet T. Görüryılmaz</b>
11.35-11.50	227	Thermal Decomposition Kinetics of Some Waste Polymers <b>Ramazan Orhan*, E. Aydoğmuş</b>	651	Thermodynamic analysis of R1234yf and R1234ze as R134a replacements in single stage vapor compression refrigeration system



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				<b>A.Ş. Şahin*, T. Kovacı, K. Kumaş, E. Dikmen</b>
11.50-13.30	<b>LUNCH BREAK</b>			<b>LUNCH BREAK</b>
<b>CHAIR</b>	<b>Asst. Prof. Dr. Emre TURGUT</b>			<b>CHAIR</b> <b>Prof. Dr. Ahmet KOCA</b>
13.30-13.45	279	Kinetic Investigation of Retention of SO <sub>2</sub> With Waste Ulexite Ore in Water <b>Özlem Karagöz*, Mehmet Çopur, M. Muhtar Kocakerim</b>	745	Biochar in Fuel Cell <b>Gökçen Akgül*, Zehra Turan</b>
13.45-14.00	229	Microwave ignited combustion of Coal with maize slush and waste cardboard in modified Tube furnace <b>Yıldırım İ. Tosun*</b>	743	Usability in Vehicles of PEM Fuel Cells <b>Adem Yılmaz*, Sinan Ünvar, Seyfi Şevik, Merve Demir</b>
14.00-14.15	250	Optimization of Duct Curtain Angle for Oscillating Water Column <b>Gokhan Ozdamar*, Yeliz Pekbey, Aydogan Ozdamar</b>	769	Unsteady mixed convection heat transfer and fluid flow from isothermal horizontal triangular cylinders subjected to upward cross flow <b>Zekeriya Altaç, Zerrin Sert, Necati Mahir, Çisil Timuralp*</b>
14.15-14.30	252	Evaluation of Estimation of Wind Power Potential in Backpropagation Networks in the Frame of Different Normalization Techniques <b>Bulent Yaniktepe*, Sakir Tasdemir, A.Burak Güher</b>	784	3-D Modelling of a Single PEM Fuel Cell at the Different Stoichiometric Conditions <b>Muhittin Bilgili*</b>
14.30-14.45	742	The Effect Of The Temperature In The Hydrolysis Reactor On The Production Of Electric Energy In The Fuel Cell-Boron Combined System <b>A. Yılmaz*, S. Şevik</b>	990	Kameriyeye Kurulan Güneş Enerjisi Üretimi ve Tüketimi Sırasında Verilerin Kablosuz Olarak Aktarılması ve İncelenmesi <b>Serkan Aydın*, Hakan Yüksel, Neşe Baysal</b>
14.45-15.00	293	Estimation of Wind power density based on the Weibull distribution parameters using different methods <b>İ. Aladağ*, B. Yaniktepe, O. Kara, C. Aladağ</b>	803	Application Of Flywheel And Ultracapacitor Energy Storage Systems In Hybrid And Electric Vehicles In Regenerative Braking Mode <b>K. Erhan, M. Ayaz, E. Özdemir</b>
15.00-15.20	<b>COFFEE BREAK</b>			<b>COFFEE BREAK</b>
<b>CHAIR</b>	<b>Assoc. Prof. Dr. Resul ÇÖTELİ</b>			<b>CHAIR</b> <b>Assoc. Prof. Dr. Rasim BEHÇET</b>
15.20-15.35	292	Determining of Weibull Distribution Parameters for a Region <b>İ. Aladağ*, B. Yaniktepe, O. Kara, C. Aladağ</b>	339	TG Analysis and Temperature Distributions in the Well during Baking of Buryan Kebab by Traditional Cooking Method <b>B. Hallac, A. Balbay*, Y. Gonulacar</b>
15.35-15.50	295	Exergo-Economic Analysis of Air and Ground Source Heat	796	Weibull Distribution Parameter Determination for Wind Speed



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		Pumps Using Different Refrigerants in Kütahya Region, Turkey <b>O.O. Yolcan, R. Kose, M.A. Ozgur, O. Kosar, Y.F. Gorgulu</b>		Profile in Hasan Polatkan Airport <b>Ahmet Süzer*, Aziz Kaba, Ümmühan Başaran Filik</b>
15.50-16.05	750	Numerical investigation of the effect of the position of a barrier placed in a square cavity on naturel convection and heat transfer <b>Filiz Özgen*, Yasin Varol</b>	389	Risk assessment in a Thermal Power Plant Using Fine-Kinney Analysis Method <b>Zehra Gülten Altın*, Barış Şimşek, Mustafa Dağ</b>
16.05-16.20	1073	The Simulation of Passive Cooling Using Ground Heat Exchanger - Toprak Isı Değişiricisi ile Pasif Soğutma İşleminin Benzetimi <b>Erkan Duman*, Hakan Tutumlu, Mustafa İnallı</b>	798	Control and Estimation of a Wind Turbine System <b>Ece Yurdusevimli Metin*, Aziz Kaba</b>
16.20-16.35	688	Comparison of Fuzzy Decision-Making Models in Solar Power Plant Selection <b>Veysel Çoban*, S.C. Onar</b>	206	Cost and Contribution to Electricity Generation of Akkuyu Nuclear Power Plant <b>A.Polatoğlu*, H. Esen</b>
16.35-16.50	586	Numerical Simulation of Natural Convection Heat Transfer in a Square Porous Cavity <b>Biröl Şahin*</b>	1076	Heat Transfer and Friction Factor of Pin Fins Inserted in the Horizontal Concentric Tubes <b>Emre Turgut*</b>
<b>21.10.2017 SATURDAY/CUMARTESİ</b>				
	<b>HALL-D</b>			<b>HALL-H</b>
<b>CHAIR</b>	<b>Asst. Prof. Dr. Emre TURGUT</b>		<b>CHAIR</b>	<b>Assoc. Prof. Dr. Filiz ÖZGEN</b>
08.30-08.45	322	Determination of Casting-Mold Interface Heat Transfer Coefficient (IHTC) in Die Casting Process by Gene-Feed Programming and Preparation of Package Program <b>Murat Kuru*, Bekir Aksoy, Onur Sevli</b>	386	Experimental Research of Convective Heat Transfer for Graphene-Oxide Nanofluid In a Straight Circular Tube <b>Koray Karabulut*, Ertan Buyruk, Ferhat Kılınc</b>
08.45-09.00	337	Generating Electrical Energy by Using Air Flow Occurrence on Horizontal Wind Turbines in Underground Metros; A Case Study in London <b>Y. F. Gorgulu*, P. H. Winfield, R. Kose, M. A. Ozgur, A. Gorgulu, O. O. Yolcan, O. Aydin</b>	352	Investigation of The Effects of Climate Conditions On Production In Solar Power Plants <b>Suat Şahin*, Unal Kurt</b>
09.00-09.15	787	Residential Green Building Design and Energy Analysis in Malatya	1012	Size Optimization of Hybrid Photovoltaic-Wind Power Generating System: A Case Study of Pınarhisar METEM, Turkey



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		<b>A. Şahinaslan*</b> , İ.G. Aksoy, M. Sancakoğlu, R. Behçet, T. Koca		<b>Sefer Ayan*</b> , Hayrettin Toylan
09.15-09.30	4	Fuel and Waste Management of Nuclear Power Plants to be Established in Turkey <b>Ahmet Polatoğlu*</b> , Hikmet Esen	1031	Numerical Investigation on Heat Transfer Enhancement of Twisted Tape Insert in Pipe <b>Taha Tuna Goksu*</b> , Fatih Dinc
09.30-09.45	385	Heat Transfer Augmentation in Channels with Vortex Generators Placed on the Upper and Lower Surfaces <b>Mehmet Dogan*</b> , Atila Abir Igcı	391	Soap and oil industry of waste waters treatment and factory applications <b>Zehra Gülten Altın*</b>
09.45-10.00	350	Investigation of Solar Energy Potential of Amasya Province And Amasya University Example <b>Suat Şahin*</b> , Unal Kurt	969	Estimation About Electricity Generation of Photovoltaic Panel by Using Artificial Neural Networks <b>Sultan Mehtap İzmirli Ayan*</b> , Hayrettin Toylan
10.00-10.20	<b>COFFEE BREAK</b>			<b>COFFEE BREAK</b>
<b>CHAIR</b>	<b>Asst. Prof. Dr. Aydın DİKİCİ</b>		<b>CHAIR</b>	<b>Asst. Prof. Dr. Koray KARABULUT</b>
10.20-10.35	918	Comparison of Efficiency Flat Plate Collectors and Parabolic Solar Collectors of Solar Energy Heating System Using Sodium Acetate <b>S.G. Güngör*</b> , A. Kabul	940	Rooftop Solar Power Plant Design and Feasibility Study <b>S. Toprak*</b> , Y. Farzambehboudi, A. Bozkurt
10.35-10.50	789	Cost Analysis of a Photovoltaic System Used for Energy Requirement of a Facility in Malatya <b>A. Şahinaslan*</b> , R. Behçet, M.M. Kocaaslan	951	CFD modelling of an ejector using steam as the working fluid <b>A. Karakoca*</b> , S.O. Yılmaz
10.50-11.05	392	An Experimental Study for Heat Transfer Enhancement of Graphene Nanoribbon Nanofluid In an Automobile Radiator <b>Ferhat Kılınç*</b> , Ertan Buyruk, Koray Karabulut	106	Determination and optimization of critical variables that affected immobilization of lipase enzymes onto loofah sponge and wood chips by chemometric methods <b>Yasin Yücel*</b> , İbrahim Sürmelioglu
11.05-11.20	1046	Gasification of formaldehyde into hydrogen and methane on zinc oxide catalyst in supercritical water <b>Ayten Ateş*</b> , Hakan Hatipoğlu	882	Energy and Exergy Analyses of Elaziğ Sugar Plant <b>Kutbettin Aydemir</b> , Hakan Tutumlu* , Mehmet Duranay
11.20-11.35	1066	Synthesis and characterisation of molybdenum oxide for gasification of formaldehyde in supercritical water <b>Ayten Ateş*</b> , Hakan Hatipoğlu	594	Solar powered boat design <b>İsmet Kandilli</b> , Ercüment Karakaş, Melih Kuncan*
11.35-11.50	15	Co-Liquefaction of Elbistan Lignite with Poplar Sawdust	105	Application of full factorial design for multiple response



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		<b>A.Ozdemir, K. Ergun, C. Koyunođlu*, Hüseyin Karaca</b>		optimization of vegetable oils methanolysis via homogeneous catalysis <b>Yasin Yücel*</b>
11.50-12.05	1209	Evaluation of Waste Heat and Saving Potential in Blast Furnaces Hot Stoves by Utilization of a Recuperator and an Absorption Chiller <b>Erhan Kayabasi*; Huseyin Kur</b>	1226	Investigation of a Distillation System with the Solar Energy Source in Elazığ Climatic Conditions <b>Cihangir Kale*; Hikmet Esen</b>
12.05-12.20	1219	Elazığ Yöresinde Kurulabilecek 100 MW Kapasiteli Dish Stirling Güneş Enerjisi Santralinin Tekno-Ekonomik Analizi <b>O.O. Yolcan, R. Köse, M.A. Özgür</b>	1227	EFeasibility Study of a PV-Electrolyzer- Fuel Cell Hybrid Power System for Off-Grid Applications in Elazığ <b>Hikmet Esen; Cihangir Kale*</b>