



<b>07 October 2015 Wednesday</b>		
<b>10:30-20:30 Arrivals of participants to the hotel and On-desk Registration</b>		
<b>08 October 2015 Thursday</b>		
<b>08:00-12:00 On-desk Registration</b>		
<b>Opening Session Hall A</b>		
09:00 - 09:10	"A starting talk for ECRES 2015", <b>Prof. Dr. Erol Kurt (Head of the organizing committee)</b>	
09:10 - 09:20	<b>Opening Talk from the Rector of Akdeniz University Prof. Dr. İsrail KURTCEPHE</b>	
09:20 - 09:30	<b>Opening Talk from the Gazi University Rectorship</b>	
<b>Invited Talk Session 1 Hall A</b>		
<b>Chairman:</b> Prof. Dr. Erol Kurt		
09:30-10:15	Nano silicon for advanced renewable energy harvest and storage technologies	Prof. Dr. Munir H. NAYFEH <i>University of Illinois Urbana-Champ., USA</i>
<b>Plenary Session 1 Hall A</b> "Alternative energy approaches"		
<b>Chairman:</b> Prof. Dr. Munir H. NAYFEH		
10:15-10:30	<b>189</b> Concept of a bidirectional power-to-x process system for technical and economical investigations of conversion and storage technologies	
10:30-10:45	<b>143</b> New possibilities for quantitative description of a fuel cell: evolution of its operational state	
<b>10:45-11:00 Coffee Break</b>		
<b>Parallel Session 1 Hall A</b> " Prediction tools in energy"		
<b>Chairman:</b> Prof. Dr. Mauricio Boscolo		
11:00-11:15	<b>174</b> Renewable policies and challenges in greece towards achieving its 2020 energy targets: A questionnaire survey	
11:15-11:30	<b>31</b> Determine the dimensions of the solar field for ISCCS in Libya	
11:30-11:45	<b>116</b> Statistical diagnosis of the weibull methods for wind power assesment for osmaniye region	
11:45-12:00	<b>105</b> Solar assessment in Algeria using RETScreen	
12:00-12:15	<b>60</b> Comparing and optimizing hydroelectricity power production regimes	
12:15-12:30	<b>175</b> The evolution of renewable energy sources in the electricity sector of Greece	
12:30-12:45	<b>173</b> A study on the interconnect protection between distribution power system and renewable energy source and in Korea	
<b>Parallel Session 1 Hall B</b> " Thermodynamics and CFD "		
<b>Chairman:</b> Prof. Dr. Thomas Pawlik		
11:00-11:15	<b>169</b> Comparative study of the effect of two type of ribs on thermal performance of solar air heaters	
11:15-11:30	<b>70</b> Thermodynamic analysis of a second degree fluid over a stretching surface prescribed wall heat flux in the presence of a transverse magnetic field	
11:30-11:45	<b>89</b> Separation analysis in a high-speed rotating cylinder for a binary Gas mixture	
11:45-12:00	<b>90</b> The generalized onsager model for a binary gas mixture with swirling feed	
12:00-12:15	<b>125</b> CFD Simulation of catalytic combustion using surface reaction model	
12:15-12:30	<b>207</b> Modeling and static aerodynamic simulation of a vertical axis wind turbine car using different blades	
12:30-12:45	<b>241</b> An industrial pine nut drying unit assisted by solar energy and heat pump: An experimental study	
<b>Parallel Session 1 Hall C</b> " Fuel-Cells "		
<b>Chairman:</b> Prof. Dr. Mirosław Krzemieniewski		
11:00-11:15	<b>13</b> Development of graphane oxide supported platinum catalyst based membrane electrode assembly for pem fuel cell	
11:15-11:30	<b>73</b> Control of fuel cells-supercapacitors dc hybrid power source using nonlinear sliding mode strategy	
11:30-11:45	<b>40</b> Application of artificial neural networks for modelling of Pt/C cathode degradation in PEM fuel	

	cell
11:45-12:00	55 PEM fuel cell performance modeling considering Pt/C cathode and membrane degradations
12:00-12:15	243 Numerical simulation of laminar forced convection of nanofluids in a channel with viscous dissipation
12:15-12:30	137 Metal oxides catalysts derived from hydrotalcites with different M(II)/M(III) ratios and the role of Ga <sup>3+</sup> replacing Al <sup>3+</sup> for ethyl biodiesel production
12:30-12:45	153 Development of Pd-Cu bimetallic catalyst by the electrodeposition in ionic liquids for electrooxidation of borohydride
<b>12:45-13:30 CONFERENCE PHOTO – 1 AND LUNCH</b>	
<b>Special Session 1 Hall A</b> “Characterization of Energy Materials”	
<b>Chairman:</b> Prof. Dr. Shadia Ikhmayies	
13:30-13:45	51 Study of electrical and thermal performance of a hybrid photovoltaic thermal collector (PVT) based on CdTe
13:45-14:00	17 The effects of exhaust valve timing and valve lift values on engine performance
14:00-14:15	42 Structural, electronic and elastic properties of MgH <sub>2</sub> , CaH <sub>2</sub> and Ca <sub>4</sub> Mg <sub>3</sub> H <sub>14</sub> for hydrogen storage material
14:15-14:30	185 Lifetime and efficiency concerns of a photovoltaic power plant
14:30-14:45	114 Effects of metallic particles on the absorption in silicon thin-film solar cells
14:45-15:00	244 Synthesis of ZNO microrod-structured thin films by the spray pyrolysis technique
<b>Special Session 1 Hall B</b> “Advances in Energy Conversion”	
<b>Chairman:</b> Prof. Dr. Youcef Soufi	
13:30-13:45	206 Selection of small capacity ORC systems for integrating of a polygeneration plant with cascade use of geothermal energy
13:45-14:00	159 Predictive controller tuning for heat exchanger, comparison with pid controller
14:00-14:15	158 Optimisation golden section technique applied to mppt search for pv system
14:15-14:30	160 Laboratory system for measurement of iron losses in high speed PMSM
14:30-14:45	144 Spectral method for PEMFC operation mode monitoring based on current (voltage) fluctuation analysis
<b>Parallel Session 2 Hall C</b> “Energy Efficiency”	
<b>Chairman:</b> Prof. Dr. Jose Manuel Lopez Guede	
13:30-13:45	229 Establishment & Application of quality management concept in nuclear QA for nuclear safety enhancement
13:45-14:00	202 Forecasting direct normal irradiation at Djibouti using artificial neural network
14:00-14:15	130 Exergy analysis of a new configuration of trigeneration system based on biomass gasifier
14:15-14:30	14 Influence of the wind farm integration on load flow and voltage in electrical distribution power system
14:30-14:45	52 A composite direct/indirect adaptive fuzzy controller for wind energy conversion systems
14:45-15:00	61 Optimal design and performance evaluation of hybrid wind-solar energy system for power generation and harmonic compensation
<b>15:00-15:30 Coffee Break</b>	
<b>Parallel Session 2 Hall A</b> “Optimization studies in Renewable Energy Systems”	
<b>Chairman:</b> Prof. Dr. Rafael JARDAN	
15:30-15:45	59 Optimal design of grid-connected hybrid renewable energy systems using multi-objective evolutionary algorithm
15:45-16:00	110 Optimization of fuzzy logic control membership functions by particle swarm optimization for a photovoltaic system
16:00-16:15	195 Optimal complex economic load dispatch solution with wind power effects based on psotvac
16:15-16:30	106 Comparative study between sliding mode control and incremental conductance algorithm to maximize power for photovoltaic systems
16:30-16:45	183 About diagram of direction of linear multielement antenna sytem radiated in the far zone
16:45-17:00	219 A simple method to design optimal controller of DC/AC grid-connected inverter
17:00-17:15	218 A modular and optimized test bed for testing and comparison of maximum power point tracking algorithms

<b>15:30-17:15 Poster Session 1 Hall B “Evaluation of Posters by The International Scientific Committee”</b> <b>Chairman:</b> Prof. Dr. Erol Kurt, Prof. Dr. Youcef Soufi, Prof. Dr. Shadia Ikhmayies and Prof. Dr. Munir Nayfeh		
<b>Parallel Session 2 Hall C “Solar Energy Applications”</b> <b>Chairman:</b> Prof. Dr. Josean Ramos-Hernanz		
15:30-15:45	35 Modeling and simulation of grid connected PV system	
15:45-16:00	220 Towards a systematic neural network based modelization of photovoltaic panels	
16:00-16:15	212 DSP controlled high frequency battery charger for PV generation systems	
16:15-16:30	133 Numerical study of TCO/Silicon solar cells with novel back surface field	
16:30-16:45	179 Performance improvement of a theoretically designed stand-alone PV system through the utilization of Matlab/Simulink modeling	
16:45-17:00	178 Improving prediction of a tilted/sun tracking photovoltaic module temperature using an optical -thermal model	
17:00-17:15	187 Design of a sustainable power management system for residential solar-hydrogen hybrid power plants: An application study	
17:15-17:30	165 Comparison of empirical models of the monthly mean daily global solar radiation on a horizontal surface	
<b>19:30 WELCOME COCKTAIL</b>		
<b>09 October 2015 Friday</b>		
<b>Invited Talk Session 2 Hall A</b> <b>Chairman:</b> Prof. Dr. Andrey Aleksandrovich Solovyev		
09:00-09:45	Evaluation of biodiesel production, engine performance and emissions	Prof. Dr. Metin Gürü Gazi University, Turkey
09:45-10:30	231 Fusion energy for future	Prof. Dr. Mahmood GHORANNEVISS Azad University, IRAN
<b>10:30-11:00 Coffee Break &amp; Conference Photo 2</b>		
<b>Parallel Session 3 Hall A “Electrical Machines in Energy”</b> <b>Chairman:</b> Prof. Dr. Rachid Chenni		
11:00-11:15	65 Optimum design of permanent magnet wind generator based on low cogging torque criteria	
11:15-11:30	227 Waveform characteristics and losses of a new double sided axial and radial flux generator	
11:30-11:45	226 An investigation of ferrite and nanocrystalline core materials for medium-frequency transformers	
11:45-12:00	197 Evaluation of topographies and roughness effects on the wind turbines wake	
12:00-12:15	68 Design of prototype dual axis tracker solar panel controlled by geared dc servomotors	
12:15-12:30	228 Economic analysis of the absence of reactive power compensation for residential distribution transformers	
12:30-12:45	54 Control with neural network and pi of grid sid converter based on strategy SVPWM in the wind energy conversion system	
<b>Parallel Session 3 Hall B “Energy harvesters &amp; System Modeling”</b> <b>Chairman:</b> Dr. Sergey Shevtsov		
11:00-11:15	211 Desgin optimization of PZT-based piezoelectric cantilever beam by using computational experiments	
11:15-11:30	193 Harvesting energy from road traffic using piezoelectric Effect	
11:30-11:45	192 Design of multi-array piezoelectric energy harvester for wireless transmitter	
11:45-12:00	166 Piezoelectric energy harvesting with biomaterials	
12:00-12:15	200 performance modelling of 250 kW wind turbine blade using Q-blade program	
12:15-12:30	93 Harmonics mitigation using hybrid power filter in three phase system	

12:30-12:45	141 Symbolic modeling of vibration energy harvesting by power PZT stack loaded on li-ion battery	
<b>Parallel Session 3 Hall C</b> “Advances in PVs and their control”		
<b>Chairman:</b> Prof. Dr. Mahmood Ghoranneviss		
11:00-11:15	239 Soft switching maximum power point tracker with resonant switch	
11:15-11:30	122 Adaptive MPPT optimization based on the radial basis network approach and feedforward decoupling current control for a grid connected PV system adapted for unstable atmospheric conditions	
11:30-11:45	217 The maximum power point tracking for PV systems: a critical review of the used protocols for testing and comparing the algorithms efficiency	
11:45-12:00	44 Control of a stand-alone hybrid power system	
12:00-12:15	75 Physical properties of CdS and CdS/CNT grown by RF magnetron sputtering	
12:15-12:30	72 Structural and electrical characterization of magnetron sputtered moox thin films	
<b>12:45-13:30 CONFERENCE PHOTO-2 and LUNCH</b>		
<b>Parallel Session 4 Hall A</b> “Nanotechnology, Nanomaterials and their applications”		
<b>Chairman:</b> Assoc. Prof. Dr. Hakan Ateş		
13:30-13:45	148 Magnetron sputtered YSZ and CGO electrolytes for SOFC	
13:45-14:00	78 Synthesis of Ca(BH <sub>4</sub> ) <sub>2</sub> from synthetic colemanite by mechanochemical reaction	
14:00-14:15	53 Nanotechnology for high performance of ferrocement in green buildings	
14:15-14:30	45 Characterization of electrospun nanofibrous scaffolds for nanobiomedical applications	
<b>Parallel Session 4 Hall B</b> “Power Electronics”		
<b>Chairman:</b> Assoc. Prof. Dr. İbrahim Sefa		
13:30-13:45	98 Hybrid modeling and control of half bridge multicellular inverter	
13:45-14:00	222 Z-Source three-level T-type inverter for renewable energy systems	
14:00-14:30 <b>Poster Session 2 Hall B</b> “Evaluation of Posters by The International Scientific Committee”		
<b>Chairman:</b> Prof. Dr. İbrahim Sefa, Prof. Dr. Erol Kurt, Prof. Dr. Youcef Soufi, and Prof. Dr. Shadia Ikhmayies		
<b>Parallel Session 4 Hall C</b> “Simulations in Energy Research”		
<b>Chairman:</b> Prof. Dr. Zaki Su’ud		
13:30-13:45	191 Comparison of planar and cylindrical 3-D PEMFC models	
13:45-14:00	1 Optimization of distributed generation using HOMER software and fuzzy logic control	
14:00-14:15	184 Design study of 100-300MWt gas cooled fast reactor for possible nuclear-solar-hydro energy synergetic system	
14:15-14:30	186 Design study of modified CANDLE based medium sized 1000-2000 MWt long life gas cooled fast reactors	
<b>14:45-19:00 CONFERENCE PHOTO – 3 &amp; CULTURAL TRIP</b>		
<b>19:30 ECRES GALA DINNER and PHOTO-3</b>		
<b>10 October 2015 Saturday</b>		
<b>Invited Talk Session 3</b>		
<b>Chairman:</b> Prof. Dr. Erol Kurt		
09:00-09:45	New approaches in photovoltaic energy conversion towards higher efficiencies	Prof. Dr. Rasit TURAN Middle East Technical University, TURKEY
<b>Planery Session 5 Hall A</b> “Characterization of energy materials ”		
<b>Chairman:</b> Prof. Dr. Rasit TURAN		
09:45-10:00	151 Metal assisted texturing of silicon wafers for solar cell applications	
10:00-10:15	123 Modeling and evaluation of a hybrid active solar food dryer	
10:15-10:30	242 Optical, structural and surface characterization of Li doped CdTe thin films	

**Closing talk for the conference by Prof. Dr. Erol KURT**  
**CALL TO 4. EUROPEAN CONFERENCE on RENEWABLE ENERGY SYSTEMS**  
**ECRES 2016**

takes place in **ISTANBUL**, where the continents meet!

**10:45- 17:00 CULTURAL AND SOCIAL TOURS**

### POSTER SESSIONS (\*)

#### POSTERS (08-09 October 2013)

<b>P1</b>	<b>215</b> Theoretical and experimental exploration of breakdown phenomena in an argon filled gap device
<b>P2</b>	<b>246</b> Exploration of argon effect optoelectronic properties of semiconductor-plasma structure with WBG GaP cathode
<b>P3</b>	<b>41</b> An analysis and control of fuel metering systems
<b>P4</b>	<b>10</b> Electrocatalytic oxidation of formic acid oxidation at nano-CuOx modified Pt-based electrodes
<b>P5</b>	<b>118</b> Experimental and computational study of two new N-heterocyclic compounds extracted from biodiesel as green environmental inhibitors for mild steel in hydrochloric acid
<b>P6</b>	<b>142</b> Dimensioning of a solar dryer with application of an experiment plans method for drying food products
<b>P7</b>	<b>150</b> Firefly and flower pollination algorithms to optimize power flow of algerian's adrar power system
<b>P8</b>	<b>172</b> Control by sliding mode of active and reactive power of a doubly fed induction generator
<b>P9</b>	<b>113</b> Algerian efficiency mapping of domestic type paraboloidal solar cooker in comparison with box-type one based on optical approach
<b>P10</b>	<b>170</b> Convective heat loss and Nusselt number for natural convection from a square tilted solar cavity with different opening ratio
<b>P11</b>	<b>7</b> Low temperature geothermal energy for rural development
<b>P12</b>	<b>56</b> Direct control of matrix converters using asymmetric strategy (ASVM) to feed the double star induction machine
<b>P13</b>	<b>156</b> $H^\infty$ robust control: Application to the DFIM
<b>P14</b>	<b>77</b> DTC applied to a PMSM with compensation of the stator resistance based on the neuro-fuzzy technique
<b>P15</b>	<b>18</b> DTC-SVPWM of an energy storage flywheel associated with a wind turbine based on the DFIM
<b>P16</b>	<b>168</b> Exploration of the chaotic behaviour in a buck-boost converter depending on the converter and load elements
<b>P17</b>	<b>50</b> Synthesis of calcium borohydride with the calcium salt and catalytic dehydrogenation of boron hydride compounds
<b>P18</b>	<b>216</b> Study on the performance of natural circulation type solar heating system on south-facing vertical wall
<b>P19</b>	<b>128</b> Electrochromic device with polymer electrolyte
<b>P20</b>	<b>136</b> Theoretical analysis of a photovoltaic panel MPPT using fuzzy logic controller
<b>P22</b>	<b>91</b> Comparison of two maximum power point tracking techniques applied to a photovoltaic system
<b>P23</b>	<b>28</b> Efficiency improvement of cigs bifacial solar cells with odc thin layer
<b>P24</b>	<b>33</b> Simulation of InGaP/n-InGaAs/p-InGaAs/InGaP subcell in triple junction solar cells
<b>P25</b>	<b>233</b> Integrated system for the use of solar energy in the animal farm
<b>P26</b>	<b>225</b> Investigation of the thermal behaviour of the ferrite core for medium-frequency transformer applications
<b>P27</b>	<b>80</b> Detailed analysis of device parameters by means of different techniques in Schottky devices
<b>P28</b>	<b>81</b> Laterally inhomogeneous barrier analysis using capacitance-voltage characteristics of identically fabricated Schottky diodes
<b>P29</b>	<b>198</b> A hybrid piezoelectric-electromagnetic energy harvester for low-frequency impulse wave

	vibration
P30	238 A numerical real-time dynamic tool for piezoelectric beam under magnetic fields
P31	66 MPC based energy storage control strategy for smart distribution system under high renewable energy penetration
P32	71 Study and Simulation of the heterojunction thin film solar cell a-Si(n)/a-Si(i)/c-Si(p)/a-Si(i)/a-Si(p)
P33	134 THE METHANE FERMENTATION EFFICIENCY OF VIRGINIA MALLOW (SIDA HERMAPHRODITA)
P34	135 The impact of the organic compounds loading on the methane fermentation process of virginia mallow (sida hermaphrodita)
P35	139 Methane fermentation process of virginia mallow (sida hermaphrodita) biomass in innovative anaerobic reactor
P36	221 Review of simulation models of photovoltaic panels
P37	76 Implementation of pv emulator supplied active power filter
P38	112 Development of software tool for optical behaviour study of solar tower heliostat field
P39	164 Interaction of a hydraulic stream and lattices of profiles of the hydro turbines in micro hydroelectric power station
P40	102 CIGS flexible Nano solar cell thin film with Argon gas low vacuum pressure
P41	92 Direct and indirect sensing two-axis solar tracking system
P42	188 Characterization of a photovoltaic solar panel cooled by the ambient air
P43	196 A study of piezoelectric energy harvester applying to auxiliary power of hi-pass terminal
P44	236 Design and implementation of RF energy harvesting system for low power devices
P45	94 The influence of orientation on a thermal system of the parabolic trough solar collector with a comparative study of three experimental methods

(\* ) - Since the Scientific Committee assigned for the poster review may have questions and suggestions, please stand aside your poster at the poster session times between **15:30-17:15 on 8<sup>th</sup> October and 14:00-14:30 on 9<sup>th</sup> October.**

- Please do not forget to get back your poster(s) on **10<sup>th</sup> October.**

- The preferred dimension for each poster should be 100 cm height and 60 cm width as also stated in web-site of the conference.