

## **RESEARCH PAPER PRESENTATIONS**

**Date: 10-11-12 October 2016**

**Venue: LUTFI KIRDAR CONGRESS AND EXHIB. CENTER, Şişli, Istanbul**

**Halls: "TOPKAPI A" and "TOPKAPI B"**

**10 OCTOBER Monday**

### **SESSION I : AWARD WINNER PAPERS**

09:15-09:30 <b>OPENING</b>			<b>A</b>
09:30 - 12:15 <b>Chair: Prof.Dr.Ahmet Dursun ALKAN</b>			
WERT	195	Roadmap and Infrastructure Assessment to Introduce Electro Mobility in Buenos Aires City <b>Gastón A. TURTURRO*</b> and <b>Matías E. UBOGUI</b>	
WES	104	Achieving 80% Greenhouse Gas Reduction Target in Saudi Arabia under Low and Medium Oil Prices <b>Yousef M. ALSHAMMARI*</b> and <b>Mani SARATHY</b>	
WERT	012	Carbon Dioxide Recovery Enhancing World Energy Supply <b>Jair Arone MAUÉS*</b> and <b>Paulo Roberto Costa CAMARGO</b>	<b>A</b>
<b>BREAK</b>			
WET	191	Regional Trilemma of the EU: Role of US LNG Exports in Gas Portfolio <b>Sıla BOZOK</b>	
WET	251	An International Assessment of Ocean Energy Innovation Performance <b>Matthew James HANNON*</b> , <b>Renée Van DIEMEN</b>	
12:15 - 13:00 <b>AWARD CEREMONY</b>			
13:00 - 15:00 <b>LUNCH BREAK</b>			

(\*) Presenter author. Numbers in the second column refers Paper ID no.

#### **NOTES for Presenters:**

- Time allocated for a presentation is 20 minutes, with a further 10 minutes allowed for discussion.
- Presentation file should be delivered to the help desk with a pdf version before the session.

## 10 OCTOBER Monday

### SESSION I : AWARD WINNING PAPERS (cont.)

09:30 - 12:15 Chair: Prof.Dr.Filiz KARAOSMANOĞLU			
WERT	151	Optimize LNG Liquefaction Operations through Proper Refrigeration Compressor Driver Selection <b>Patrice Bardon</b>	B
WET	278	Improving Environmental-Sustainability for Industrial Minerals production with Solar Ponds - a case study for extended decision making <b>Carlos Daniel Galli</b>	
WES	327	The effect of varying photovoltaics short circuit current and open circuit voltage on the panel simulation model accuracy <b>Kamal Ghassan Al KHUFFASH*, Lisa Ann LAMONT and Youssef Abdul MAGID</b>	
BREAK			
WERT	85	Domiciliary management of mango waste for power production using Microbial fuel cell-a green technology <b>Iti SHARMA* and Makarand Madho GHANGREKAR</b>	B
WERT	167	Highly Selective Syngas Conversion to Methanol over Multicomponent Metal Oxides: Catalysis and Kinetics Studies <b>Pintu MAITY*, P. K. RAKSHIT, C. SAMANTA, B. NATARAJAN, R. VOOLAPALLI, S. BHARGAVA, A. BORDOLOI, M.O. GARG, J. PATEL, W. L. and T. BHATELIA</b>	
12:15 - 13:00 <b>AWARD CEREMONY</b>			A
13:00 - 15:00 LUNCH BREAK			
15:00 - 16:00 Chair: Prof.Dr.Ahmet Dursun ALKAN			
WES	249	Addressing Issues of Renewable Energy Grid Integration through Segregation and Solarisation of Agriculture Feeders <b>Soumya Prakash NAYAK and Roshin THOMAS*</b>	B
FREI	142	Developing Resilient Wind Infrastructure in Uruguay <b>Rosa TARRAGÓ</b>	
15:00 - 16:30 Chair: Dr.Murat ÇAKAN			
WET	239	Innovative Pricing Models for Sustained Growth of Solar Power Sector <b>Shruti SEHGAL</b>	A
WERT	110	Solar Power Satellites for Clean Energy Enabled through Disruptive Technologies <b>Alex ELLERY</b>	
WERT	130	Environmental issues related to electricity exchange between South American countries <b>Ricardo M. e DINATO, Vinícius O. da SILVA*, André L.V. GIMENES and Miguel E.M. UDAETA</b>	
CLOSING AWARD WINNER PAPERS			

**Venue:** LÜTFİ KIRDAR ICEC, located in quartier Harbiye, City: Şişli, Istanbul.

**Hall names:** A: "TOPKAPI A", B: "TOPKAPI B" (<http://www.wec2016istanbul.org.tr/exhibition/venue>)

## 11 OCTOBER Tuesday

### SESSION II: WORLD ENERGY RESOURCES AND TECHNOLOGIES - 1

09:00 - 12:15 <b>Chair: Prof.Dr.Oğuz BORAT</b>			
WERT	140	Coordinated Conservation Voltage Reduction Algorithm for Different Load Model <b>Ahmet ÖNEN</b>	A
	232	Onshore Wind Turbine, Renewable Energy, Wind Turbine, Wind Green Energy, Sustainable Energy <b>Lama S.M. ABUMUAILEQ*, Hanan M. TALEB</b>	
	200	Coal and Coal Related Research and Development Studies in Turkey <b>Mustafa ZIYPAK*, Ferda BAYRAK</b>	
BREAK			
10:45 - 12:15 <b>Chair: Prof.Dr.Oğuz BORAT</b>			
WERT	157	The Effects of Equivalence Ratio and Various Fuels on the Performance and NO of a Spark Ignition (SI) Engine <b>Güven GONCA</b>	A
	064	State of The Art Monitoring CO2 at Krechba Field as a Key Role in a Transition to a Lower Carbon World <b>Zeboudj FAYCAL</b>	
	101	Simulations Provide Training In Underground Coal Mining: Underground Mining Training Simulation <b>Mustafa Onur KAYA</b>	
12:15 - 13:15 LUNCH BREAK			
13:15 - 15:15 <b>Chair: Prof.Dr.Bülent YEŞİLATA</b>			
WERT	121	Energy Audit of Petroleum Oil Terminals <b>Rajesh MOHAN</b>	A
	300	Introduction of Standalone PV Solar Power System in Kota-Jobner MultiProduct Petroleum Pipeline in the State of Rajasthan, India <b>Vishal PALIWAL*, Umesh GAUTAM</b>	
	245	Applied Analysis of Photovoltaic Power Systems in Buildings within the Scope of Energy Efficiency <b>Sercan KESKİNEL, Şermin ONAYGİL</b>	
	211	Energy Efficiency, Investments and Emissions in Natural Gas Sweetening Processes <b>Juan Pablo GUTIERREZ*, Elisa Liliana ALE RUIZ, Eleonora ERDMANN</b>	
BREAK			
15:30 - 17:30 <b>Chair: Prof.Dr.Bülent YEŞİLATA</b>			
WERT	145	The Latvian UGS Potential and Alternative Use of Underground Geological Structures <b>Leo JANSONS*, Namejs ZELTINS, Juris SAVICKIS</b>	A
	055	Biogas Production from Saw Dust using Acti-zyme as Digestion Catalyst and its Upgrading to Bio methane using Chemical Absorption-Revised <b>Musaida M. MANYUCHI, A. E. BOBO, D. I. O. OMOREGBE, O. OYEKOLA</b>	
	077	Integrated Development of Solar Energy along with other Renewable Sources of Energy in India <b>Surendra Pal SHARMA</b>	
	134	Performance Testing and Reliability of Two Pole Magnetic Latching Relays for Smart Meters <b>Anish GARG, Shridhar PANDEY*</b>	

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**11 OCTOBER Tuesday**



**SESSION III: WORLD ENERGY TRILEMMA - 1**

09:00 - 12:15 <b>Chair: Prof.Dr.İsmail EKMEKÇİ</b>			
WET	146	Communal Brigades of Energy Management in the Context of the World Energy Trilemma <b>Yaneth Guarapana REYES, Jesús Manuel Barceló MÁRQUEZ*</b>	B
	194	Regional and National Challenges for the integration of the Western Balkans in the European Energy Union <b>Nikola TOMASOVIC*, Mihailo MIHAIOVIC</b>	
	128	Solar Photovoltaic Development Opportunities in New Regions with a Global Virtuous Circle <b>Hyun Jin Julie YU</b>	
	334	A Study on the Analysis of Wind Measurement Data and Electrical Energy Production Potential <b>İsmail Ekmekçi and Faruk ORAL</b>	
BREAK			
WET	143	Resolving Energy Trilemma by the help of Smart e-Energy Efficiency Management Technologies – Interactive Online Actual Energy Consumption Class map <b>Romanas SAVICKAS</b>	B
	138	Implementation of Novel Technological Infrastructure in the Ecuadorian Electricity Sector towards the Improvement of the Trilemma Index <b>Jaime C. CEPEDA, Linda J. CHIMBORAZO*, Gabriel A. ARGÜELLO</b>	
	271	Peer-country Independent Energy Overall Index: Methodological Suggestion from a MCDA Approach <b>Ana ANDRADE*, Isabel CABRITA</b>	
12:15 - 13:15 LUNCH BREAK			
13:15 - 15:00 <b>Chair: Prof.Dr.Ahmet Dursun ALKAN</b>			
WET	215	India Transits to Clean Energy Economy: Where will the differentiated sustainable path lead to? <b>Debesh PATRA</b>	B
	273	As an Economic Curse: Dutch Disease and Oil Exporter Gulf Countries <b>Ertan TAŞKIRAN</b>	
	210	Virtuous Cycles of Expanding Production and Lower Costs in Renewables Through Economies of Scale: Lessons from the Information Economy <b>Roberto VERZOLA</b>	
	170	Are Long Term Contracts needed for the energy transition? <b>Ibrahim ABADA, G. M. D'AERTRYCKE, Andreas EHRENMANN* and Yves SMEERS</b>	
BREAK			

**SESSION IV: WORLD ENERGY SCENARIOS - 1**

15:15 - 16:45 <b>Chair: Dr. Kemal Gani BAYRAKTAR</b>			
WES	238	Oil Price Scenarios of Next Two Years and OPEC's Reaction <b>Aslı YEL*, Begüm AKCORA</b>	B
	054	Effects of United States LNG advent on European Natural Gas Market and Competition with Russian Export: a Close Look at Baltic Region <b>Javad KEYPOUR*, Alireza PEYMANPAK</b>	
	216	Ultra Long-Term Perspective for Energy Demand Management: Learning from Japan's Historical Experiences <b>Kazutomo IRIE</b>	

**B: Hall "TOPKAPI B", Venue: Lütü Kırđar ICEC, Harbiye, Şiřli, İstanbul.**

## 12 OCTOBER Wednesday

### SESSION V: WORLD ENERGY TRILEMMA - 2



09:00 - 11:00 Chair: Dr. Kemal Gani BAYRAKTAR			
WET	120	Reflections on the German "Energiewende" <b>Juergen F. HAKE, Wolfgang FISCHER, Wilhelm KUCKSHINRICHS*, P. MARKEWITZ, Thomas SCHRÖDER</b>	A
	051	Water Management is the Challenger for E&P in Argentina <b>Gustavo Fabian ACOSTA</b>	
	331	Sub-Saharan Africa: Electricity Infrastructure for Social Development of the Region <b>Alessandro CLERICI*, Vincenzo ASCERI, Francesco BEGNIS</b>	
	218	Green Human Resource Management: A Paradigm Shift in HR Practices of Indian Power Sector in Context with Paris Climate Summit 2015 <b>Gireesh Chandra TRIPATHI, Anoop KUMAR*</b>	
BREAK			
11:15 - 13:15 Chair: Dr. Kemal Gani BAYRAKTAR			
WET	182	Introducing Distributed Energy Systems – Flexible and Efficient Power for the New Energy Era <b>Maria BRUCOLI and Michael STEVNS*</b>	A
	325	Evolving Market Design Understanding the Role of Demand Response and Ancillary Services as a Power System Resource <b>Rohan BADALA</b>	
	159	Environmental Impacts of Coal Mining Activities in Turkey and Their Contribution in Electricity Generation <b>Ferda BAYRAK*, Hatice BAŞARANOĞLU, Alev Tansu TAKMAZ</b>	
	298	Power Deal of Canada & US Assessment Seeking a Brazilian Model for Energy Integration in South America <b>Diogo M.C. FARIA, Vinícius O. da SILVA*, Miguel E.M. UDAETA, Antonio C. ABREU JUNIOR, Andre L.V. GIMENESA and José A.B. GRIMONI</b>	
13:15 - 14:00 LUNCH BREAK			

### SESSION VI: FINANCING RESILIENT ENERGY INFRASTRUCTURE

09:00 - 11:00 Chair: Prof. Dr. Beril TUĞRUL			
FREI	254	Best Practices to Increase Cyber Resilience of Smart Electricity Grid with Focus on Advance Metering and Distribution Infrastructure <b>Babu Ram</b>	B
	147	Water-Energy-Food Nexus in the GCC Countries <b>Mohammed DARWISH, Hassan ABDELRAHIM, Sayeed MOHAMMED</b>	
	333	Opportunities and Challenges of Smart Metering Implementation Projects <b>Alessandro BERTANI*, Claudio CATTANEO, Marco Giacomo GOBBI</b>	
	236	Title: Financing resilient energy infrastructure in rapidly developing economies: Can the Paris Agreement leverage low-carbon investment? <b>Luigi Carafa</b>	
	152	The Great Energy Transition: Financing a Clean, Green Future <b>Kirk EDELMAN, Howard GOODER,*</b>	

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## 12 OCTOBER Wednesday

### SESSION VI: FINANCING RESILIENT ENERGY INFRASTRUCTURE (cont.)

<b>11:00 - 13:00 Chair: Prof. Dr. Beril TUĞRUL</b>			
FREI	131	Energy Productivity Estimation in the Economy of the Common Market of South America <b>Henrique CALOGERAS, Vinícius Oliveira Da SILVA*, Miguel Edgar Morales UDAETA</b>	B
	086	Water-Energy Nexus: An Assessment of Climate Change Related Risks on Selected Thermal Power Plants <b>M. Kemal DEMİRKOL, Mücahit SAV, Zafer ÇİÇEK, Erdem ERGİN, Edward BYERS, Zeren E. YAŞAR, Arif Cem GÜNDOĞAN</b>	
	280	Regulatory Assessment in the Consolidation of PV Solar Energy in Brazil Considering Legal and Tax Incentives <b>Daniel da S. TAVEIRA, Stefania G. RELVA, Vinícius O. da SILVA*, Jose A.B. GRIMONI, André L.V. GIMENES, Miguel E.M. UDAETA</b>	
	116	From Food to Energy: A Bridge from the Milano EXPO 2015 to the Astana EXPO 2017 <b>Gianluca ALIMONTI, Riccardo BRAMBILLA, Rosaria PILECI, Riccardo ROMANO*, Francesca ROSA, Luca SPINICCI</b>	
<b>13:15 LUNCH BREAK</b>			

## 12 OCTOBER Wednesday

### SESSION VII: WORLD ENERGY SCENARIOS - 2

<b>14:00 - 15:00 Chair: Dr. Cenk SEVİM</b>			
WES	275	Enhancement of a Grid Connected PV Distributed System with Maximum Penetration - Case Study: 10 MWp PV Plant Located West Kuwait <b>Heba Mohammed ABDULLAH*, Rashad M. KAMEL, M. EL SAYED</b>	A
	247	What if... Discussing the Effects of the Paris Agreement on the Energy Markets <b>Michele STUA*, Colin NOLDEN, Alessandro COSTA*</b>	
	056	What If Conventional Energy Business and Renewable Energy Business Work Together, Rather Than Competing Each Other.. <b>Haluk ÖZGÜN</b>	
<b>BREAK</b>			

Halls: A: "TOPKAPI A", B: "TOPKAPI B", Venue: Lütü Kırđar ICEC, Harbiye, Şiřli, İstanbul.



## 12 OCTOBER Wednesday

### SESSION VIII: WORLD ENERGY RESOURCES AND TECHNOLOGIES - 2

15:15 - 18:15 Chair: Doç.Dr. Fehmi AKGÜN			
WERT	168	Turkish Coal Briquette Research Studies In Turkey <b>Alican VATANSEVER*</b> , Hacer DOĞAN, Murat KORAL, Zeki OLGUN, Mustafa ZİYPAK	A
	281	External Analysis of the Smart Devices Possibilities in the NAFTA Bulk Power Transmission <b>Hermon LEAL, Vinícius da SILVA*</b> , Stefani G. RELVA, José GRIMONI, Miguel UDAETA, Luiz GALVÃO	
	228	Gasification Study of Soma Coal in a Fluidized Bed Reactor <b>Ayse TARAKÇIOĞLU, Tülay DURUSOY, Mustafa ZİYPAK*</b> , Zeki OLGUN, Abdullah AKÇA	
	226	Conversion to Renewable Energy of Coal Slurry using Plasma Gasification Method <b>Beycan İBRAHİMOĞLU, Çiğdem KANBEŞ DINDAR, Hazal EROL, Salih KARASARI</b>	
	240	Implementation of Plasma Technology to Fossil Fuels <b>Beycan İBRAHİMOĞLU, Mustafa AKTAŞ, Besim ŞİŞMAN, Mustafa ÖZDİNGİŞ, İbrahim İBRAHİMOĞLU, Çiğdem KANBEŞ DINDAR</b>	

### SESSION IX: WORLD ENERGY RESOURCES AND TECHNOLOGIES - 3

14:15 - 16:15 Chair: Doç.Dr. Sibel BAŞAKÇILARDAN KABAKÇI			
WERT	139	Renewables Deployment in the Power Sector of the European Union - Successes and Challenges <b>Hans Wilhelm SCHIFFER</b>	B
	284	Energy Security Dilemma of Turkey in The Context of Domestic Coal Policies <b>Metin AKTAN</b>	
	033	The Dependence over Strategic Materials in Renewable Energies and Energy Efficiency: A New Energy Security Issue <b>Nicolas MAZZUCCHI</b>	
	203	Off to New Frontiers: Latest Gas Turbine Power Plant Technology Drives Environmental Friendly, Resource-saving, Affordable and Reliable Power Generation <b>Gero MEINECKE, Lothar BALLING, Zafer GÜRSOY*</b>	
BREAK			
16:30 - 18:30 Chair: Doç.Dr. Sibel BAŞAKÇILARDAN KABAKÇI			
WERT	080	Is it Possible to Reduce Dependence on Natural Gas by Using Low Calorie Local Lignite? Turkey Case Study <b>Osman TÜRKMEN*</b> , Birgül TÜRKMEN	B
	330	The impact of Variable Renewable Energy Sources on the Italian Power System <b>Alessandro CLERICI*</b> , Daniele DAMINELLI, Simone PASQUINI	
	268	Biological Hydrogen Fuel: Let's Re-Fuel Future with an Eco-Elegant Fuel <b>Tanvi RAJPUT*</b> , Munish SHARMA	
	322	For an energy-efficient Oil & Gas industry in Algeria: Exploring the "hidden fuel" <b>Djallal BOUCHENEB</b>	

#### CLOSING RESEARCH PAPER PRESENTATIONS

Halls: A: "TOPKAPI A", B: "TOPKAPI B", Venue: Lütfi Kırdar ICEC, Harbiye, Şişli, Istanbul.