# PROGRAMME

**4 September 2011 Sunday**

15:30-20:30 Registration

**5 September 2011 Monday**

08:00-09:00 Registration

**Opening Session**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
<th>Institution and Country</th>
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</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Prof. Dr. Sümer Şahin</td>
<td>The Role Of Exergy In Sustainable Energy Technologies</td>
<td>Faculty of Engineering and Applied Science (UOIT) - Canada</td>
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<tr>
<td>09:10</td>
<td>Prof. Dr. Saffa Riffat</td>
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<tr>
<td>09:20</td>
<td>Prof. Dr. H. Mehmet Şahin</td>
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**Plenary Session 1, Chairman: Dr. Ruzhu Wang**

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<tr>
<th>Time</th>
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<tr>
<td>09:30</td>
<td>Prof. Dr. Sümer Şahin</td>
<td>The Role Of Exergy In Sustainable Energy Technologies</td>
<td>Faculty of Engineering and Applied Science (UOIT) - Canada</td>
</tr>
<tr>
<td>10:00</td>
<td>Prof. Dr. Peter LUND</td>
<td>Large-scale urban renewable electricity schemes - integration</td>
<td>Aalto Uni., Department of Engineering Physics/Advanced Energy Systems, Finland</td>
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<td></td>
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<td>and interfacing aspects</td>
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10:30-10:50 **Coffee Break**

**Plenary Session 2, Chairman: Prof. Dr. Ibrahim DINÇER**

<table>
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<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
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<tbody>
<tr>
<td>10:50</td>
<td>Prof. Dr. Lizhi Zhang</td>
<td>Heat and moisture recovery from ventilation air with membranes: from fundamentals to engineering applications</td>
<td>South China Uni. Of Tech. China</td>
</tr>
<tr>
<td>11:20</td>
<td>Prof. Dr. Peter LUND</td>
<td>An overview of the funding opportunities offered by the European Research Council</td>
<td>European Research Council, Brussels- Belgium</td>
</tr>
</tbody>
</table>

11:50-14:00 **CONFERENCE PHOTO-1 and LUNCH**

**Parallel Session 1 (MARMARA Hall) “Nuclear Energy” Chairman: Dr. Abdul Waris**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>14:00</td>
<td>Incineration of Nuclear Reactor Waste in LIFE Hybrid Reactor</td>
<td>Sümer ŞAHİN, H. Mehmet Şahin, Adem Acır</td>
<td>Atılım Uni., Turkey</td>
</tr>
<tr>
<td>14:15</td>
<td>Utilization of Thorium in a Gas Turbine - Modular Helium Reactor</td>
<td>H. Mehmet Sahin, Özgür Erol, Adem Acır</td>
<td>Gazi Uni.-Turkey</td>
</tr>
<tr>
<td>14:30</td>
<td>The Effects of Cathode Structure and Dielectric Type in an Inertial Electrostatic Confinement (IEC) Device</td>
<td>Erol KURT, Serdal Arslan</td>
<td>Gazi Uni.-Turkey</td>
</tr>
<tr>
<td>14:45</td>
<td>Computational Analysis of Supercritical CO₂ Brayton Cycle Power Conversion System for Fusion Reactor</td>
<td>Burhanuddin Halimi, Kune Y. Suh</td>
<td>Seoul National Uni. – Korea</td>
</tr>
<tr>
<td>15:00</td>
<td>An Overview of IAEA Activities On Nuclear Hydrogen Production</td>
<td>Ibrahim Khamis</td>
<td>IAEA, Austria</td>
</tr>
<tr>
<td>15:15</td>
<td>MYRRHA A Multi-Purpose Fast Spectrum Research Reactor</td>
<td>Hamid Aït Abderrahim, Peter Baeten, Didier De Bruyn, Rafaël Fernandez</td>
<td>SCK CEN -Belgium</td>
</tr>
</tbody>
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**Parallel Session 1 (FIRAT Hall) “Sustainable Buildings” Chairman: Prof. Dr. Lizhi Zhang**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>14:00</td>
<td>Vacuum Insulated Panels For Building Applications</td>
<td>Sultan Alotaibi, Saffa Riffat</td>
<td>Uni. Nottingham- UK</td>
</tr>
<tr>
<td>14:15</td>
<td>Comparison Of The Application Of A Phase Change Material/Internal Wall Insulation System With Current</td>
<td>David Tetlow, Saffa Riffat, Yuehong Su</td>
<td>Uni. Nottingham –</td>
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<tr>
<td>Time</td>
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<td>Authors</td>
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<tr>
<td>14:30-14:45</td>
<td>Developing An Indoor Environment Quality Tool For Assessment Of Office Buildings In The UK</td>
<td>Matiwaza Ncube, Saffa Riffat (Uni. Nottingham – UK)</td>
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<tr>
<td>14:45-15:00</td>
<td>A Novel Vacuum Window System</td>
<td>Haoyang Liu, Xingxing Zhang, Riffat Saffa (Uni. Nottingham – UK)</td>
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</tr>
<tr>
<td>15:00-15:15</td>
<td>Analysing the Demographic Structure of Immigration: An ICT based Architectural Approach</td>
<td>Burak Korkmaz (Yeditepe Uni. – Turkey)</td>
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</tr>
<tr>
<td>15:15-15:30</td>
<td>Integrated Design of Zero Carbon Green Home in Korea</td>
<td>Sun Hye Mun, Yong Sang Yoon, Sung-En Shin (Korea Institute of Construction Technology - Korea)</td>
<td></td>
</tr>
<tr>
<td>14:00-14:15</td>
<td>A Three-Dimensional CFD Simulation of Direct Methanol Fuel Cell for Portable Applications</td>
<td>Mohammad Hadi Akbari, Rasoul Asaee (Shiraz Uni. – Iran)</td>
<td></td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Thermal Performance of a Floor Heating and Cooling System With Air Heat Source by CFD Simulation</td>
<td>Satoru Ikeo, Hiroshi Matsumoto, (Toyoohashi Uni. of Technology - Japan)</td>
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<tr>
<td>14:30-14:45</td>
<td>Investigation of a Novel Magnetic Desiccant Ventilation System Using Computational Fluid Dynamics (CFD)</td>
<td>Auwal Muktar Dodo (Uni. of Nottingham – UK)</td>
<td></td>
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<tr>
<td>14:45-15:00</td>
<td>Investigation of Connection Types Impact on Panel Radiator Using CFD</td>
<td>Ismail Eknecki, Emir Aydar (Marmara Univ. – Turkey)</td>
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<tr>
<td>15:00-15:15</td>
<td>CFD Modeling Of Small Scale Pellet Boilers: An Overview With Preliminary Results From a Simplified Approach</td>
<td>Joel Chaney, Jinxing Li, Hao Liu (Uni. of Nottingham – UK)</td>
<td></td>
</tr>
<tr>
<td>15:30-15:45</td>
<td>Short-term optimal hydrothermal scheduling using ANN</td>
<td>Majed S. Al-Hafid, Abdul-Bary R. Sulaiman, Azher S. Al-Fahadi (Uni. of Mosul – Iraq)</td>
<td></td>
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<tr>
<td>14:00-14:15</td>
<td>Bending properties of multilayered non-interlaced e-glass/polyester composites for wind blade applications</td>
<td>Kadir Bilisik (Erciyes Uni. - Turkey)</td>
<td></td>
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<tr>
<td>14:15-14:30</td>
<td>Piezoelectric Wind Power Harnessing</td>
<td>G{&quot;u}l&quot;unhal Çevik, Mahmut F. Akşit (Sabancı Uni. – Turkey)</td>
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<tr>
<td>14:30-14:45</td>
<td>A FPGA based control implementation of a wind energy conversion system</td>
<td>Kadir Atilla Toker, Numan Sabit Çetin (İzmir Uni., Turkey)</td>
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<tr>
<td>14:45-15:00</td>
<td>Importance of examining weibull distribution fitting in determining wind power</td>
<td>Talha Arslan, Emin Açıkkalp, Haydar Aras, Veysel Yilmaz (Eskisehir Osmangazi Uni., Turkey)</td>
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<tr>
<td>15:00-15:15</td>
<td>Feasibility study of offshore wind turbine installation for persian gulf</td>
<td>Ali Mostafaeipour (Yazd Uni.-Iran)</td>
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<tr>
<td>15:15-15:30</td>
<td>Feasibility study of harnessing wind energy from binalood area in Iran</td>
<td>Ali Mostafaeipour, Morteza Ghalishooyan, Mostafa Ghalishooyan (Yazd Uni., Iran)</td>
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<tr>
<td>14:00-14:15</td>
<td>Tracing ethanol fermentation by anaerobic bacteria using stable carbon isotope discrimination</td>
<td>Gang Seong Joo, Roh Heemyong (Seoul National Uni. – Korea)</td>
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<tr>
<td>14:15-14:30</td>
<td>Bio fuel as an alternative and clean energy option for growing</td>
<td>Raza Leghari (BUET, Khuzdar,</td>
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<td>Time</td>
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<tr>
<td>14:30-14:45</td>
<td>Parallel Session 1 (HEYBELI Hall) “Hydrogen Production”</td>
<td>Clean syngas and energy production with biomass using gasification in turkey</td>
<td>Mustafa Tolay, Cengiz Karaca, Ron Bailey (Mustafa Kemal Uni., Turkey)</td>
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<td>Study on the performance of a solar assisted ground source heat pump heating system for a biogas reactor</td>
<td>Lei Yong, SHI Huixian, Zhu Hongguang, Pei Xiaomei, Guo Changcheng, Zhang Di (Tongji Uni. – China)</td>
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<td>14:45-15:00</td>
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<td>Experimental studies of flame stability limits of biogas flame</td>
<td>Wanneng DAI, Chaokui QIN (Tongji Uni. – China)</td>
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<td>Biofuels- Fuel For The Future, Emerging Developments And Turkey’s Position In The Future: A Research From The Single Refinery of Turkey</td>
<td>Funda Çetin, Ahmet Murat Yıldırım (TÜPRAŞ, Turkey)</td>
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<tr>
<td>15:00-15:15</td>
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<td>Optimisation of Hybrid First/Second Generation Biofuel Supply Chains</td>
<td>Özlem Akgül, Nilay Shah, Lazaros Papageorgiou (Uni. College London-UK)</td>
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<td>15:15-15:30</td>
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<td>Microaerobic Dark Fermentative Hydrogen Production By The Photosynthetic Bacterium Rhodobacter Capsulatus JY91</td>
<td>Mona Abo-Hashesh, Patrick Hallenbeck (Université de Montréal – Canada)</td>
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<td>Hydrogen Production From Water-Splitting Reaction Over NiO/NaTaO₃ Photocatalyst Prepared By Hydrothermal Method</td>
<td>Ien-Whei Chen, Chih-Hao Tan Lang-Yu Chiou (Taiwan)</td>
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<td>Direct Decomposition of Methane And Steam Reforming</td>
<td>Merve Ozirk, A. Derya Deniz (Hacettepe Uni., Turkey)</td>
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<td>Hydrogen production via autothermal reforming of methanol in a microchannel</td>
<td>Mohammad Hadi Akbari, Mehdi Andisheh-Tadbir, S.M. Abbaspour (Shiraz Uni. – Iran)</td>
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<td>15:00-15:15</td>
<td></td>
<td>Numerical Simulation of Methanol Steam Reforming in a Microreactor</td>
<td>Mohammad Hadi Akbari, Mehdi Andisheh, Mohammad Abbaspour (Shiraz Uni. – Iran)</td>
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<td>A study of the Co-W activated Ni cathodes for hydrogen generation</td>
<td>Snezana Miulovic</td>
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<td>15:15-15:30</td>
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<td>Recent developments in low-grade steam power cycles</td>
<td>Faisal Albatati, Saffa Riffat (Uni. of Nottingham – UK )</td>
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<td>Exergoeconomic analysis and optimization of a solar assisted ground-source heat pump anaerobic digester heating system</td>
<td>Huixian SHI (Tongji Uni. – China)</td>
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<td>Circulation Composition of CO₂+Ethane Refrigerant Mixtures in Cascade Refrigeration System</td>
<td>Nasruddin Yusuf Rodjali, Putra Temagangka Indra, Darwin Rio Budi Syaka, M.Idrus Alhamid (Uni. of Indonesia - Indonesia)</td>
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<td>15:30-15:45</td>
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<td>Brief Introduction of Cool Dry Quiet Desiccant Dehumidification</td>
<td>Jia Jing (Trane, China)</td>
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<td>Thermal Conductivity of Backfilling Materials For Horizontal Ground Heat Exchanger</td>
<td>Byonghu Sohn, Jihae Wi, Chulho Lee, Hangseok Choi (Korea Institute of Construction Technology - Korea)</td>
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<tr>
<td>15:45-16:00</td>
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<td>Conduction Controlled Freezing of PCMs in Cylinders</td>
<td>Subrahmaniyam Sasurla, A Garapati, S.K. Susarla, S.N. Repalle (Stanley College of Engineering &amp; Technology - India)</td>
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<td>Investigation of Hydrogen Usage in Aviation Industry</td>
<td>Ilker Yilmaz, Mustafa Ilbaş, Murat Taştan, Cevahir Tarhan (Erciyes Uni. Gazi Uni. – Turkey)</td>
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</tbody>
</table>
### Parallel Session 2 (FIRAT Hall) “Energy Saving” Chairman: Mustafa Tolay

<table>
<thead>
<tr>
<th>Time</th>
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<th>Speaker(s)</th>
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</thead>
<tbody>
<tr>
<td>16:00-16:15</td>
<td>Energy Savings and Optimisation Studies on Ships for a Better Performance and Cleaner World</td>
<td>Alper Kilic, Adem Guleryuz</td>
<td><em>(Istanbul Technical Uni., Turkey)</em></td>
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<tr>
<td>16:15-16:30</td>
<td>Analysis on the saving effect of power plant construction from peak load shaving under smart grid</td>
<td>Young-Shin Jeon, Young-Chang Kim and Hyung-Taek Kim <em>(Ajou Uni., Suwon, Korea)</em></td>
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<tr>
<td>16:30-16:45</td>
<td>Role of Cogeneration Systems in Sustainability of Energy</td>
<td>Üğur Çakır, Kemal Çomaklı</td>
<td><em>(Bayburt Uni., Turkey)</em></td>
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<tr>
<td>16:45-17:00</td>
<td>Computaional Prediction of “Optimum Convectional Heat Transfer Coefficient of Air of a Room” and Effect of Thickness of Concrete</td>
<td>Mabi Abri Lavasani, Amin Engearnevis, Majid Amidpour, Hadi Jafari <em>(Ferdos Ave., Iran)</em></td>
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<tr>
<td>17:00-17:15</td>
<td>Statistical Evaluation of Worldwide Sustainable Energy Production</td>
<td>Z. Canan Girgin <em>(Yildiz Tech. Uni., Turkey)</em></td>
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<tr>
<td>17:15-17:30</td>
<td>Benchmarking Of OECD Countries By Different Energy Efficiency Measurement Approaches</td>
<td>Mehmet ÜNSAL, Hasan BAL, H. Hasan ÖRKÇÜ <em>(Gazi Uni., Turkey)</em></td>
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<tr>
<td>17:30-17:45</td>
<td>PETKİM energy saving studies</td>
<td>Dilek Celenk Akıncı, Sadi Şenocak, Ali Hikmet Unalan <em>(Petkim Petrochemical Inc., Turkey)</em></td>
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### Parallel Session 2 (SEYHAN Hall) “Bio-fuel Applications” Chairman: Dr. Simon Jayaraj

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<tbody>
<tr>
<td>16:00-16:15</td>
<td>Current Biodiesel Production Technologies: A Comparative Review</td>
<td>Ahmad Abbaszadeh Mayvan, Barat Ghabadian, Gholamhassan Najafi <em>(Tarbiat Modares Uni., Tehran - Iran)</em></td>
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<tr>
<td>16:15-16:30</td>
<td>Analytical And Fem Design of Mixing System in STR Biodiesel Production</td>
<td>Ahmad Abbaszadeh Mayvan, Barat Ghabadian, Gholamhassan Najafi, Mohammad Reza Omidkhah <em>(Tarbiat Modares Uni. - Tehran, Iran)</em></td>
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<tr>
<td>16:30-16:45</td>
<td>Bioenergy Production And Use: Comparative Analysis Of The Economic And Environmental Effects</td>
<td>Christiane Hennig, Marek Gawor <em>(German Biomass Research Centre, Germany)</em></td>
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<tr>
<td>16:45-17:00</td>
<td>Effect of Injection Pressure on Brake Thermal Efficiency and BSFC in a DI Diesel Engine using Biodiesel</td>
<td>Sajad Rostami, Lotfollah Savadkouhi, Barat Ghabadian, Mostafa Kiani <em>(Tarbiat Modares Uni., Tehran - Iran)</em></td>
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<tr>
<td>17:00-17:15</td>
<td>Variation of Engine Performance And Emissions Using Waste Vegetable Oil And Its Blends With Diesel Fuel</td>
<td>Hamad Algasim, John Fieldhouse <em>(Uni. of Huddersfield - UK)</em></td>
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<tr>
<td>17:15-17:30</td>
<td>Potential of Biodiesel Production from WVO and SVO in Iran</td>
<td>Barat Ghabadian <em>(Tarbiat Modares Uni., - Iran)</em></td>
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</tr>
<tr>
<td>17:30-17:45</td>
<td>Biogas Production at Normmejerier Dairy Factory, Umea, Sweden</td>
<td>Anita Sellstedt, Mike Li, Atongka Placid, Tony Backstrom <em>(Umea Uni. Sweden)</em></td>
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### Parallel Session 2 (CEYHAN Hall) “Solar Energy Applications” Chairman: Essam Al-Ammar

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<tr>
<td>16:30-16:45</td>
<td>A solar-driven ejector refrigeration system for Mediterranean climate: Experience and performance</td>
<td>Siddig Omer, Yosr Allouche, Saffa Riffat, Chihel Bouden <em>(Uni. of Nottingham – UK)</em></td>
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<tr>
<td>16:45-17:00</td>
<td>Thermal Performance Evaluation of Actual Multistory Type Double Skin Facade with Respect to Solar Radiation</td>
<td>Uk-Joo Sung, Soo Cho, Dong-Hyun Seo, Sang-Hoon Lim</td>
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</tbody>
</table>
17:00-17:15
Concentration solar cooker made from scraps of satellite dishes
Luiz Guilherme Meira Souza, Ricardo Eugênio Barbosa Ramos Filho, Jose Ubiragi de Lima, Mendes, Miguel Cabral de Macedo Neto, Luiz Guilherme Vieira Meira de Souza (Universidade Federal do Rio Grande do Norte, Brazil)

17:15-17:30
Solar Energy Applications in Refineries: Emerging developments and potential applications: A single refinery research
Meriç Kartal, (TÜPRAŞ, Turkey)

Parallel Session 2 (DİCLE Hall) “Wind Energy Applications” Chairman: Dr. Sulaiman Ibrahim

16:00-16:15
Proposal of An Electromechanical System Wind Turbine-Static Converter-Synchronous Moteur
Yamina Menasria (Badj Mokhtar Uni. – Algeria)

16:15-16:30
A Mean Flow Acoustic Engine Capable of Wind Energy Harvesting
Daming SUN, Ya XU, Haijun CHEN, Yan YU, Limin QIU (Zhejiang Uni. – China)

16:30-16:45
Optimal Operation of a Wind Powered Pumped Storage Hydroelectricity Plant
Erman Terciyanlı, Neslihan Köse, Ceyhun Yldız, Mustafa Demir, Hasan Ozan Taş Hakan Ünsal, Maksut Sarğını (TÜBİTAK Space Research Inst., Turkey)

16:45-17:00
Use of Support Vector Regression for Wind Power Forecasting
SeongJun Kim, Inyong Seo (Gangneung-Wonju National Uni. – Korea)

17:00-17:15
Reliability Assessment of Wind Energy System Considering Turbine Dimensions
Bedri Kekezoglu, Ali Erduman, Ali Durusu, İsmail Nakir, Muğdeşem Tanrıöven, (Yıldız Technical Uni. – Turkey)

17:15-17:30
Use Of Wavelet Decomposition For Wind Power Forecasting
Seong-Jun Kim, In-Yong Seo (Gangneung-Wonju National Uni., Korea)

17:30-17:45
Study of wind speed trends for energy in Iran
Yagob Dinpashoh (Unı. of Tabriz – Iran)

Parallel Session 2 (HEYBELİ Hall) “Artificial networks” Chairman: Essam Al-Ammar, Saudi Arabia

16:00-16:15
Drying Kinetics of Asian Pears (Pyrus Serotina Rehd) Using Thin-Layer Drying Models and Artificial Neural Networks
Pegah Nematizade, Mohamad Abasian, Mohamad Hadi Khoštaghbaža, Barat Ghobadian, Gholamhassan Najafi (Tarbiat Modares Uni., Tehran- Iran)

16:15-16:30
Assessing the size of distributed generation in reliable micro-grid using particle swarm based optimization Based on Reliability Concept
Fatemeh Tooryan, S. Masood Moghaddas Tafreshi, S. Mohammad taghi Bathae (Khajeh Nasir Toosi Uni., Iran)

16:30-16:45
Fuzzy Dispatching of Solar Energy in Distribution System
Majid Nayeripour, Mostafa Kheshti (Shiraz Uni. Of Technology – Iran)

16:45-17:00
Design and Implementation of A Fuzzy Logic Based A Photovoltaic Peak Power Tracking Controller
Khalid Khaleel (Uni. of Mosul, Iraq)

19:00 CONFERENCE DINNER
6 September 2011 Tuesday

Parallel Session 3 (MARMARA Hall) “Nuclear energy” Chairman: Kune Y. Suh

09:00-09:15
Commercial Utilization of Weapon Grade Plutonium as TRISO Fuel in Conventional CANDU Reactors
Sümer Şahin, Hacı Mehmet Şahin, Adem Acır (Atılım Uni. , Gazi Uni. Turkey)

09:15-09:30
A Study On A Symbiotic Thorium Breeding Fuel-Cycle: L. Berrin Erbay, Kazuo Furukawa
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30</td>
<td>Parallel Session 3 (FIRAT Hall)“Energy-exergy Analysis”</td>
<td>Exergy Analysis of A Direct Methanol Fuel Cell System</td>
<td>Suha Mert (Ege Uni. – Turkey)</td>
</tr>
<tr>
<td>09:45</td>
<td>Effect of Void-Fraction on Characteristics of Several Thorium Fuel Cycles in BWR</td>
<td>Effect of Void-Fraction on Characteristics of Several Thorium Fuel Cycles in BWR</td>
<td>A. Waris, M. A. Shafii, S. Pramudiyta, R. Kurniadi, Novitrian, Z. Su’ud (Institut Teknologi Bandung, Indonesia)</td>
</tr>
<tr>
<td>10:00</td>
<td>Parallel Session 3 (SEYHAN Hall)“Energy Policy ”</td>
<td>The effect of external energy driven transport systems on cities Entropy in urban and transport planning</td>
<td>Hermann Knoflacher, Ebru Ocaltir (Vienna Uni. of Technology – Austria)</td>
</tr>
<tr>
<td>10:15</td>
<td>Sustainable Generation And Transmission Expansion Planning In Competitive Power Markets</td>
<td>Sustainable Generation And Transmission Expansion Planning In Competitive Power Markets</td>
<td>Mohammad Sadegh Javadi, Mohsen Saniei (Shahid Chamran Uni. - Iran)</td>
</tr>
<tr>
<td>11:00</td>
<td>Incorporating Seasonal Variation of Occupancy in an Electricity Demand Model for Dynamic Demand Management Simulations</td>
<td>Incorporating Seasonal Variation of Occupancy in an Electricity Demand Model for Dynamic Demand Management Simulations</td>
<td>Amir Fazeli, Mark Gillott, Mark Johnson, Mark Sumner, David Parra (Nottingham Uni, UK)</td>
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<tr>
<td>12:00</td>
<td>Responsible Generation And Transmission Expansion Planning In Competitive Power Markets</td>
<td>Responsible Generation And Transmission Expansion Planning In Competitive Power Markets</td>
<td>Mohammad Sadegh Javadi, Mohsen Saniei (Shahid Chamran Uni. - Iran)</td>
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<td>12:30</td>
<td>Incorporating Seasonal Variation of Occupancy in an Electricity Demand Model for Dynamic Demand Management Simulations</td>
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Parallel Session 3 (CEYHAN Hall) “Energy-saving Buildings” Chairman: Dr. Ahmed Freewan

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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Exergy Analysis of A Direct Methanol Fuel Cell System</td>
<td>Exergy Analysis of A Direct Methanol Fuel Cell System</td>
<td>Suha Mert (Ege Uni. – Turkey)</td>
</tr>
<tr>
<td>09:30</td>
<td>Analysis Of The Exergy Rationality Of Combining Heat Pumps And Chp Systems</td>
<td>Analysis Of The Exergy Rationality Of Combining Heat Pumps And Chp Systems</td>
<td>Birol KILKIŞ (Başkent Uni. - Turkey)</td>
</tr>
<tr>
<td>09:45</td>
<td>A Net-Zero Building Application And Its Role In Exergy-Aware Local Energy Strategies For Sustainability</td>
<td>A Net-Zero Building Application And Its Role In Exergy-Aware Local Energy Strategies For Sustainability</td>
<td>Şiir Kilkış (Royal Institute of Technology, Sweden)</td>
</tr>
<tr>
<td>10:00</td>
<td>Exergy Metrification Of Radiant Panel Heating With Heat Pumps</td>
<td>Exergy Metrification Of Radiant Panel Heating With Heat Pumps</td>
<td>Birol Kilkış (Başkent Uni. -Turkey)</td>
</tr>
<tr>
<td>10:30</td>
<td>Energy And Exergy Analysis of A Heavy Duty CI Engine</td>
<td>Energy And Exergy Analysis of A Heavy Duty CI Engine</td>
<td>Hasan Koten , Yağğın Yücelentürk, Mustafa Yılmaz (Marmara Uni. – Turkey)</td>
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Parallel Session 3 (CEYHAN Hall) “Energy-saving Buildings” Chairman: Dr. Ahmed Freewan

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</tr>
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<td>09:15</td>
<td>Review of Renewable Transport Technologies for Sustainable Environments in European Countries</td>
<td>Review of Renewable Transport Technologies for Sustainable Environments in European Countries</td>
<td>Mustafa Ersalici, Hasim Altan (Uni. Sheffield – UK)</td>
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<td>Authors</td>
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<td>09:30-09:45</td>
<td>Why are Carbon Capture and Demonstration Projects Failing?</td>
<td>Laura Kairnemi, Sanni Eloneva Carl- Johoan Fogelholm (Aalto Uni. – Finland)</td>
<td></td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>A Comparison of Metrobus System and Trolleybus System Considering Energy Costs and CO2 Emission: A Case Study for Istanbul</td>
<td>Ramazan AYZAY, Ismail Nakir, Ali Durusu, Hakan Akça, Müşteme Tanrıöven (Yıldız Technical Uni. – Turkey)</td>
<td></td>
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<tr>
<td>10:00-10:15</td>
<td>A Hybrid Intelligent Algorithm for Improved Prediction of Annual CO2 Emission</td>
<td>Ali Azadeh, M. Sheikhalishahi, M. Hasumi, B. Malekeshoja (Uni. of Tehran – Iran)</td>
<td></td>
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<tr>
<td>10:15-10:30</td>
<td>Investigation of determinants of agricultural production cooperatives efficiency in Iran</td>
<td>Sevil Hatamifard, Saeed Yazdani, Hamideh Hamidéhpoor (Islamic Azad Uni., Iran)</td>
<td></td>
</tr>
<tr>
<td>10:30-10:45</td>
<td>Aerogel Applications in The Built Environment: Review</td>
<td>Guoquan Qiu, Saffa Riffat (Uni. Nottingham – UK)</td>
<td></td>
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<tr>
<td></td>
<td><strong>Parallel Session 3 (DİCLE Hall) “Material research in Energy Applications” Chairman: Dr. Hasan Üfuk Gökçe</strong></td>
<td></td>
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</tr>
<tr>
<td>09:00-09:15</td>
<td>Techno-Economic Evaluation of High Temperature Superconductivity Utilization for Sustainability: A Case Study for Turkey’s Power System</td>
<td>Ali Erduman, Bedri Kekezoglu Müşteme Tanrıöven (Yıldız Technical Uni. – Turkey)</td>
<td></td>
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<tr>
<td>09:15-09:30</td>
<td>Improvement Of Thermal Properties Of Polyurethane Rigid Foam With Phase Change Materials</td>
<td>Ahmet Alper Aydm, Hasançan OKUTAN (Istanbul Technical Uni. – Turkey)</td>
<td></td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>Synthesis and characterization of Al doped-ZnO thin film coatings by dip coating: effect of ZnO sol concentration</td>
<td>Deniz Gultekin, Mehmet Oğuz Güler, Özgür Cevher, Hatem Akbulut (Turkey)</td>
<td></td>
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<tr>
<td>09:45-10:00</td>
<td>Feasibility of phase change material for heat reduction window</td>
<td>Waraporn Rattanongphisat (Naresuan Uni. - Thailand)</td>
<td></td>
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<tr>
<td>10:00-10:15</td>
<td>High performance new generation solar cells with metal nanostructures</td>
<td>Ricky Dunbar (Ludwig-Maxililians Uni. – Germany)</td>
<td></td>
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<tr>
<td></td>
<td><strong>Parallel Session 3 (HEYBELİ Hall) “Advanced Solar Applications” Chairman: Dr. Ed Cooper</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:00-09:15</td>
<td>Solar-driven ejector refrigeration technologies: State of the Art Review</td>
<td>Bakr Alshehri, Saffa Riffat (Uni. of Nottingham – UK)</td>
<td></td>
</tr>
<tr>
<td>09:15-09:30</td>
<td>Experimental research of the multi-surface composite focus trough solar air collector</td>
<td>Tao Tao, Hongfei Zheng (Beijing Institute of Technolog – China)</td>
<td></td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>Seawater Desalination Using Solar Thermal Technologies: State Of The Art</td>
<td>Shiva Gorjian, Seymour Tavakkoli, Barat Ghobadian (Tarbiat Modares Unn., Iran)</td>
<td></td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>The Design Of Improved Sun Tracking Devices As Solar Panel Enhancers Based On Parallel Robotics</td>
<td>Luc Rolland (Torus Unn. – Turkey)</td>
<td></td>
</tr>
<tr>
<td>10:00-10:15</td>
<td>The Relation Of Collector And Storage Tank Size in Solar Heating Systems</td>
<td>Uğur Çakır, Kemal Çomaklı, Kadir Bakırcı (Bayburt Unn., – Turkey)</td>
<td></td>
</tr>
<tr>
<td>10:15-10:30</td>
<td>Experiment and simulation study of solar collector selection for solar ejector air conditioning system</td>
<td>Wei Zhang, Xiaoli Ma, S.A.Omer, S.B.Riffat (Uni. Nottingham – UK)</td>
<td></td>
</tr>
<tr>
<td>10:30-10:45</td>
<td>Modeling, Simulation, Performance And Maintenance of Parabolic Trough Solar Field in Desert Regions</td>
<td>Omar Behar, Hadıocuğe Ahmed, Kellaf Abdallah, Mohamedi Kamal (Uni. of Boumerdes, Algeria)</td>
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<td><strong>10:45-11:00 Coffee Break</strong></td>
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<td></td>
<td><strong>Parallel Session 4 (MARMARA Hall) “Heat Transfer Applications” Chairman: Dr. Abdullrahman Maghrabi</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00-11:15</td>
<td>Heat Transfer To Supercritical Pressure Carbon Dioxide Flowing Upward Small Circular Tube</td>
<td>Jae S. Yoo, Kune Y. Suh (Seoul National Unn. – Korea)</td>
<td></td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>An Experimental Study on Thermal Performance of a Heat Exchange Type Air Flow Window</td>
<td>Keigo Yoshida, Hiroshi Matsumoto, Masashi Hanma, Satoru Ikeo (Toyohashi Unn. Technology - Japan)</td>
<td></td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Preliminary Performance Evaluation of Heat Transfer</td>
<td>Hyung M. Son, Kune Y. Suh</td>
<td></td>
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<tr>
<td>Time</td>
<td>Session</td>
<td>Title</td>
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<td>11:45-12:00</td>
<td>Impact of Gas-liquid Interface on the Mobility and Pressure Drop of a Two-Phase Flow in Porous Media</td>
<td>Correlations For Supercritical Carbon Dioxide Vertical Upflow</td>
<td>Xu Xu, Stephen O. Kwelle, Michael Zaiser, Xianfeng Fan (The Uni. Edinburgh – UK)</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>The efficiency enhancement of vortex cooling by means of heat exchanger</td>
<td>Correlations For Supercritical Carbon Dioxide Vertical Upflow</td>
<td>Waraporn Rattanongphisat, Theeraphong Yimpradit (Naresuan Uni. - Thailand)</td>
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</table>

**Parallel Session 4 (FIRAT Hall) “Hydrogen Energy Applications” Chair: Prof. Dr. Atilla Aykol**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
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<tbody>
<tr>
<td>11:00-11:15</td>
<td>Exergoeconomic Analysis Of A Combined Ammonia Based Solid Oxide Fuel Cell System</td>
<td>Ehsan Baniasad, Greg Naterer, Ibrahim Dinçer (Univ. of Ontario Inst. Tech. – Canada)</td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>Numerical Study Of The Effect Of The Inlet Pressure In A Gas Channel On The Consumption Of Reagents In A PEMFC Fuel Cell</td>
<td>Zeroual Mostefa, Belkacem Bouzida Sihem, Ben Moussa Hocine (Univ. of Batna - Algeria)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>SOFC Fed By Hydrogen: Heat Sources And Gas Temperatures Effect On Temperature Field</td>
<td>Zitouni Bariza, Abdenebi Hafsa, Zeroual Mustapha, Ben Moussa Hocine Haddad Djamel (Univ. Batna - Algeria)</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Performance Analysis of Fuel Cells using Non dimensional Approach</td>
<td>Ibrahim Rajab (Jubail Industrial College : KSA)</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Modelling of Methane Reforming in a Membrane Rector</td>
<td>Özgün Yücel, Eyüp Şimşek, M. Alattin Hastaoğlu (GYTE – Turkey)</td>
</tr>
<tr>
<td>12:30-12:45</td>
<td>Hydrogen storage: Size effects in complex hydrides</td>
<td>Meganne Christian, Kondo-Francois Aguey-Zinsou (Univ. of New South Wales - Australia)</td>
</tr>
</tbody>
</table>

**Parallel Session 4 (SEYHAN Hall) “Researches on Traditional Resources” Chair: Mr. Anthony D Browne**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00-11:15</td>
<td>Determination of sorbent materials for the control of arsenic and selenium emissions from coal discards gasification</td>
<td>Duncan Mwakipesile (Mbeya Institute of Science and Technology – Tanzania)</td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>Feasibility Experiments on VOC Removal Performance of an Air Cleaner Based on Adsorption/Desorption Effect using Zeolite</td>
<td>Masashi Hanna, Hiroshi Matsumoto (Toyoohashi Uni. Technology, Japan)</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>A study of the drying characteristics of Indonesian IBC coal through lab-scale single fluidized-bed reactor</td>
<td>Do Man Jeon, Tae Jin Kang, Ga Hee Lee, Young Shin Jeon, Hyung Taek Kim, Si Hyun Lee, Sang Do Kim (Ajou Uni. - Korea)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Aspen HYSYS Simulation of CO₂ Removal by Amine Absorption from the Flue Gas of a Coal-Fired Power Plant</td>
<td>Anthony Browne, Paul Langston, Hao Liu (Uni. Nottingham – UK)</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Study of Trace elements behaviour on coal discards Gasification for Sustainable Energy in Tanzania</td>
<td>Duncan Mwakipesile (Mbeya Institute of Science and Technology – Tanzania)</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Gasification of the chars from low quality Adana-Tufanbeyli lignite</td>
<td>Fatih Çakırorglu, Hanzade Haykırm-Açma, Serdar Yaman (Istanbul Technical Uni. - Turkey)</td>
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**Parallel Session 4 (CEYHAN Hall) “Hydro and Geothermal Energy Researches” Chair: Dr. Joel Chaney**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
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<tbody>
<tr>
<td>11:00-11:15</td>
<td>The geothermal resources in the region of Guelma (Algeria)</td>
<td>Mebrouk Benziada (CDER, Algeria)</td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>Thermodynamic Analysis Of Geothermal Energy Based</td>
<td>Can Coskun, Zuhal Oktay, Ibrahim</td>
</tr>
<tr>
<td>Time</td>
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<tr>
<td>11:30-11:45</td>
<td>The examination of geothermal energy in Northwestern Iran (Meshginshahr Region)</td>
<td>Shahriyar Karimdoust (Payame Noor Uni., Iran)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>A Nozzle Pulse Pressurisation Technique For Measurement of Building Leakage At Low Pressure</td>
<td>Edward Cooper, Yingqing Zu (Uni. of Nottingham – UK)</td>
</tr>
<tr>
<td>Parallel Session 4 (DİCLE Hall) “Thermodynamic Applications” Chairman: Mr. Hong Bing Chen</td>
<td></td>
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<tr>
<td>11:00-11:15</td>
<td>Effect of Electrode Geometric Properties on EHD Enhanced Heat Transfer in A Tube</td>
<td>Mojtaba Mirhosseini, Ali Akbar Alemrajabi (Isfahan Uni. of Technology – Iran)</td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>Experimental Studies For The Removal of Excessive Heat Originated From SCR Application in A Bus Powered By EPA10 Engine</td>
<td>Mustafa Taş (Temsa Global A.Ş. – Turkey)</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Modeling, Performance Evaluation And Optimization Of An Organic Rankine Cycle (ORC) Unit With R245FA As Working Fluid</td>
<td>Musbaudeen Bamgbopa, Eray Uzgören (Middle East Technical Uni. –Turkey)</td>
</tr>
<tr>
<td>Parallel Session 4 (HEYBELİ Hall) “Energy policies” Chairman: Prof. Ien whei Chen</td>
<td></td>
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</tr>
<tr>
<td>11:00-11:15</td>
<td>G-Series: as an environmental friendly hybrid fossil-bio transportation fuel</td>
<td>Pegah Nematizade, Barat Ghoadian, Gholamhassan Najafi (Tarbiat Modares Uni. - Iran)</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Renewable Energy: In The Context Of Turkey’s And The EU’s Energy Policies</td>
<td>Selma Şekerçioğlu, Mustafa Yılmaz (Marmara Uni. Turkey)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Assessment of Renewable Energy Policy in Pakistan</td>
<td>Waqas Bin Najib, Tariq Saeed Khan (Punjab Board of Inv.&amp; Trade, Pakistan)</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Future Energy Carrier- DME</td>
<td>Hülya Erdener, Murat Yıldırım (TÜPRAŞ – Turkey)</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Utilization of hybrid renewable energy in Saudi Arabia</td>
<td>Essam Al-Ammar, Nazar Malik Mohammad Usman (King Saud Uni. - Saudi Arabia)</td>
</tr>
<tr>
<td>12:30-13:30 CONFERENCE PHOTO-2 and LUNCH</td>
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<tr>
<td>Parallel Session 5 (MARMARA Hall) “Hydrogen Production” Chairman: Prof. Dr. Birol Kılıç</td>
<td></td>
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</tr>
<tr>
<td>14:00-14:15</td>
<td>Hydrogen Production From Sugar Industry Wastes In Single-Stage Photo Fermentation Systems</td>
<td>Tuğba Keskin, Patrick C. Hallenbeck (Université de Montréal, Canada)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Studying The Effect of Different Variables On The Production of Hydrogen From Sea Water Using PV Cells Coupled To an Electrolyzer</td>
<td>Farqad Saeed, Ahmed Al-Ghandour, Yaseen Al Husban (Royal Scientific Society, KSA)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Technico-economic analysis of renewable hydrogen production in Algeria</td>
<td>Rafika Boudries, R. Dizene (CDER, Algeria)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>On the use of electrodepositcd Ni-W alloy coatings as cathodes for hydrogen evolution in potassium hydroxide solution – a reduction of energy consumption</td>
<td>Gvozden S. Tasic, Milica P. Marceta, Vladimir M. Nikolic, Djordje P. Saponjić, Vladimir D. Jovic (Uni. of Belgrade, Serbia)</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Feasibility Analysis of Carbon Trading for Hydrogen Production from Natural Gas</td>
<td>Fehmi Görkem Üçtuğ, Mehmet Melikoğlu, Cemil Abdullah Naseh (Bahçeşehir Uni. - Turkey)</td>
</tr>
<tr>
<td>15:15-15:30</td>
<td>Characterization of hydrogen production by ammonium insensitive revertant of CBB deficient rhodobacter capsulatus</td>
<td>Yavuz Öztürk, Abdulmecit Gökçe, Meral Yücel, İnci Eroğlu</td>
</tr>
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<td>Time</td>
<td>Session Details</td>
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<tr>
<td>14:00-14:15</td>
<td>A study on the effective use of the Environmental Assessment Tools and its sustainable impact: case study for low cost high rise housing in Malaysia</td>
<td>Asrulmahjuddin Aminuddin (Universiti Malaya - Malaysia)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Towards a multidimensional segmentation of the real estate market of apartments in Santiago de Chile: A probabilistic approach from the energy building simulation</td>
<td>Felipe Encinas Pino, Francisco José Sanchez De La Flor, Carlos Aguirre Nurnez, Alejandro Rincon Casado (Université catholique de Louvain, Belgium)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Energy management in Iran’s vernacular architecture</td>
<td>Melika Amizadeh (Uni. of Tehran, Iran)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Micro-eolic energy within residential buildings: a didactic experiment at the school of Architecture in Naples</td>
<td>Dora Francese, Luca Buoninconti, Pietro Nunziante, Renato Rinauro, (Università Federico II, Italy)</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Thermal Barrier: Indirect heating and cooling technique of residential buildings</td>
<td>Marek Krzaczek, Maria-Illona Kiefel, Gang Liu, Klaus Rückert (Gdansk Uni. of Technology - Poland)</td>
</tr>
<tr>
<td>15:15-15:30</td>
<td>Improving daylight performance of light well in multi-story apartment buildings</td>
<td>Ahmed Freewan (Jordan Uni. of Science and Technology Jordan)</td>
</tr>
<tr>
<td>14:00-14:15</td>
<td>Multi-Dimensional Simulation of n-heptane Combustion under HCCI Engine Condition Using Detailed Chemical Kinetic</td>
<td>Younes Bakhshian (Hormozgan Uni. - Iran)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Drivers for a sustainable future: A review of motor fuels &amp; automotive technologies</td>
<td>Irmak Koçcan Ersolmaz, A. Murat Yıldırım (TÜPRAŞ – Turkey)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Exergetic Analyses of Solar Stirling Engines</td>
<td>Rabì Karaali (Kocaeli Uni. - Turkey)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Prediction &amp; analysis of knock in an ICE Fueled with CNG</td>
<td>Younes Bakhshian (Hormozgan Uni. - Iran)</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>A zero-dimensional turbulence model for calculation of heat transfer in a CNG engine</td>
<td>Younes Bakhshian (Hormozgan Uni. - Iran)</td>
</tr>
<tr>
<td>15:30-15:45</td>
<td>Numerical and experimental study to design 1kW Stirling engine heat exchanger</td>
<td>Seok Hun Kang, Hyuck Joo Kim (Korea Institute of Energy Research, Korea)</td>
</tr>
<tr>
<td>14:00-14:15</td>
<td>The use of slag stone concrete to improve the thermal performance of light steel buildings</td>
<td>Djamel Begas (El Baha Uni., Saudi Arabia)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Sustainability Evaluation Method for PV Buildings</td>
<td>Dora Francese, Cristian Filagrossi Ambrosino (Università di Napoli – Italy)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Viability of Renewable Technologies in Refurbished Non Domestic Buildings</td>
<td>Michelle Agha-Hosseinp (Uni. of Reading -UK)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Building Integrated Solar Tri-generation System for the Engineering Faculty Building of Başkent Uni.</td>
<td>Birol KILKIŞ (Başkent Uni. - Turkey)</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Harnessing Daylighting Potentials as a Tool for Thermal Comfort for Residential Buildings</td>
<td>Rukayyatu Tukur (Uni. of Nottingham – UK)</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
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<tr>
<td>15:30-15:45</td>
<td>Intelligent Building Systems: Sustainability through Information transfer</td>
<td>Hussnan Shah (Technologies for Sustainable Built Environments – UK)</td>
</tr>
<tr>
<td></td>
<td><strong>Parallel Session 5 (DICLE Hall) “Heat Transfer Application”</strong> <strong>Chairman: Dr. Kune Y. Suh</strong></td>
<td></td>
</tr>
<tr>
<td>14:00-14:15</td>
<td>The Analytical Optimization Of Specific Heat For Building Internal Envelope</td>
<td>Jiang Feng, Wang Xin, Yinping Zhang (Tsinghua Uni. – China)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Numerical Calculation Using Computer Software (Fluent) And Experimental Validation of The Temperature inside A Greenhouse</td>
<td>Zitouni Bariza (Univ. of Batna - Algeria)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Theoretical model of a flat Loop Heat Pipe (LHP) in moderate to high load conditions</td>
<td>Mohammad Hossein Ghaffari, Hooman Farzaneh, M. Behshad Shafii (Azad Uni., Iran)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Performance And Potential Applications of Direct Expansion Ground Source Heat Pump Systems For Building Energy</td>
<td>Abdeen Omer, Siddig Omer, Saffa Riffat (Univ. of Nottingham – UK)</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Effect of low pressure generator temperature on the performance of double effect vapour absorption heat transformer</td>
<td>Rabah GOMRI (Univ. of Nottingham – UK)</td>
</tr>
<tr>
<td>15:15-15:30</td>
<td>Effects of concavity level on heat loss, effectiveness and efficiency of a longitudinal fin exposed to natural convection and radiation</td>
<td>Pınar Mert Cuce, Erdem Cuce (Karadeniz Technical Uni. – Turkey)</td>
</tr>
<tr>
<td>15:30-15:45</td>
<td>Numerical Comparison Between Two Advanced HGHEs</td>
<td>Michele Bottarelli, Vittorio Di Federico (Università di Ferrara, Italy)</td>
</tr>
<tr>
<td></td>
<td><strong>Parallel Session 5 (HEYBELI Hall) “Wind Energy Applications”</strong> <strong>Chairman: Dr. Guoquan Qiu</strong></td>
<td></td>
</tr>
<tr>
<td>14:00-14:15</td>
<td>Aerodynamic Design of a 300 kW Horizontal Axis Wind Turbine</td>
<td>Mojtaba Mirhosseini, Mohsen Alaian, Ahmad Sedaghati, Ali Akbar Alemrajabi (Isfahan Uni. of Technology – Iran)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Performance Analysis of the Double Blade Airfoils</td>
<td>Tahir Yavuz, Emre Koç, H. Tagmac Derya (Başkent Uni. – Turkey)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>A Wind Tunnel Investigation of Monodraught Windcatcher Designs</td>
<td>Edward Cooper, Naghman Khan, Mahdieh Mahin Babaei (Univ. of Nottingham, UK)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Distributed algorithm for power optimization of offshore wind parks</td>
<td>Julio A. Oliveira Filho, Zoltan Papp (TNO, The Netherlands)</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Application of Simulation Model for Sizing the Hybrid Solar and Wind Energy Production System Prototype in a Commercial Building in Izmir</td>
<td>A.Sedat Sarman, Başak Kardaşlar, Dana Kardaslar,Yunus Hacihalil, (Yasar Univ., Turkey)</td>
</tr>
<tr>
<td>15:15-15:30</td>
<td>Aerodynamic Performance Sensitivity Analysis of Blade Design for a 100 kW HAWT</td>
<td>Hassan Dogan, Mahmut Faruk Aksit (Sabancı Univ, Turkey)</td>
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<tr>
<td></td>
<td><strong>15:45-16:00 Coffee Break</strong></td>
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<tr>
<td></td>
<td><strong>Parallel Session 6 (MARMARA Hall) “Solar Energy”</strong> <strong>Chairman: Dr. Lucelia Taranto Rodrigues</strong></td>
<td></td>
</tr>
<tr>
<td>16:00-16:15</td>
<td>Comparative Performance Evaluation of Rectangular And Square Type Solar Cookers</td>
<td>Ibrahim Damnallam (Sokoto Energy Research Centre, Nigeria )</td>
</tr>
<tr>
<td>16:30-16:45</td>
<td>Feasibility of Solar Based Technology Use in Nigeria</td>
<td>Musbaudeen Bamgbopa, Ali Muhtaroglu (Middle East Technical Uni. – Turkey)</td>
</tr>
<tr>
<td>16:45-17:00</td>
<td>Comparison on black solar absorber thin films</td>
<td>Sm Rozati, S.Jafari, G.Toghdori, Z.Ghasempour (Univ. of Guilan - Iran)</td>
</tr>
<tr>
<td>17:00-17:15</td>
<td>The Process of Designing Surrounding Heliostat Fields for a Solar Power Plant</td>
<td>Pouyan Talebizadeh, Mozzafar Ali (Shahrood Uni.)</td>
</tr>
<tr>
<td>Time</td>
<td>Title</td>
<td>Authors</td>
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<tr>
<td>17:15-17:30</td>
<td>Developing New Models to Predict Optimum Slope Angle of Solar Collectors for Any Latitude in Iran</td>
<td>Pouyan Talebian, Mozzafar Ali Mehrabi, Mehrabian, Morteza Abdolzadeh, Seyed Ali Keshavarz (Shahid Bahonar Uni., Islamic Azad Uni. - Iran)</td>
</tr>
<tr>
<td>16:00-16:15</td>
<td>Morphology and composition of Ni-W alloys electrodeposited on a nickel mesh as possible cathodes for alkaline water electrolysers</td>
<td>Marijana Tasic (Uni. of Belgrade, Serbia)</td>
</tr>
<tr>
<td>16:15-16:30</td>
<td>Thin Film SnO₂ Coatings for Lithium Ion Batteries</td>
<td>Mehmet Öğuz Guler, Hatem Akbulut (Sakarya Uni. - Turkey)</td>
</tr>
<tr>
<td>16:30-16:45</td>
<td>Ni Hydrotalcites materials for catalytic reaction</td>
<td>F. Touahra, K. Bachari, A. Saadi, O. Cherifi, D. Halliche (USTHB, Algeria)</td>
</tr>
<tr>
<td>16:45-17:00</td>
<td>Structural And Thermal Investigation Of The PyrolyticChars From Stalks And Stover Of Sunflower</td>
<td>Emine Topsak, Hanzade Haykiri-Açma, Serdar Yaman (Istanbul Technical Uni. - Turkey)</td>
</tr>
<tr>
<td>17:00-17:15</td>
<td>Effect of annealing temperature on the properties of tin-doped indium oxide (ITO) thin films prepared by RF magnetron sputtering</td>
<td>Ozgur Cevher, Mehmet Oguz Guler, Deniz Gültekin, Hatem Akbulut (Sakarya Uni. – Turkey)</td>
</tr>
<tr>
<td>17:15-17:30</td>
<td>Analysis on the Performanc of Adsoprtion Desalination System with 3 types of Silica Gel</td>
<td>Joon Ho Hyun, Seung Jin Oh, Young Min Kim, Kuan Chen, Yoon Joon Lee, Ng Kim Choon, Wongee Chun (Jeju National Uni. - South Korea)</td>
</tr>
<tr>
<td>Time</td>
<td>Title</td>
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<tr>
<td>16:45-17:00</td>
<td>Hybrid Ventilation of Residential Buildings</td>
<td>Sanchez de la Flor, Felipe Encinas Pino, Carlos Aguirre Nuñez (Universidad de Cadiz - Spain )</td>
</tr>
<tr>
<td>17:00-17:15</td>
<td>Simulation Tools for Zero Carbon Building Design</td>
<td>Lucélia Rodrigues (Uni. of Nottingham – UK)</td>
</tr>
<tr>
<td>17:15-17:30</td>
<td>A quantitative approach for “green city building”</td>
<td>Kwon Soook Park, Yong Sang Yoon (Karachi International Container Terminal – Pakistan)</td>
</tr>
<tr>
<td>17:30-17:45</td>
<td>Façade performance and Occupant Comfort Studies in a Conditioned Open Plan office Building</td>
<td>Kiran Kumar DEVS, Ramachandraiah A (IIT Madras – India)</td>
</tr>
<tr>
<td></td>
<td>Existing buildings project. Technical and operational model for the eco-compatible rehabilitation of public residential buildings</td>
<td>Roberta Rotondo (Sapienza Uni. of Rome, Italy)</td>
</tr>
</tbody>
</table>

**Parallel Session 6 (DİCLE Hall) “Alternative Energy Researches” Chairman: Dr. Wd Ying**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00-16:15</td>
<td>A Displacement Dependent Damper For A Vibration Based Energy Harvester</td>
<td>Nezih Topaloğlu, Asil Aksekili, Burak Yegin (Yeditepe Uni., Turkey)</td>
</tr>
<tr>
<td>16:15-16:30</td>
<td>Effect of cadmium ion concentration on the physical properties of nanoscale CdO thin films prepared by spray pyrolysis</td>
<td>Zahra A. Hallaj, S. Mohammad Rozati (Uni. of Guilan - Iran)</td>
</tr>
<tr>
<td>16:45-17:00</td>
<td>Steam Production From Spent Mushroom Bed Gasification</td>
<td>Tetsu Yamagishi, Sumiko Igawa (Tokyo Gas Co.- Japan)</td>
</tr>
<tr>
<td>17:00-17:15</td>
<td>Study Of using microalgae as an alternative of fossil fuel in Iran</td>
<td>Farzaneh Jafarigol, Soroush Younessi Sinaki, Ali Beheshhti (Islamic Azad Uni. – Iran)</td>
</tr>
</tbody>
</table>

**Parallel Session 6 (HEYBELİ Hall) “Hydroenergy Researches” Chairman: Dr. Wei Zhang**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:15-15:30</td>
<td>Harnessing waves energy in south coasts of Iran</td>
<td>Behzad Soltanbeigy, Ramin Vafaei Poursorkhahi (Islamic Azad Uni., Iran)</td>
</tr>
<tr>
<td>15:30-15:45</td>
<td>Global irradiation and air temperature data analysis using Fourier series for the site of CDER, Algiers .</td>
<td>Abdeladim Kamel, Kerkouche Karim, Cherra Farida,Chouder Aïssa, Hadj-Arab Amar (CDER - Algeria)</td>
</tr>
<tr>
<td>15:45-16:00</td>
<td>Optimizing High–Pressure Pipes for Water Transfer of Plant Through Genetic Algorithm Method</td>
<td>Nazila Kardan, Mostafa Basiri (Islamic Azad Uni., Iran)</td>
</tr>
<tr>
<td>16:00-16:15</td>
<td>Study Of Robotic Arms With Flexible Elements For Wave Energy Conversion</td>
<td>A. Maravandi M. Moallem (Simon Fraser Uni., Canada)</td>
</tr>
<tr>
<td>16:15-16:30</td>
<td>The Role of Exterior Walls In Environmental Sustainable Design And Construction</td>
<td>Leila Mirsaeedie (Islamic Azad Uni. – Iran)</td>
</tr>
<tr>
<td>16:30-16:45</td>
<td>Modeling of an integrated power system for the city of Shiraz</td>
<td>Mohammad Hadi Akbari, Mehdi Andisheh-Tadbir (Shiraz Uni. – Iran)</td>
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</tbody>
</table>

**19:30 DINNER**

**7 September 2011 Wednesday**

**Parallel Session 7 (MARMARA Hall) “Bio-energy Applications” Chairman: Mr. Oliver Van Der Borght**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:15</td>
<td>Briquetting of Coal–Biomass Blends</td>
<td>Seza Gönen, Hanzade Haykırrı Açma, Sadiyre Küçükbayrak (Istanbul Technical Uni., Turkey)</td>
</tr>
<tr>
<td>09:15-09:30</td>
<td>Recent Developments On Product Gas Cleaning Technologies For Biomass Gasification</td>
<td>Wenbin Zhang, Hao Liu, Irfan Ul Hai, York Neubauer, Philipp Schröder, Holger Oldenburg, Alexander Seilkopf, Axel Kölling</td>
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<tr>
<td>Time</td>
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<td>Speaker(s)</td>
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<tr>
<td>09:30-09:45</td>
<td>Feasibility of The Electricity Production From Forest Biomass in Turkey</td>
<td>Işık Taşkıran (General Direct. Forestry, Turkey)</td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>The Effect of Alleviating the Sand Concrete by Wood Shavings on Wall Time Lag And Decrement Factor</td>
<td>Bencheikh Hamida, B. Belhadji, Med. M. Khenfer (Université Amur Teldji, Algeria)</td>
</tr>
<tr>
<td>10:00-10:15</td>
<td>Design, Fabrication And Evaluation of A Novel Biodiesel Processor System</td>
<td>Ahmad Abbassadeh Mayvan, Barat Ghobadian, Gholamhassan Najafi, Mohammad Reza Omidkhah (Tarbiat Modares Uni., Iran)</td>
</tr>
<tr>
<td>10:15-10:30</td>
<td>Decision Process For Adoption Of Biogas Technology For The Sustainable Development In Uttaradit Province, Thailand</td>
<td>Chedsada Mingchai, Podjanee Sangmanee (Faculty of Agriculture -URU)</td>
</tr>
<tr>
<td>10:30:10:45</td>
<td>Energy Balance Analysis for Potato Production in Hamadan Province of Iran</td>
<td>Mohamad Abasian, Barat Ghobadian, Gholamhassan Najafi (Tarbiat Modares Uni., Tehran - Iran)</td>
</tr>
</tbody>
</table>

Parallel Session 7 (FIRAT Hall) “Building Application” Chairman: Dr. Nasruddin Yusuf Rodjali

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:15</td>
<td>Performance Investigation of Novel Building Integrated Heat Recovery System with Fibre Wick Structure for Cooling and Dehumidification</td>
<td>Mardiana-Idayu Ahmad, Saffa Riffat (Uni. of Nottingham – UK)</td>
</tr>
<tr>
<td>09:15-09:30</td>
<td>Long-Term Thermal Behavior of Energy Textile Constructed in Tunnel</td>
<td>Chulho Lee, Moonseo Park, Sangwoo Park, Byonghu Sohn, Hangseok Choi (Korea Uni. – Korea)</td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>Sustainability Patterns in the Old Residential Fabric of Boushehr</td>
<td>Said Mahdi Rezaei Nabi Mustafa Basiri (Islamic Azad Uni. – Iran)</td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>Holistic System Architecture for Energy Efficient Building Operation</td>
<td>Hasan Ufuk Gökçe, Kamil Umut Gökçe, Raimar Scherer (İstanbul Bilgi Uni. – Turkey)</td>
</tr>
<tr>
<td>10:00-10:15</td>
<td>Construtability and Thermal Performance of Large size Cast-in-place Concrete Energy Pile</td>
<td>Sunhong Min, Chulho Lee, Hyungseon Koh, Jaihyun Yoo, Kyoung-sik Jung, Hangseok Choi (Korea Uni., Korea)</td>
</tr>
<tr>
<td>10:15-10:30</td>
<td>A Smart Tool For Assessing Energy Performance Of Buildings</td>
<td>Vangelis Marinakis, Charikleia Karakosta, Haris Doukas, John Psarras (National Technical Uni. of Athens – Greece)</td>
</tr>
</tbody>
</table>

Parallel Session 7 (SEYHAN Hall) “Energy Efficiency” Chairman: Prof. Ali Yousfi

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:15</td>
<td>Effect of Interruptible Loads And Reliability On Optimal Sizing of An Islanded Microgrid</td>
<td>HassanzadehFard, S. M. Moghaddas-Tafreshi, Seyed Mehdie Hakimi (K.N.Toosi Uni.-Iran)</td>
</tr>
<tr>
<td>09:15-09:30</td>
<td>UK Dwelling Overheating Temperatures And Comfort Criteria Under Climate Change</td>
<td>Young Ki Kim, Hasim Altan (The Uni. of Sheffield – UK)</td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>PSO Based Optimal Sizing of Distributed Energy Resources in Islanded Micro-Grid Considering Uncertainty</td>
<td>Fatemeh Tooryan, S. M. Moghaddas-Tafreshi, S. M. Bathae, Humid Hasanazadehfard (K.N.Toosi Uni.-Iran)</td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>Energy Recovery From Rotary Kiln in Cement Process</td>
<td>Vedat Arı (Sakarya Uni. –Turkey)</td>
</tr>
<tr>
<td>10:00-10:15</td>
<td>Energy Saving in Building by Optimized Combined Cooling, Heating, and Power (CCHP) System</td>
<td>Saeed Karimi Alavijeh, Ali Behbahaninia, Mohsen Parvan (K.N.Toosi Uni., Iran)</td>
</tr>
<tr>
<td>Time</td>
<td>Session Title</td>
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<tr>
<td>10:15-10:30</td>
<td>Energy Saving From Stenter in Textile Finishing Mills</td>
<td>Emel Ceyhun Sabir, Funda Uçak (Uni. of Çukurova, Turkey)</td>
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<tr>
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<td><strong>Parallel Session 7 (CEYHAN Hall) “Solar Energy” Chairman: Prof. Mortaza Yari</strong></td>
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<tr>
<td>09:00-09:15</td>
<td>A novel multi-surface concentrating trough solar air collector and its experimental test</td>
<td>Zheng Hongfei, Tao Tao, Ma Ming, Kang Hufang (School of Mechanical of Beijing Institute of Technology, China)</td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>Application of solar driven two-stage desiccant cooling/heating system</td>
<td>H. Li, Yan Jun Dai, Y. Li, D. La, R. Z. Wang (Shanghai Jiao Tong Uni., China)</td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>Thermodynamic And Enviro-Economic Analyses of Stand-Alone Solar Power Plants</td>
<td>Kandasamy Ravi Kumar, K. S. Reddy (Indian Institute of Technology Madras, India)</td>
</tr>
<tr>
<td>10:00-10:15</td>
<td>Performance evaluation of Solar Water Heating for Residential Application in Iraq</td>
<td>Mahmoud U. Jasim (Mosul Uni. – Iraq)</td>
</tr>
<tr>
<td></td>
<td><strong>Parallel Session 7 (DİCLE Hall) “Material Research” Chairman: Prof. Hongfei Zheng</strong></td>
<td></td>
</tr>
<tr>
<td>09:00-09:15</td>
<td>Experimental Investigations of the Effectiveness of the Phase Change Materials when coupled with pure and mix clay material</td>
<td>Moataz Khalifa, Siddig Omer, Saffa Riffat (Univ. of Nottingham – UK)</td>
</tr>
<tr>
<td>09:15-09:30</td>
<td>Structure and properties of CP Titanium Treated Layers by Pulsed Nd: YAG Laser</td>
<td>Abida Bahloul, M. C. Sahour, L. Lavisse, R. Oumeddour (Université 8 mai 1945 de Guelma - Algerie)</td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>An Experimental Investigation of Selective CO$<em>2$ Adsorption with differently pre-treated Zeolite$</em>{13}$X</td>
<td>Sang-Phil Yoon, Young-Shin Jeon, Hyung-Teak Kim (Korea)</td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>The Synthesis And Its Application of Titania Iron Doped Photocatalyst For Dye Sensitized Solar Cell</td>
<td>Amir Abidov, Jeonghwan Lee, EunYoung Lee, Li Li He, DaeWoo Park, SooJeong Jo, Jeong Ae Park, Soon-Wook Jeong, Sungjin Kim (Kumoh National Inst. Tech. - Korea)</td>
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<tr>
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<td><strong>Parallel Session 7 (HEYBELİ Hall) “Cooling&amp;Refrigeration Systems” Chairman: Dr. Bun Tsuchiya</strong></td>
<td></td>
</tr>
<tr>
<td>09:00-09:15</td>
<td>Modeling The Cooling Effect of a Bioshader in the Hot Arid Climate</td>
<td>Khaled Al-Sallal, Laila Al-Rais (UAE Uni., UAE)</td>
</tr>
<tr>
<td>09:15-09:30</td>
<td>Surface Solar Cooling With Photo-Responsive Nanocomposites</td>
<td>D. Karamanis, E. Vardoulakis, E. Kyritsi, N. Ökte, G. Mihalakakou, T. Vaimakis (Univ. of Ioannina, Greece)</td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>Determining Appropriate Method of Cooling Air in Desert By Implementing Value Engineering Methodology</td>
<td>Ali Mostafaeipour (Yazd Uni.-Iran)</td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>Superficial evaporation in a forced convection of porous medium in transitory laminates regime “application on mint leaves drying”</td>
<td>Boumediene Touati, Lips Bernard Benyoucef Boumediene, Virgone Joseph (Univ. of Bechar)</td>
</tr>
<tr>
<td>10:00-10:15</td>
<td>Binary and Multicomponent Fluids For Ejector Refrigeration System</td>
<td>D. Buyadgie, O. Buyadgie, A. Chamchine, O. Drakhnia, S. Artemenko (Univ. of Central Lancashire – UK)</td>
</tr>
</tbody>
</table>
### Cooling Gas Turbines Inlet Air Using Chilled Water and Seawater in Kuwait

Asad Alebrahim, Sorour Alotaibi
(Kuwait Uni. - Kuwait)

### Parallel Session 8 (MARMARA Hall) “Sustainable Environment” Chairman: Prof. Suozo Tanaka

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00-11:15</td>
<td>Improvement Of Water Uptaken Characteristics Of Perfluorosulfonic Acid Membranes With Radical Formation</td>
<td>Bun Tsuchiya, S. Nagata, K. Saito, T. Shikama (Meijo Uni., Japan)</td>
</tr>
<tr>
<td>10:15-11:30</td>
<td>A Study On Passive Detail And Technology Performance For Zero Carbon Green Home</td>
<td>Sung Eun Shin, Soo Am Kim, Yong Sang Yoon, Sun Hye Mun (Korea Institute of Construction Technology, Korea)</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Influence of Indoor Environmental Quality on Occupant Comfort and Health</td>
<td>Touraj Ashrafian, Nazanin Moazzen Ferdos, Masoud Haghlesan (Islamic Azad Uni. – Iran)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>A slide rule for noise measurement</td>
<td>Himanshu Dehra (Avenue Windsor, Canada)</td>
</tr>
</tbody>
</table>

### Parallel Session 8 (FIRAT Hall) “Solar Energy Research” Chairman: Prof. Yoshihiko Suzuki

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15-11:30</td>
<td>Experimental study of the performance of a capillary film solar still (single stage) in southern Algeria</td>
<td>M. Zeroual, H. Bouguettaia, D. Bechki, S. Bougali, B. Boucheikima and H. Mahcene (Uni. of Batna – Algeria)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Solar thermal power and solar desalination</td>
<td>Tayfun Arslan (Dicle Univercity – Turkey)</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Optimization of An Absorption Solar Cooling System</td>
<td>Rabi Karaali (Kocaeli Uni. – Turkey)</td>
</tr>
</tbody>
</table>

### Parallel Session 8 (SEYHAN Hall) “Bio-mass & Bio-fuel” Chairman: Dr. Khaulah Sulaiman

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00-11:15</td>
<td>Biodiesel a way to save humanity</td>
<td>Fariborz Aramesh (Azad Uni. – Tehran)</td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>High Voltage/Low Amperage Current For Separation of Crude Glycerin From Biodiesel</td>
<td>Ahmad Abbaszadeh, Barat Ghabadian, Gholamhassan Najafi (Tarbiat Modares Uni., Tehran - Iran)</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Enhancing Biodiesel Production from Waste Cooking Oil with Ultrasonics</td>
<td>Barat Ghabadian (Tarbiat Modares Uni., Tehran - Iran)</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Optimization of a few fossil fuels and liquid biofuel blend properties using Genetic Algorithm</td>
<td>Pegah Nematizade, Barat Ghabadian, Gholamhassan Najafi, Mohammad Safieddin Ardebili (Tarbiat Modares Uni., Tehran - Iran)</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Waste To Energy By Supercritical Water Gasification - Utilization of Residual By-Product Streams From The Pulp And Paper Industry</td>
<td>Ida Rönnlund, Lillemor Myrén (Abo Akademi Uni. – Finland)</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Comparision of Clostridium Beijerinckii NRRL B593 And Locally Isolated Klebsiella Pneumoniae in Regards To Their 1,3 - Propanediol Production From Glycerol And Effect of Co-Substrate Addition</td>
<td>Mine Gündörmüşler, Nuri Azbar (Ege Uni. – Turkey)</td>
</tr>
<tr>
<td>12:30-12:45</td>
<td>Advanced Pretreatment Process for Enzymatic</td>
<td>Prihardi Kahar, Shuzo Tanaka</td>
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<tr>
<td>Time</td>
<td>Session</td>
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<tr>
<td>11:00</td>
<td>Parallel Session 8 (CEYHAN Hall) “Sustainable Buildings” Chairman: Prof. Jayaraj Simon</td>
<td>Monthly Mean Clearness Index for Few Iranian Cities</td>
</tr>
<tr>
<td>11:15</td>
<td></td>
<td>Uncertainty and sensibility analysis in energy building simulation: A probabilistic approach to the real estate market of apartments in Santiago de Chile</td>
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<td>11:30</td>
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<td>Designing The First Green Kindergarten School in Isfahan, Iran</td>
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<td>11:45</td>
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<td>An investigation into current Chinese low energy buildings and the thermal comfort conditions in hot summer and cold winter climatic zone in China</td>
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<tr>
<td>12:00</td>
<td></td>
<td>Optimizing Passive House Design with Microclimate Simulation</td>
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<td>12:15</td>
<td></td>
<td>Thermal Analysis of a Controlled Environment Greenhouse and Utilisation Bioenergy in The Heating System</td>
</tr>
<tr>
<td>11:00</td>
<td>Parallel Session 8 (DİCLE Hall) “Electrical&amp;electronic components” Chairman: Prof. Taner Sengör</td>
<td>A single source multilevel inverter design for renewable energy systems</td>
</tr>
<tr>
<td>11:15</td>
<td></td>
<td>A Unique Design Procedure for light-emitting diode (LED) Street Lighting System</td>
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<tr>
<td>11:30</td>
<td></td>
<td>Led Technology</td>
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<tr>
<td>11:45</td>
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<td>Optimization of The Solar Control Devices in Windows For Hot Climates</td>
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<tr>
<td>12:00</td>
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<td>Study on the Acoustic Resonance Phenomenon of a Pair of Thermoacoustic Lasers</td>
</tr>
<tr>
<td>12:15</td>
<td></td>
<td>Construction And Design of Impulse High Voltage Measurement System</td>
</tr>
<tr>
<td>11:00</td>
<td>Parallel Session 8 (HEYBELİ Hall) “Photovoltaic Applications” Chairman: Dr. Luc Rolland</td>
<td>Modelling of an airflow window with a photovoltaic solar wall</td>
</tr>
<tr>
<td>11:45</td>
<td></td>
<td>Pre-Feasibility Study of Hybrid PV Based Energy System for Residential Applications</td>
</tr>
<tr>
<td>12:00</td>
<td></td>
<td>Performance Evaluation of Monocrystalline And Polycrystalline PV Modules - A Case Study For Istanbul</td>
</tr>
<tr>
<td>12:30</td>
<td></td>
<td>Lunch</td>
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<tr>
<td>Time</td>
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<td>Speaker/Institution</td>
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<tr>
<td>14:00-14:15</td>
<td>A Review On Performance Analysis of Photovoltaic/Thermal Collectors</td>
<td>Saffa Riffat, Erdem Cuce (Univ. of Nottingham - UK)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Photovoltaic System With Maximum Power Point Tracking Control And A Generalized Model of Grid Connected PV System</td>
<td>Tuner Sengor, Sayema Shahidul (Yildiz Technical Uni. – Turkey)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Photovoltaic Energy Conversion Based on EV80C196MC Microcontroller Evaluation Board for water Pumping System, Simulation and Realization</td>
<td>Mohamed Arrouf, Farida Benabid (Univ. of Batna – Algeria)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Model of A Photovoltaic Panel Emulator in Matlab-Simulink</td>
<td>Hayrettin Can (Firat Uni. – Turkey)</td>
</tr>
</tbody>
</table>

**Parallel Session 9 (FIRAT Hall) “Energy, Environment and Public”** Chairman: Prof. Mattheos Santamouris

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00-14:15</td>
<td>Sustainability Indicators in Traditional Sustainable Neighborhoods: Case Study of Tabriz City’s Districts in Iran</td>
<td>Masoud Haghlesan, Touraj Ashrafian, Mostafa Basiri, Nazanin Moazzen Ferdos (Islamic Azad Uni., Iran)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Policies and initiatives to achieve EU’s energy efficiency and environmental goals</td>
<td>Afroditi Synnefa, Mattheos Santamouris (National KAPODISTRIAN Uni. of Athens - Greece)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Greece and the growth of renewable energy technologies: A patent based analysis</td>
<td>Maria Markatou (Univ. of Athens – Greece)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Energy planning for Millenium City of National Capital Region Case study: Gurgaon, India</td>
<td>Shelly Dahiya (Global Development Network)</td>
</tr>
</tbody>
</table>

**Parallel Session 9 (SEYHAN Hall) “Energy Systems Design &Modeling”** Chairman: Prof. Heemyong Ro

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00-14:15</td>
<td>Evaluation of ground thermal conductivity by back-analyzing in-situ thermal response test (TRT)</td>
<td>Moonseo Park, Chulho Lee, Dongseop Lee, Shin-Hyung Kang, Hangseok Choi (Korea Uni. - Korea)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Daylighting Simulation of Sunpipes by using Ecotect and Radiance</td>
<td>Seung Jin Oh, Joon Ho Hyun, Jin Ho Jung, Yoon Joon Lee, Wongee Chun (Jeju National Uni., Korea)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Energy Saving in Climate Design of inter-City Welfare Services Complex</td>
<td>Leila Esmaeili, Seyed Mohammad Farid Ahmadi, Saeed Karimi Alavijeh (Architectural Uni. of Esfahan, Iran)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>New process of Cold Fusion</td>
<td>Cpl Von Thule (SCM Internationale, France)</td>
</tr>
</tbody>
</table>

**Parallel Session 9 (CEYHAN Hall) “Bio-mass Energy”** Chairman: Dr. İnci Eroğlu

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00-14:15</td>
<td>Biofuel From Microalgae: Alternative, Sustainable And Renewable Fuel</td>
<td>Gholamhassan Najafi, Barat Ghabadian, Talal Yusaf (Tarbiat Modares Uni. - Iran)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Effect of storage methods on the physical and chemical properties of biomass fuels</td>
<td>Shalini Graham, Carol Eastwick, Colin Snape (Univ. of Nottingham – UK)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Bio-Energy from Agricultural Residues in Phitsanulok Thailand</td>
<td>Waraporn Rattanongphisat (Naresuan Uni., Thailand)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Biodiesel Production Potential from Edible Oil Seeds in Iran</td>
<td>Mohammad Safieeddin Ardebili, Barat Ghabadian, Gholamhassan Najafi Ahmad Chegeni (Tarbiat Modares Uni. - Iran)</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Impact of Air Distributor on Solid-Gas Flow Structure in A Bubbling Fluidized Bed for biomass gasification and</td>
<td>Zhufang Yang, Xianfeng Fan (The Uni. of Edinburgh – UK)</td>
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<tr>
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<tr>
<td>14:00-14:15</td>
<td>Energy Management In Developing Countries</td>
<td>Fatma Mohamed, Tomonari Yashiro (Uni. of Tokyo, Japan)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Improvement Of Energy Utilization In Natural Gas Dehydration Plant Through Reducing Electricity And Steam Demand</td>
<td>Hooman Farzaneh, Ehsan Zand Miralvand (Islamic Azad Uni. – Iran)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Measuring the Sustainability of Agricultural Energy Management System in Iran</td>
<td>Sevil Hatamifard (Islamic Azad Uni. – Iran)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>IT maturity, Relational maturity and firm performance in Iran’s Electric Industry</td>
<td>Ali Azadeh, Masoud Afsharimolfrad, Abbas Keramati (Uni. of Tehran, Iran)</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Energy Management in Sustainable Agriculture: A Case Study of Khorasan Province in Iran</td>
<td>Saeed Yazdani (Islamic Azad Uni., Iran)</td>
</tr>
<tr>
<td>14:00-14:15</td>
<td>Natural convection counter-flow solar air heater</td>
<td>M. Bamgbopa, U. Atikol, M. Alkhawaja (Eastern Mediterranean Uni. - Northern Cyprus)</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>Wind and solar energy potential in Batna, Algeria</td>
<td>Aksas Mounir, Gama Amor (Uni. of Batna, Algeria)</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>Hybrid Biomass /Solar Micro-Chp System With Orc</td>
<td>Guoquan Qiu, Hao Liu, Abdulkarim Mayere, Barry West, Saffa Riffat (Uni. of Nottingham – UK)</td>
</tr>
<tr>
<td>14:45-15:00</td>
<td>Optimization of an Absorption Solar Cooling System</td>
<td>Rabi Karaali (Kocaeli Uni. – Turkey)</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>Employment Impacts of Solar Energy in Turkey</td>
<td>Müjgan Cetin, Nilüfer Eğrican (SİSTEM Yönetim Danışm. Ltd. Şti., Turkey)</td>
</tr>
<tr>
<td>15:15-15:30</td>
<td>Numerical Simulation And Optimization of Solar Tower</td>
<td>Yalçın Yükselentürk, Hasan Köten, Mehmed Rafet Özdemir, Nuri Kerem Binark, Mustafa Yılmaz (Marmara Uni. – Turkey)</td>
</tr>
<tr>
<td>15:30-15:45</td>
<td>Impact of operational conditions on biogas-microturbine performance and adaptability of the exhaust gas to CO₂ enrichment into greenhouse</td>
<td>Junkeuk Park, kwangbeom Hur, Sanggyu Rhim, Inhwa Lee, (Korea Electric Power Corporation, Korea)</td>
</tr>
<tr>
<td>15:45-16:00</td>
<td>Comparative Modelling And Optimisation of Different Pretreatment Technologies For Bioethanol Production</td>
<td>Melanie T. Ramirez-Jaramillo, Eric S. Fraga (Uni. College London, UK)</td>
</tr>
<tr>
<td>16:00-16:15</td>
<td>Integration of biomass Upgrading processes with communal CHP plants – Influence on energetic and environmental performance</td>
<td>Thomas Kohl, Timo Laukkanen, Carl-Johan Fogelholm (Aalto Uni., Finland)</td>
</tr>
<tr>
<td>16:15-16:30</td>
<td>Biogas plants in pakistan army military farms</td>
<td>Muhammad Jawad (Pakistan Army- Pakistan)</td>
</tr>
<tr>
<td>16:45-17:00</td>
<td>Economic Assesment of Three Biomass-Based Hydrogen Production Systems</td>
<td>Mehmet K. Cohce, Ibrahim Dincer, Marc A. Rosen (UOIT, Canada)</td>
</tr>
<tr>
<td>17:00-17:15</td>
<td>Catalytic Deoxygenation of Bio-Oil Derived From Pyrolysis Of Leucaena Leucocephala</td>
<td>Jiraporn Payormhorn, Kunn Kangvansaichol2, Prasert Reubroycharoen, Prapan Kuchonthara, Napida Hinchiran (Chulalongkorn University, Thailand)</td>
</tr>
<tr>
<td>Time</td>
<td>Session Title</td>
<td>Presenter and Affiliation</td>
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<tr>
<td>15:30-15:45</td>
<td>Life cycle assessment of a fluidized bed system for steam production</td>
<td>Eda Cetinkaya, Marc A. Rosen, Ibrahim Dinçer (UOIT, Canada)</td>
</tr>
<tr>
<td>15:45-16:00</td>
<td>Development of a Guideline for Reducing Construction Waste</td>
<td>Sung Ok Lee, Soo Am Kim (KICT - Pakistan)</td>
</tr>
<tr>
<td>16:00-16:15</td>
<td>Living Adaptability With Nature Cycles Along With Sustainable Development</td>
<td>Shahram Nassehzadeh Tabriz, Fariborz Mahdavi Tabatabaei Fard, Elham Behboodi (Islamic Azad Uni., Iran)</td>
</tr>
<tr>
<td>16:15-16:30</td>
<td>Study On Micro Combustion Chamber of Gas Turbine</td>
<td>Sri Sudadiyo (UIKA, Indonesia)</td>
</tr>
</tbody>
</table>

**Parallel Session 10 (SEYHAN Hall) “Efficiency in energy”** Chairman: Prof. Marco Noro

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:30-15:45</td>
<td>CSP: World at a Glance and Pakistan</td>
<td>Muhammad Ishfaq Khan, Zeeshan Najam (IIU - International Islamic Uni. – Pakistan)</td>
</tr>
<tr>
<td>15:45-16:00</td>
<td>The Impact of Bionic Design in Proposing an Energy Efficient Future: Case study of Ocean-Scraper 2050</td>
<td>Ali Mohammad Sami Kashkooli Sahar Zahiri, Hasim Altan (The Uni. of Sheffield, UK)</td>
</tr>
<tr>
<td>16:00-16:15</td>
<td>Developing a renewable energy selection toolkit for Istanbul “The Istanbul Renewable Toolkit”</td>
<td>Tuğba Salman, Sofie Pelsmakers (UEL - Uni. of East London)</td>
</tr>
</tbody>
</table>

**Parallel Session 10 (CEYHAN Hall) “Thermodynamic Applications”** Chairman: Prof. Riichiro Mizoguchi

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:30-15:45</td>
<td>Review of Freezing of PCM in Cylinders Under Conduction/Convection Controls</td>
<td>Subrahmaniyam Susarla (Stanley College of Engineering &amp; Technology - India)</td>
</tr>
<tr>
<td>15:45-16:00</td>
<td>Thermodynamic analysis of a novel combined power – refrigeration cogeneration cycle</td>
<td>S. Mohammad S. Mahmoudi, D Aghazadeh, M. Yari (Uni. of Tabriz – Iran)</td>
</tr>
<tr>
<td>16:00-16:15</td>
<td>Different Configuration of A Gas Turbine Power Plant To Increase Energy Utilization Factor</td>
<td>Hossein Rabiei, Sahand Behboodi (K. N. TOOSI Uni. Tech., Iran)</td>
</tr>
<tr>
<td>16:15-16:30</td>
<td>Energetic And Economic Analysis Of Different Heat Pump Systems For Space Heating</td>
<td>Marco Noro, Filippo Busato, Renato Lazzarin (Uni. of Padova - Italy)</td>
</tr>
<tr>
<td>16:30-16:45</td>
<td>Thermodynamic Analysis And Economic Evaluation Of Feasibility Of Supplementary Firing In An Unfired HRSG</td>
<td>Mohammad Tajik Mansouri, Hossein Rabiei, (Niroo Research Institute, Iran)</td>
</tr>
</tbody>
</table>

**Parallel Session 10 (DİCLE Hall) “Energy policy”** Chairman: Ms. Eugenia Mehleri

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:30-15:45</td>
<td>Assesment of Resource Use in Turkish Household Sector and Labour Generation</td>
<td>Candeniz Seçkin, Ahmet Bayülken (İstanbul Technical Uni. – Turkey)</td>
</tr>
<tr>
<td>15:45-16:00</td>
<td>Eco-Innovative Policy Measures For The Turkish Automotive Industry</td>
<td>Hande Eryilmaz, Burcu Devrim İctenbaş (Atılım Uni., Turkey)</td>
</tr>
<tr>
<td>16:00-16:15</td>
<td>Fair Electricity Transfer Pricing And Capacity Planning in Microgrid</td>
<td>Di Zhang, Lazaros Papageorgiou, Dan Brett, Nilay Shah (Uni. College London, UK)</td>
</tr>
<tr>
<td>16:30-16:45</td>
<td>The Desirability of Energy Efficient Buildings in the UK</td>
<td>Lucelia Rodrigues, Tim Garratt (Uni. of Nottingham – UK)</td>
</tr>
<tr>
<td>16:45-17:00</td>
<td>Willingness to Pay For Renewable and Nuclear Energy Options in Turkey</td>
<td>Cem Tekesin, Shihomi Ara Aksoy (Hacettepe Uni. – Turkey)</td>
</tr>
</tbody>
</table>

**Planery Session 3  Closing Talk** (Prof. Dr. Sümer Şahin & Prof. Dr. Saffa Riffat & Prof. Dr. H. Mehmet Şahin)
<p>| P1  | Implementation of P&amp;O Algorithm On FPGA For Photovoltaic Applications | A. Mellit, H. Rezzouk, A. Messai, B. Medjahed (Jijel Uni., Algeria) |
| P2  | Atmospheric Radiation its nature, origin and applications: A basic summary for Engineers | Abdullrahman Maghrabi (King Abdulaziz Uni. Sci. Tech., KSA) |
| P3  | Environmental payback time analysis for building-integrated photovoltaic system in Hong Kong | Jinqing PENG, Lin LU, Hongxing YANG, Jun HAN (Hong Kong Polytechnic Univ., China) |
| P4  | Solar Powered Greenhouses | Shiva Ghorjian, Teymour Tavakkoli, Barat Ghorbadian (Tarbiat Modares Univ., Iran) |
| P5  | Turning Wastewater (Greywater) Into Electrical Energy in Buildings | Sajad Mir Varzandeh, Sina Baghbani Kordmahale (Islamic Azad Univ., Iran) |
| P6  | State feedback control technique of ASVC-based VAR flow compensation. | Mansour Benyamina (Uni. of Mostaganem, Algeria) |
| P7  | Case Study of A Small-Scale Solar Chimney Power Plant in Kerman, Iran | Ehsan Ghomalalizadeh, Seyed Hossein Mansouri, Masoud Iranmanesh (Shahid Bahonar Univ. of Kerman, Iran) |
| P8  | A study on tar reduction of producer gas from biomass gasification with activated carbon and dolomite | Hyo Jae Jeong, Chang Won Yang, Jung Ho Hwang, Uen Do Lee (Yonsei Univ., Korea) |
| P11 | MRAS Technique Speed Control of sensorless Induction Motor Drives Supplied by Photovoltaic Solar Energy | Larabi Abdelkader, S.Rafa , L. Barazane, M.S.Boucherit (Laboratory of the electric and industrial systems, Algeria) |
| P12 | Embedded Wireless Sensor System For Applications in Building Energy Efficiency | M. Moallem, Y. Rashidi (Simon Fraser Univ., Canada) |
| P13 | Chemical Composition Of Leaves Essential Oil Of Algerian Punica Granatum | Nacéra Tigrine, Samir Dameche (Université des Sciences et de la Technologie Houari Boumediene, Algeria) |
| P14 | Efficiency of Energy in Road Lighting | Aida Spahiu, Orion Zavalani, Lindita Dhamo (Albania) |
| P15 | Development of a packed-bed desiccant dehumidifier for desiccant-evaporative cooling of buildings | Chris S. Tretiak, Nouri Ben Abdallah (Dalhousie Univ., Canada) |
| P16 | Characterization of Thermoelectric Module as Generator | Rasit AHISKA, Hayati Mamur (Gazi Univ.-Turkey) |
| P17 | Nanostructured Materials Based On Compounds IV-VI For Thermoelectric Energy Converters | Dmytro Freik, Rasit Ahiska, Igor Yurchyshyn, Lyubomyr Nykyryuy Yuriy Lysyuk (Gazi Univ., Turkey) |
| P18 | Theoretical And Experimental Analysis Of The Flow In And Around A Savonius Rotor | Zeroual Aouachra, Djoumati Djemaa, Haddad Djamel (Hadj Lakhder Univ., Algeria) |
| P19 | Experimental investigation on performance of very small | Milad Zahir, Ali Akbar Alemrajabi, |</p>
<table>
<thead>
<tr>
<th>Paper Number</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P20</td>
<td>Adsorption Chiller</td>
<td>Ahmad Moheb (Isfahan Uni. Technology - Iran)</td>
</tr>
<tr>
<td>P21</td>
<td>Evaluation of the Na⁺ transport properties through a cation exchange</td>
<td>Mouna Nacef, Mohamed Lyamine Chelagha, Abed Mohamed Affoune (Université 8 mai 1945, Algeria)</td>
</tr>
<tr>
<td>P22</td>
<td>Chromium recovery from chromic sludge</td>
<td>Aboubaker Lembarek, Ameur Gouassma, Mouna Nacef, Abed Mohamed Affoune (Université 8 mai 1945, Algeria)</td>
</tr>
<tr>
<td>P23</td>
<td>The simulation of drying characteristics of low rank coal under different blowing air speed</td>
<td>Dong-Ha Jang, Do-Man Jeon, Tae-Jin Kang Young-Shin Jeon, Hyung-Taek Kim (Ajou Uni., Korea)</td>
</tr>
<tr>
<td>P24</td>
<td>Combined Water-Oxygen Pinch Analysis to Optimize Wastewater Treatment Plant</td>
<td>Zahra Jandaghian (Islamic Azad Uni., Iran)</td>
</tr>
<tr>
<td>P25</td>
<td>Efficiency Bioethanol Dehydration Process: Pervaporation</td>
<td>Filiz Uğur, Niliüfer Hilmioğlu (Kocaeli Uni., Turkey)</td>
</tr>
<tr>
<td>P26</td>
<td>Mismatching Losses in Solar PV Plants</td>
<td>Jose VERA, Luis Marroyo, Miguel Garcia (Technical Uni. of Cartagena-UpNA)</td>
</tr>
<tr>
<td>P27</td>
<td>Optimization of the parameters of elaboration of the quaternary chalcopyrite CuInGaSe₂ for photovoltaic applications</td>
<td>M. Mezghache, O. Benhalima, F. Chouia, B. Hadjoudja, B. Chouial, A. Chibani, (Laboratoire des semi-conducteurs, Algeria)</td>
</tr>
<tr>
<td>P28</td>
<td>Effect of EHD on forced Convection in a Tube by Using Helical Electrode</td>
<td>Mohammad Mirhosseini, Ali Akbar Alemrajabi (Isfahan Uni. of Technology-Iran)</td>
</tr>
<tr>
<td>P29</td>
<td>Real Time Based Fuzzy Logic Distance Protection</td>
<td>Maamoon Al_Kababjie (Uni. of Mosul – Iraq)</td>
</tr>
<tr>
<td>P30</td>
<td>Thermodynamic Simulation of Solar Absorption Refrigeration</td>
<td>Djamil Lynda, Kerbache Tahar (Mentouri Uni. - Algérie)</td>
</tr>
</tbody>
</table>

6 September 2011

<table>
<thead>
<tr>
<th>Paper Number</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Desalination system powered by a hybrid waste heat and solar energy</td>
<td>Nabil Elminshawy, Ayman Mohamed, Mahmoud Kassem (Port-Said Uni., Egypt)</td>
</tr>
<tr>
<td>P2</td>
<td>The Strategic Techniques of the Control of Nutritional Elements in the Water Supply</td>
<td>Gafsi Mostefa, Kettab Ahmed, Djeichiche Abdelkader (Univ. Ammar Telidji Laghouit, Algeria)</td>
</tr>
<tr>
<td>P3</td>
<td>Studies on trace element levels in Kiwira coal waste for sustainable utilization for energy in Tanzania</td>
<td>Duncan Mwikesile (Mbeya Inst. Sci. Tech., Tanzania)</td>
</tr>
<tr>
<td>P4</td>
<td>Robust Frequency Control in An Isolated Power System Using Battery Energy Storage</td>
<td>Cuk Ali Nandar (Kyushu Uni., Japan)</td>
</tr>
<tr>
<td>P5</td>
<td>Performance Comparison Of The Glass Vacuum Tube And Flat Plat PV/T Heat Pump Systems</td>
<td>H. Chen, S. B. Rifat (Uni. of Nottingham – UK)</td>
</tr>
<tr>
<td>P6</td>
<td>Design and Experimental study to increase efficiency of organic Rankie cycle</td>
<td>Seok Hun Kang, Dae Hun Chung (KIER-Korea)</td>
</tr>
<tr>
<td>P7</td>
<td>An Experimental Study on Pyrolysis under isothermal condition of Indonesian Biomass (Empty Fluid Bunch: EFB)</td>
<td>Sang Shin Park, Jung Ho Hwang, Uen Do Lee, Tea U Yu (Yonsei Uni., Korea)</td>
</tr>
<tr>
<td>P8</td>
<td>Experimental Study of Convective Boiling in Minichannels: Cooling of The Pem Fuel Cells</td>
<td>Boudouh Mounir Louahalia-Gualous Hasna Si-Ameur Mohamed Michel de Labachelerie (Univ. of Batna, Algeria)</td>
</tr>
</tbody>
</table>
| P9          | Capturing Dynamic Key Performance Indicators for building           | Hussnan Shah (Technologies for...
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P10</td>
<td>A Novel Ejector-Expansion Transcritical CO₂ Cascade Refrigeration Cycles</td>
<td>Mortaza Yari, S.M.S. Mahmoudi (Univ. of Tabriz, Iran)</td>
</tr>
<tr>
<td>P11</td>
<td>Cooling And Heating Performance Evaluation of A Small Scale Ground-Coupled Heat Pump System</td>
<td>Byonghu Sohn, Chulho Lee, Moonseo Park, Hangseok Choi (Korea Institute of Construction Technology, Korea)</td>
</tr>
<tr>
<td>P12</td>
<td>Energy management strategies for grid integration of microgrids based on renewable energy sources</td>
<td>Javier Barricarte, I.San Martin, Pablo Sanchis, Luis Marroyo (Public Uni. of Navarre - Spain)</td>
</tr>
<tr>
<td>P13</td>
<td>Ethanol Reforming For Supplying Molten Carbonate Fuel Cells</td>
<td>Andrea Nicolini (Università degli Studi di Perugia, Italy)</td>
</tr>
<tr>
<td>P14</td>
<td>GA and BIP based Optimal Allocation of Phasor Measurement Units (PMUs) for Khouzestan Transmission Network complete observability, Considering Double Redundancy for Sensitive Substations</td>
<td>S. S. Mortazavi, M. Heidari, D. Mirabbasi (Shahid Chamran Univ., Iran)</td>
</tr>
<tr>
<td>P15</td>
<td>Prospect of Iran Natural Gas Export Projects</td>
<td>Hedayat Omidvar (National Iranian Gas Company – Iran)</td>
</tr>
<tr>
<td>P16</td>
<td>A Study of Optimum Conditions of Batch Culture Medium on Ethanol and Acetate Production Using Clostridium ljungdahlii</td>
<td>Bayarbat Ishvaanjil, Long Wang, Seong-Gu Hong, Kwon-Kyoo Kang, (Hankyong National Univ., Korea)</td>
</tr>
<tr>
<td>P17</td>
<td>Thermoelectricity based on novel materials: effective and environmentally safety method of direct energy conversion</td>
<td>Rasit Ahiska, Lev Bulat (Gazi Uni. - Turkey, St. Petersburg State Uni. - Russia)</td>
</tr>
<tr>
<td>P18</td>
<td>Performance of Solar Façade For Space Cooling During The Summer in The UK</td>
<td>Hoy-Yen Chan, Saffa Riffa, Jie Zhu (Univ. of Nottingham – UK)</td>
</tr>
<tr>
<td>P19</td>
<td>Changing of Thermal Properties of Sewage Sludge During Its Open-Air Storage</td>
<td>Kozioł Michał, Landrat Marcin, Ścierski Waldemar (Silesian Univ. of Technology, Poland)</td>
</tr>
<tr>
<td>P20</td>
<td>Noise spectra of Potassium and Ammonium ion transport at a cation exchange membrane interface.</td>
<td>Kafia Oulmi, K.E Bouhidel, G.M. Andreadis (Univ. of Batna, Algeria)</td>
</tr>
<tr>
<td>P21</td>
<td>PV/T air collectors with natural air flow operation: Optimization using genetic algorithm and a case study</td>
<td>Amin Shahsavar, Pouyan Talebizadeh, Hamid Tabaei (Shahid Bahonar Univ., Iran)</td>
</tr>
<tr>
<td>P22</td>
<td>Design Of New Domestic Wind Turbines</td>
<td>Mohammed AI Eid (Jubail Industrial College , KSA)</td>
</tr>
<tr>
<td>P23</td>
<td>Decision making model for selection between distributed and centralized generation</td>
<td>Nikzad manteghi, Mohammad Jafar Haddadpour Jahromi (Iran)</td>
</tr>
<tr>
<td>P24</td>
<td>Thermal compression oscillations in a semi-infinite compressed fluid</td>
<td>Himanshu Dehra (Concordia U., UQÀM)</td>
</tr>
<tr>
<td>P26</td>
<td>Resistance of Treated Stain Less Steel To Cavitation Damage</td>
<td>Ahmed Alarabi, Fouad Abudaia (Al Fateh Uni. - Libya)</td>
</tr>
<tr>
<td>P27</td>
<td>Experimental study of a cabinet solar dryer in mixed and indirect modes</td>
<td>Mojtaba Dadashzadeh (Pro &amp; Technical group, Iran)</td>
</tr>
<tr>
<td>P28</td>
<td>Model for optimal design of Presurized Fluidized Bed Combustion (PFBC) based on the mathematical programming</td>
<td>Hooman Farzaneh, Reza Fattahi (Islamic Azad Uni. – Iran)</td>
</tr>
<tr>
<td>P29</td>
<td>Using Self-Excited Induction Generator in the field of Renewable Energies &quot;The kinetic energy in the variable speed of the free flow water in Tigris river&quot;</td>
<td>Wael Hamdon, Maamoon Al-Kababjie (Uni. of Mosul - Iraq)</td>
</tr>
<tr>
<td>P30</td>
<td>First Principles Investigation On The Optical And Magnetic Properties of Transition-Metal-Doped XzNo</td>
<td>Boukortt Abdelkader, Ahmed SADOK, Rachida HOCINE (Mostaganem Univ.,)</td>
</tr>
<tr>
<td>P31</td>
<td>Investigation Of Flow Rate And Inlet Coolant Temperature Variation On Modular Helium Reactor With Equivalent Cylinder Model</td>
<td>H. Mehmet SAHIN and Omur AKBAYIR (Gazi University, Turkey), Cemil KOCAR (Hacettepe University, Turkey)</td>
</tr>
</tbody>
</table>

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