

CONFERENCE PROGRAM

Monday - April 22, 2019 (Ibn Khaldoun Hall, Qatar University)

7:00-8:00

Transportation from a) Retaj Al Rayyan Hotel and b) Ezdan Hotel to Qatar University

8:00-9:00

Conference Registration & Welcoming Coffee

Opening Ceremony - 8th Global Conference on Global Warming - 2019

Ibn Khaldoun Hall

Opening Ceremony

Welcoming Remarks

Dr. Hassan Al Derham, *President of Qatar University*

Prof. Ibrahim Dincer, *Founding Chair*

Dr. Omar Boukhris, *Qatar National Research Fund*

9:00 -10:00

10:00-10:15

Coffee Break

Plenary Session I

Ibn Khaldoun Hall

Keynote Talks

Session Chair: Majeda Khraisheh

Prof. Feridun Hamdullahpur (*President, University of Waterloo, Canada*)

"Renewable Energy, Climate Change and Society Triangle: Can Technology Answer All Questions?"

Prof. Ibrahim Dincer (*Founding Chair of GCGW, University of Ontario Institute of Technology, Canada*)

"Energy Storage Systems for Better Environment and Sustainability"

Dr. Wei HUANG (*Director, Department of Nuclear Energy, Vienna International Centre, Austria*)

"Climate Change and the Role of Nuclear Energy"

10:15 - 12:30

12:30-13:45

Lunch

Plenary Session II	
14:00 - 15:30	Ibn Khaldoun Hall
	Keynote Talks Session Chair: Rajesh Shende
	Prof. Ganapati D. Yadav (Vice Chancellor, Institute of Chemical Technology, India) "Sustainability through Catalytic Conversion of Waste Biomass and CO ₂ into Value Added Chemicals, Materials and Energy"
	Prof. Ram B. Gupta (Associate Dean for Research, Virginia Commonwealth University, USA) "Clean Energy for a Growing and Prospering World"
16:00-17:00 Transportation from Qatar University to a) Retaj Al Rayyan Hotel and b) Ezdan Hotel	

Tuesday - April 23, 2019 (Intercontinental Doha - The City, West Bay)

8:00-8:30

Transportation from a) Retaj Al Rayyan Hotel and b) Ezdan Hotel to Intercontinental Doha - The City

8:30-12:30

Conference Registration

Tuesday - April 23, 2019

Parallel Sessions-1

	ROOM - AI JAWHARA-1	ROOM - AI JAWHARA-2	ROOM - AI JAWHARA-3
	Environmental Issues-I Session Chairs: Abdulaziz Atabani & Yusuf Bicer	Energy Storage and Management-I Session Chairs: Onder Kizilkan & Abdul Shakoore	Alternative Energy Sources Session Chairs: Ram Gupta & Essa Al-Musleh
9:00-10:30	#OP-228 (9:00 - 9:15): "University Health Sciences Students' Understandings, Practices and Ideas about Environmental Education and Carbon Footprint in Turkey" <u>Nurhan Unusan</u>	#OP-216 (9:00 - 9:15): "Greening of the Athens Tram using guarantees of origin (GOs) from Renewable Energy Sources" <u>Konstantinos Christodoulos Gkarakis, Georgia Stylianos Orfanaki</u>	#OP-232 (9:00 - 9:15): "Analysis of a Solar Assisted Organic Rankine Cycle Using CO ₂ for Power and Heat Generation" <u>Onder Kizilkan, Haruhiko Yamasaki, Takashi Horino, Hiroshi Yamaguchi</u>
	#OP-103 (9:15 - 9:30): "Physiochemical characterization and thermal kinetics of lignin recovered from sustainable agrowaste" <u>Gazliya Nazimudheen, Nimmi C Sekhar, Aparna Kallingal</u>	#OP-190 (9:15 - 9:30): "Thermal energy storage in encapsulated phase change material: A cleaner energy storage approach" <u>Nirali Tulsidas Dudhreji, Ram Kishore Singh, Adepu Kiran Kumar, Reshma Lalbihari Patel, Arti Nanak Pamnani</u>	#OP-27 (9:15 - 9:30): "Thermal analysis of a multigeneration system using geothermal energy as its main power source" <u>Sameer Adnan Ansari, Mohammad Kazim, Muhammad Areeb Khaliq, Tahir Abdul Hussain Ratlamwala</u>
	#OP-146 (9:30 - 9:45): "An investigation to identify fundamental characteristics of gases to determine their impact on atmospheric anomalies, liquids, and solids" <u>Paul somerville</u>	#OP-217 (9:30 - 9:45): "Greek System of Guarantees of Origin" <u>Konstantinos Christodoulos Gkarakis, Georgia Stylianos Orfanaki</u>	#OP-253 (9:30 - 9:45): "Thermodynamic and Environmental Impact Analyses of Hydrogen Powered Car Run by Wind Turbine" <u>Onur Oruc, Ibrahim Dincer</u>
	#OP-257 (9:45 - 10:00): "Fusing the Physical and the Digital across Disciplines to Elevate Citizens to the Center of the Circular Economy" <u>Hossein Shahrokni, Aram Mäktivierikko, Kent Norlenius</u>	#OP-242 (9:45 - 10:00): "Smart Energy Management System [SEMS]: Computational Technology Applications" <u>Mahmoud Alsaeed, Fodil Fadli</u>	#OP-214 (9:45 - 10:00): "Design of a Hybrid Solar-Wind Water Pump" <u>Zaid Hasan Murad, Ibrahim Hamdi Elmegabar, Omar Ashraf Adlan, Jyohan Narayan Joglekar, Abdelrahman Mohamed Ahmed, Adel Gastli, Sadok Sassi, Lazhar Ben Brahim</u>
	#OP-231 (10:00 - 10:15): "Analysis of Waste Management with Municipal Solid Waste Incineration Plant" <u>Merve Ozturk, Ibrahim Dincer</u>	#OP-208 (10:00 - 10:15): "Potential Application of Waste Hot Gases from Steel Manufacturing Industries in Qatar" <u>Mehzabeen Mannan, Yusuf Bicer, Sami G. Al Ghamdi</u>	#OP-53 (10:00 - 10:15): "Saudi Arabia and the Emirates' Quest for Nuclear Energy" <u>Mehran Haghirian</u>
	#OP-209 (10:15 - 10:30): " Modeling impacts of alternative management practices on soil organic carbon under no-tillage system in Morocco using DNDC Model" <u>Ibtissame Lembaid, Rachid Moussadek, Rachid Lmrabet, Ahmed Douaik, Ahmed Bouhaouss</u>	#OP-97 (10:15 - 10:30): "Lithium-Ion Battery SOC/SOH Parameter Adaptive Estimation via Simplified Single Particle Model" <u>Zhaohui Cen, Pierrie Kubiak</u>	#OP-261 (10:15 - 10:30): "Maritime Spatial Planning of Northern Aegean Sea with Regard to Offshore Wind Energy" <u>Tugsan Arife Isiacik Colak, Cigdem Goksel, Cem Gazioglu, Cengizhan Ipbuker</u>

10:30-11:00

Coffee Break and Poster Session

Poster Session-1 (Foyer Area)

Judges: Rajesh Shende & Konstantinos Kakosimos

10:30-11:00

- #PP-1:** "Kinetic Modeling of Methane-Driven Reduction of Ceria" *Kent John Warren, Jonathan R. Scheffe*
- #PP-5:** "Studying the Relation between the Engine Size and Manufacturing Year of Gasoline-Fueled Vehicles and Exhaust Emission Percentages and Concentrations" *Shamil Ahmed Flamarz*
- #PP-7:** "A Montmorillonite Clay as an Efficient and Green Catalyst for Polyether Synthesis (Environment-Friendly Solid Catalyst)" *Habiba Belbekiri*
- #PP-8:** "Study of operation disinfection tanks using numerical simulation" *Sabri Dairi, Dounia Mrad, Sofiane Boukhari, Yassine Djebbar*
- #PP-10:** "Investigating the effect of the air inlet temperature on the combustion characteristics of a spark ignition engine fueled by Biogas" *Mohamed. A. Bassiony, A. E. Ebrahemi, S. F. Ahmed*
- #PP-13:** "Study of Radioactivity and Measurement of Absorption Coefficient of Gamma Rays For Alanine" *Haqi Ismail Shareef*
- #PP-14:** "Sulfur-based Redox Flow Battery for Energy Storage Applications" *Ahmed Sodiq, Fathima Fasmin, Sabah Mariyam, Muthumeenal Arunachalam, Belabbes Merzougui*
- #PP-49:** "Facile Synthesis of CuO@Binary Metal Oxides for Catalytic Oxidation of Carbon Monoxide" *Aya Abdirazaq Ali, Yahia Ahmad, Assem Mohamed, Siham Al Qaradawi*
- #PP-17:** "Conductive functionalization of carbon nanotube (CNT) with iron and nitrogen precursors: Computational characterization" *Sun Hee Yoon, Choongho Yu, Hyunwoong Park, Nimir Elbashir, Dong Suk Han*
- #PP-93:** "Solid sorbents for trace CO₂ removal from natural gas" *Majeda Khraisheh, Jamileh Fouladi, Fares Almomani*
- #PP-94:** "Advanced physisorbent material for the removal of trace levels of carbon dioxide (CO₂) from methane (CH₄)" *Majeda Khraisheh, Amrit Kumar, Jamileh Fouladi, Fares Almomani, Gavin Walker, Michael Zaworotko*
- #PP-95:** "Development of a reusable demulsifier system for oil recovery process" *Wamda Faisal Elmobarak, Fares Almomani*
- #PP-97:** "Copper removal from aqueous solution by different biosorbents: new approach" *Norhan Asharf, Fares Almomani*
- #PP-77:** "Solar Thermochemical Conversion of H₂O/CO₂ via zinc oxide based H₂O/CO₂ Splitting Process" *Rahul Bhosale, Suliman Rashid*
- #PP-62:** "Development of Novel Imines and Schiff Bases for detection of Cyanide and Zinc and Aluminum Ions" *Christian Arro, Yousef Hijji*
- #PP-69:** "Influence of water quality on the electrochemical behavior of a carbon steel used in the combustion chamber of boilers of a petroleum complex" *Nadia Hammouda*
- #PP-81:** "Thermal and Exergy Analysis of Concentric Parabolic Solar Collector" *Gorakshnath Takalkar, Rahul Bhosale*
- #PP-38:** "Bioconversion of cellulosic rich macroalgae as suitable substrate for cost effective biopolymer production through novel chaotrope aid homogenization" *Gopalakrishnan Kumar, Rajeshbanu Jeyakumar, Yukeshkannah Raju, Kavitha Selvi, Schikiran Mukundan, Gunasekaran Mukunt*

Tuesday - April 23, 2019

Parallel Sessions-2

	ROOM - AI JAWHARA-1	ROOM - AI JAWHARA-2	ROOM - AI JAWHARA-3
	Climate Change, Invention and Innovation-I Session Chairs: Wei Huang & Krishna Kumar Kanikicharla	Waste Heat Recovery and Electrical Vehicles Session Chairs: Nusara Sinbuathong & Ramazan Kahraman	Greenhouse Gases and Air Pollution Session Chairs: Amr Henni & Majeda Khraisheh
11:00-12:30	#OP-13 (11:00 - 11:15): "Climate change and water resources in Essaoouira basin (Morocco)" <u>Mohammed Bahir, Driss Ouazar, Salah Ouhamdouch, Otman El Mountassir</u>	#OP-174 (11:00 - 11:15): "Evaluation of GaSb cells used in waste heat recovery systems in terms of energetic and exergetic modelling" <u>Zafer Utlu, Arif Karabuga, Elif Altıntaş</u>	#OP-111 (11:00 - 11:15): "Determination of Carbon Footprint of Turkish transportation system" <u>Can Coskun, Zuhul Oktay Coskun</u>
	#OP-7 (11:15 - 11:30): "Exploring the Interdependence of Tropospheric Trace Gases over Pakistan through Impulse Response Function Analysis" <u>Naila Zeb, Muhammad Fahim Khokhar, Saud Ahmed Khan</u>	#OP-169 (11:15 - 11:30): "Heat Exchanger Network Design of an Organic Rankine Cycle System Utilizing Waste Heat of a Marine Vessel Using Pinch Point Technology" <u>Olgun Konur, Suleyman Aykut Korkmaz, Anil Erdogan, Can Ozgur Colpan, Omur Yasar Saatcioglu</u>	#OP-23 (11:15 - 11:30): "Comprehensive analysis of aerosol composition and movement across the Arabian Peninsula from 2005-2015" <u>Dillan Raymond Roshan, Christos Fountoukis, Muammer Koc, Rima Isaifan</u>
	#OP-200 (11:30 - 11:45): "An experimental evaluation of indirect direct evaporative cooling unit for hot climate" <u>Bourhan Tashtoush, Nelson Chilengwe, Mohammad Musthafa, Yousef Al Horr</u>	#OP-179 (11:30 - 11:45): "Real-Time Optimal Energy Management for Hybrid and Plug-in Hybrid Electric Vehicles" <u>Jian Dong, Zuomin Dong, Curran Crawford</u>	#OP-34 (11:30 - 11:45): "Mathematical Modelling of Urban Transport Air Pollution" <u>Aouachria Zeroual, Haddad Louiza</u>
	#OP-82 (11:45 - 12:00): "Economic Growth, CH ₄ and N ₂ O Emissions in Sudan: Empirical Evidences for Climate Change Policy" <u>Elwasila Saeed Elamin Mohamed</u>	#OP-223 (11:45 - 12:00): "Performance comparison of closed Brayton cycle and transcritical organic Rankine cycle (ORC) for waste heat recovery" <u>Onder Kizilkan</u>	#OP-41 (11:45 - 12:00): "A technological overview of anaerobic biofilm digester for reduction of greenhouse gas emission and energy efficiency in Malaysia municipal solid waste management" <u>Suja Fatimah, Yusof Arij, Pramanik Sagor, Abdul Rahman Rakmi, Porhmemmat Mojtaba</u>
	#OP-210 (12:00 - 12:15): "Environmental impact assessment of a Nitrogenous fertilizer (CAN 27%N) production in the Algerian plant" <u>Ali Makhoulouf, Gaetana Quaranta, Ramdane Kardache, Raouf Chaabia</u>	#OP-170 (12:00 - 12:15): "Design and simulation of a N1 class range-extended electric light-duty vehicle" <u>Mustafa Umut Karaoğlan, Halil Namlı, Can Ozgur Colpan, Nusret Sefa Kuralay</u>	#OP-43 (12:00 - 12:15): "Mitigation of NO _x emission by monophenolic antioxidants on performances and emissions of a single cylinder diesel engine fuelled with POME biodiesel blends" <u>Anes G Mrwan, Mohd. Hafiz Ali, Mohd. Kamal Kamaruzzaman, Mohd. Fahmi Othman, Abdullah Adam</u>
#OP-221 (12:15 - 12:30): "Comparison of ecosystem respiration response to soil temperature of two ecosystems on the Tibetan Plateau" <u>Mingyuan Du, Yingnian Li, Fawei Zhang, Liang Zhao, Xianzhou Zhang, Yongtao He, Ben Niu, Song Gu, Seiichiro Yonemura, Yanhong Tang</u>	#OP-175 (12:15 - 12:30): "Theoretical and experimental comparison of data of thermophotovoltaic GaInAsSb cells in high temperature waste heat systems" <u>Zafer Utlu</u>	#OP-95 (12:15 - 12:30): "Particulate matter characterization, sources and mitigation in Qatar" <u>Rima Isaifan, Mohammed Ayoub</u>	
12:30-13:45 Lunch (The Bridge, Intercontinental Doha - The City, West Bay)			

Tuesday - April 23, 2019			
Parallel Sessions-3			
	ROOM - AI JAWHARA-1	ROOM - AI JAWHARA-2	ROOM - AI JAWHARA-3
	<p>Oil & Gas Session Chairs: Bourhan Mohammad Tashtoush & Faris Tarlochan</p>	<p>Energy Efficiency Session Chairs: Shaheen AlMuhtaseb & Fadwa Eljack</p>	<p>Hydrogen Production and Storage Session Chairs: Rajesh Shende & C. S. Mathpati</p>
14:00 - 15:30	<p>#OP-247 (14:00 - 14:15): "On the global stability and unrest resulting from fossil fuel consumption: a case study for Qatar" <i>Adnan Midilli, Ugur Akbulut</i></p>	<p>#OP-37 (14:00 - 14:15): "Role of Renewable in reducing the costs related to Energy Efficiency" <i>Athar Kamal, Muammer Koc, Sami G Al Ghamdi</i></p>	<p>#OP-255 (14:00 - 14:30): "Hydrogen and biofuels - addressing key technology challenges" <i>Rajesh Shende, Vinod S Amar, Anuradha R Shende, Abdulmenan M Hussein, Joseph Houck, Bharathkiran Maddipudi (Invited Talk)</i></p>
	<p>#OP-49 (14:15 - 14:30): "Technical assessment of power production using SOFC and LNG for non-interconnected island cases" <i>Christos Samlis, Konstantina Manou, Konstantinos Atsonios, Aris Nikolopoulos, Konstantinos Sfetsioris, Adamis Mitsotakis, Panagiotis Grammelis</i></p>	<p>#OP-268 (14:15 - 14:30): "Sustainability Assessment Study of Ontario's Energy Sector" <i>Azzam Abu Rayash</i></p>	<p>#OP-5 (14:30 - 14:45): "An independent investigation to determine the best processes for releasing and storing hydrogen" <i>Paul Somerville</i></p>
	<p>#OP-166 (14:30 - 14:45): "Plausible Source of Water from Gas Fired Power Plants in Qatar" <i>Ahmed Yasir, Fadwa Eljack, Monzure Khoda Kazi</i></p>	<p>#OP-25 (14:30 - 14:45): "Towards Domestic Energy Efficiency: Using Micro-Moments for Personalized Behavior Change Recommendations" <i>Abdullah Alsalemi, Christos Sardianos, Faycal Bensaali, Iraklis Varlamis, Abbes Amira, George Dimitrakopoulos</i></p>	<p>#OP-98 (14:45 - 15:00): "Hydrogen production over iron-doped industrial nickel catalyst via methane steam reforming" <i>Salhi Nassima, Boudjeloud Meriem, Boulahouache Ali, Trari Mohamed</i></p>
	<p>#OP-120 (14:45 - 15:00): "Effect of water cuts on methane hydrate formation and dissociation in the gas dominated system" <i>M. Fahed Qureshi, Majeda Khraisheh, Fares Almomani, Rahul Bhosale</i></p>	<p>#OP-140 (14:45 - 15:00): "Evaluation of Power-to-X Technologies in US Energy System Futures" <i>Bernd Thomas, Joseph De Carolis</i></p>	<p>#OP-116 (15:00 - 15:15): "DRM+COSORB process for high H₂/CO syngas production" <i>Shaik Afzal, Debalina Sengupta, Mahmoud El Halwagi, Nimir Elbashir</i></p>
	<p>#OP-222 (15:00 - 15:15): "Present And Future Of Flue Gas Emission Reduction Technologies Related To Fossil Power Generation" <i>Sefa Yalçın, Al Er Konukman, Adnan Midilli</i></p>	<p>#OP-153 (15:00 - 15:15): "Energy Consumption and Conservation in QATAR" <i>Fedaa Ali, Moncef Krarti</i></p>	<p>#OP-262 (15:15 - 15:30): "Investigation of a New Integrated System for Combined Heat, Power, Hydrogen, and Methanol Production" <i>Canan Acar, Ibrahim Dincer</i></p>
	<p>#OP-224 (15:15 - 15:30): "Development of an Efficient High Power 5-Phase-5-Level Electric Drive System for LNG Plants" <i>Ezelddeen Abdulla Shehadeh, Adel Gastli, Lazhar Ben Brahim</i></p>	<p>#OP-260 (15:15 - 15:30): "Adaptive Optimization Search Tool for Smart Distribution System in Smart Grid" <i>Adel Younis, Zuomin Dong</i></p>	

15:30-16:00

Coffee Break and Poster Session

Poster Session-2 (Foyer Area)

Judges: C. S. Mathpati & Shaheen AlMuhtaseb

15:30-16:00

- #PP-18:** "Low Cost Anion Exchange Membranes Based on Poly Aryl Phosphonium Ionomer for Energy Conversion and Storage Devices" *Muthumeenal Arunachalam, Belabbes Merzougui, Stephen E Creager, Rhett Smith, Rachid Zaffou, Ahmed Sodiq, Ruhul Amin, Fathima Fasmin, Ramesh Kumar Petla, Sabah Mariyam*
- #PP-20:** "The importance of mitigation policies in the reduction of particulate matter emissions from diesel vehicles in Qatar" *Hanadi Ghanim Al Thani, Muammer Koc, Rima J. Isaifan*
- #PP-24:** "Microwave treatment of industrial waste waters - the compost biochar/ clay activation as sorbent" *Yıldırım İsmail Tosun*
- #PP-25:** "Novel Power Cycle study with Experimental Validation of Multi-Composition Ammonia Liquor Absorption Engine (MALAE) for use of low pressure solar steam for power generation" *Satchidanand Ramdasji Satpute*
- #PP-26:** "Assessment of climate change impact on coastal aquifers under semi-arid climate from Morocco" *Abdelmalek Goumih, Driss Ouazar, Mohammed Bahir, Salah Ouhamdouch*
- #PP-27:** "Comparative study of solid oxide fuel cell combined the sinusoidal and single flow fields: numerical study" *Sabrina Horr, Hocine Mohcene*
- #PP-29:** "Modeling and simulation of forward osmosis process for the treatment of wastewater using Aspen Plus-MATLAB model" *Ahmed Alnouss, Mona Gulied, Majeda Khraisheh, Fares Almomani*
- #PP-33:** "Electrochemical oxidation of ammonia (NH₄⁺/NH₃) on synthesized nickel-cobalt oxide catalyst" *Fares Almomani, Mohammed Ali H Salah Saad*
- #PP-34:** "A process Integration approach for a sustainable Dry Reforming within a GTL process" *Mohamed Sufiyan Challiwala, Shaik Afzal, Mahmoud El Halwagi, Nimir Elbashir*
- #PP-37:** "Hydrogen peroxide mediated biological liquefaction of dairy waste activated sludge for profitable biohydrogen production" *Gopalakrishnan Kumar, Rajeshbanu Jeyakumar, Preethi Muthu, Kavitha Selvi, Yukeshkannah Raju, Gunasekaran Mukunt*
- #PP-78:** "Estimation of the solar-to-fuel energy conversion efficiency of the ferrite based two-step thermochemical H₂O splitting cycle" *Rahul Bhosale, Suliman Rashid*
- #PP-79:** "Metal oxide based solar-driven CO₂ splitting process: Thermodynamic analysis" *Rahul Bhosale, Suliman Rashid*
- #PP-88:** "Bioethanol Production from Dates-Refuse: Simulation Study for UAE" *Muhammad Tawalbeh, Amani Al Othman, Karim El Ahwal, Bassam El Taher*
- #PP-89:** "Experimental study of an isobaric expansion engine-pump" *Alexander Kronberg, Maxim Glushenkov, Rahul Bhosale, Gorakshanath Takalkar*
- #PP-96:** "Laboratory evaluation of fractional distillation products of sudanese crude oils" *Wamda Faisal Elmobarak, Fares Almomani*
- #PP-92:** "Conceptual Process Design and Economic Analysis of MEG Recovery System Based on sequential salt precipitation and vacuum distillation" *Asmaa Othman, Fares Almomani, Majeda Khraisheh, Saad Ali Al Sobhi, Ahmed Alnous*
- #PP-41:** "Microwave combined H₂O₂ pretreatment of marine macroalgae under alkaline conditions for hydrogen production" *Gopalakrishnan Kumar, Rajeshbanu Jeyakumar, Dinesh Kumar Muthu, Yukeshkannah Raju*
- #PP-99:** "Synthesis of Zn-Mn based magnetic nanoparticles for H₂ generation" *Vinod S Amar, Rajesh V Shende*

Tuesday - April 23, 2019

Parallel Sessions-4

	ROOM - AI JAWHARA-1	ROOM - AI JAWHARA-2	ROOM - AI JAWHARA-3
	Energy and Exergy Analysis-I Session Chairs: Siham Alqaradawi & Anand Kumar	Global Warming Session Chair: Can Ozgur Colpan & Mohammed Al-Odat	Biomass and Biofuels-I Session Chair: Gopalakrishnan Kumar & Ram Gupta
16:00-18:00	#OP-186 (16:00 - 16:15): "Exergy-based model predictive control for HVAC systems" <u>Tatiana Morosuk</u> , <u>Saeed Sayadi</u> , <u>George Tsatsaronis</u>	#OP-226 (16:00 - 16:15): "Determination of the Turkey Global Warming Map" <u>Can Coskun</u> , <u>Mustafa Erturk</u> , <u>Erol Aracakli</u> , <u>Zuhal Oktay Coskun</u>	#OP-276 (16:00 - 16:30): "Biomass valorization to chemicals and fuels via bio-refinery paradigm" <u>Gopalakrishnan Kumar</u> (Invited Talk)
	#OP-188 (16:15 - 16:30): "Thermodynamic investigation of a cogeneration system: a combination of concentrated PV/Thermal and an adsorption refrigeration system" <u>Nitin D. Banker</u> , <u>Rohit Pilligundla</u> , <u>Harshil Negi</u> , <u>Bhanu Prakash Reddy Bysani</u> , <u>Harender Sinhmar</u>	#OP-10 (16:15 - 16:30): "Long-term spatio-temporal warming tendency in the Vietnamese Mekong Delta based on observed and high-resolution gridded datasets" <u>Dang Nguyen Dong Phuong</u> , <u>Tran Thong Nhat</u> , <u>Nguyen Kim Loi</u>	#OP-138 (16:30 - 16:45): "Valorisation of lignin by fungal sources" <u>Sirisha Pamidipati</u> , <u>Asma Ahmed</u>
	#OP-263 (16:30 - 16:45): "Analysis of an Ocean Current Energy Based Cogenerational System" <u>Fatih Sorqulu</u> , <u>Ibrahim Dincer</u>	#OP-31 (16:30 - 16:45): "The Severe Impacts of Global Warming" <u>Taha Hussein Al Salim</u>	#OP-21 (16:45 - 17:00): "Biomass Gasification using Dual Fluidized Bed Gasification Systems: A Review" <u>Naresh Dattatray Hanchate</u> , <u>Sudha Ramani</u> , <u>Channamallikarjun S Mathpati</u>
	#OP-105 (16:45 - 17:00): "Thermodynamic modeling and analysis of a combined heat and power system" <u>Michael Jibolu Adedeji</u> , <u>Humphrey Hugh Adun</u> , <u>David Pomile Alao</u> , <u>Muhammad Abid</u>	#OP-33 (16:45 - 17:00): "Uncertainty in determining the global temperature change over last century from recorded data" <u>Mohammed Anwer</u>	#OP-258 (17:00 - 17:15): "CO ₂ assisted hydrothermal processing of lignocellulosic biomass in the presence BTMO nanoparticles" <u>Vinod S Amar</u> , <u>Anuradha Shende</u> , <u>Rajesh V Shende</u>
	#OP-204 (17:00 - 17:15): "Development and Analysis (Energetic and Exergetic) of a Geothermal Based Multi Generation System" <u>Tahir Abdul Hussain Ratlamwala</u> , <u>Ahmed Ali Tahir</u> , <u>Muhammad Haider Raza Zaidi</u> , <u>Mehdi Hassan</u> , <u>Syed Zaghum Ali Naqvi</u>	#OP-55 (17:00 - 17:15): "The Role of Gulf Educational Institutions in the Face of Global Warming: A Proposed Concept" <u>Abdulnaser Abdurraheem Fakhrou</u>	#OP-29 (17:15 - 17:30): "Enhancement of methane yield from digestion of sunn hemp using sodium hydroxide pretreatment" <u>Nusara Sinbuathong</u> , <u>Boonsong Sillapacharoenkul</u>
	#OP-195 (17:15 - 17:30): "Exergy-based evaluation of a tri-generation system with CO ₂ as the working fluid" <u>Tatiana Morosuk</u> , <u>Jing Luo</u> , <u>George Tsatsaronis</u> , <u>Bourhan Tashtoush</u>	#OP-163 (17:15 - 17:30): "Do we have already hit the tipping point? Global warming and crop productivity in Pakistan" <u>M. Fahim Khokhar</u> , <u>Fatimah Mahmood</u> , <u>Yousaf Jamal</u>	#OP-240 (17:30 - 17:45): "Energy Recovery Analysis during Production of Biohythane and Biomethane from Organic Waste" <u>Kubra Sorqulu</u> , <u>Hulya Civelek Yoruklu</u> , <u>Emre Oguz Koroglu</u> , <u>Bestami Ozkaya</u> , <u>Ahmet Demir</u>
	#OP-256 (17:30 - 17:45): "Towards cleaner and sustainable manufacturing processes: a framework" <u>Hossam A Kishawy</u> , <u>Hussien Hegab</u> , <u>Ali Hosseini</u> , <u>Elsadig Saad</u>	#OP-225 (17:30 - 17:45): "Global Warming Aspects of A Digester Integrated SOFC System" <u>Selcuk Inac</u> , <u>Bsalih Ozen Unverdi</u> , <u>Adnan Midilli</u>	#OP-109 (17:45 - 18:00): "Integrated Multigeneration System for Clean Biodiesel and Methanol Production from Waste Water Sludge" <u>Moiz Maroof Ali</u> , <u>Farrukh Khalid</u> , <u>Yusuf Bicer</u>
	#OP-61 (17:45 - 18:00): "Power Sources Sizing Optimization for Fuel Cell Hybrid Vehicles" <u>Hani Sadek</u> , <u>Riad Chedid</u> , <u>Dima Fares</u>	#OP-40 (17:45 - 18:00): "Energy and exergy analysis of thermal vapor compression (TVC) and absorption vapor compression (AVC) for multi effect desalination (MED) plants" <u>Furqan Tahir</u> , <u>Abdelhasser Mabrouk</u> , <u>Muammer Koc</u>	
18:15-18:45			
Transportation from Intercontinental Hotel to a) Retaj Al Rayyan Hotel and b) Ezdan Hotel			

Wednesday - April 24, 2019 (Intercontinental Doha - The City, West Bay)

8:00-8:30

Transportation from a) Retaj Al Rayyan Hotel and b) Ezdan Hotel to Intercontinental Doha - The City

8:30-12:30

Conference Registration

Wednesday - April 24, 2019

Parallel Sessions-5

	ROOM - AI JAWHARA-1	ROOM - AI JAWHARA-2	ROOM - AI JAWHARA-3
	Solar Energy-I Session Chairs: Mohammed Jaber Al-Marri & Konstantinos Kakosimos	Energy and Exergy Analysis-II Session Chairs: Gopalakrishnan Kumar & Hazim Qiblawey	Advanced Materials-I Session Chairs: Majeda Khraisheh & Sandro Nizetic
9:00-10:30	#OP-238 (9:00 - 9:15): "Conjugated materials for solar energy and plastic electronics" <u>Mohammed Al Hashimi</u>	#OP-92 (9:00 - 9:15): "Energy and exergy analyses of multi-generation system using renewable energy" <u>Tahir Abdul Hussain Ratlamwala, Jahanzeb Javed, Eliezer Gill, Zamil Mustafa Shah</u>	#OP-71 (9:00 - 9:15): "Using Electric Power to Synthesize Resorcinol-Formaldehyde Gels with Enhanced Characteristics" <u>Ahmed Awadallah F, Shaheen A Al Muhtaseb</u>
	#OP-35 (9:15 - 9:30): "Feasibility analysis of a solar chimney power plant system in two Algeria regions" <u>Aouachria Zeroual, Benlahcene Djaouida, Benmachiche Abd El Hakim, Sellami Ali</u>	#OP-84 (9:15 - 9:30): "Exergoeconomic performance assessment of a mobile air conditioning unit" <u>Huseyin Gunhan Ozcan, Huseyin Gunerhan, Arif Hepbasli</u>	#OP-266 (9:15 - 9:30): "Solar thermochemical conversion of H ₂ O/CO ₂ using perovskites" <u>Gorakshnath Takalkar, Rahul Bhosale</u>
	#OP-145 (9:30 - 9:45): "A parametric investigation into entropy generation in solar collector using different nanofluids" <u>Tahir Abdul Hussain Ratlamwala, Eric C. Okonkwo, Muhammad Abid, Humphery Adun</u>	#OP-172 (9:30 - 9:45): "Analysis and assessment of an argon liquefaction system in terms of advanced exergy analysis" <u>Arif Karabuğa, Zafer Utlü</u>	#OP-164 (9:30 - 9:45): "Life cycle assessment of portland cement production in Algeria" <u>Ali Makhlof, Gaetana Quaranta, Ramdane Kardache, Hamza Cheniti</u>
	#OP-271 (9:45 - 10:00): "Experimental and Numerical Analysis of Various Tube Geometries for Solar Central Receivers" <u>Salman Ismail, Saud Ghani, Mohammad Rashwan</u>	#OP-54 (9:45 - 10:00): "Thermodynamic analysis of premixed and non-premixed oxy-methane combustion cycle with membrane assisted oxygen separation" <u>Binash Imteyaz, Furqan Tahir</u>	#OP-259 (9:45 - 10:00): "Porous carbon materials derived from hydrothermal processing followed by thermal activation" <u>Vinod S Amar, Rajesh V Shende</u>
	#OP-124 (10:00 - 10:15): "Theoretical Analysis of a Concentric Parabolic Trough Receiver with Phase change material" <u>Victor Adebayo Adebayo, Eric Chekwube Okonkwo, Muhammad Abid</u>	#OP-182 (10:00 - 10:15): "Dynamic analysis of electrochemical transients in polymer electrolyte membrane fuel cells" <u>Kavya V.R, Aparna Kallingal, Shaneeth Muliankeezhu</u>	#OP-36 (10:00 - 10:15): "Effect of Al ₂ O ₃ , SiO ₂ and CNT Nanoparticles Blend Fuels on Diesel Engine Performances and Emission Characteristics" <u>Anes G Mrwan, Ang Fuk Chen, Mohd. Akmal Adzmi, Mohd. Hafiz Ali, Kamal Kamaruzzaman, Mohd. Fahmi Othman, Abdullah Adam, Gholamhassan Najafi</u>
	#OP-133 (10:15 - 10:30): "Global Solar Radiation Prediction: Case study of North Cyprus" <u>Humphrey Adun, Eric Chekwube Okonkwo, Serkan Abbasoglu</u>	#OP-206 (10:15 - 10:30): "Performance analysis of compressor-assisted two stage triple effect absorption refrigeration cycle power and cooling" <u>Tahir Abdul Hussain Ratlamwala, Chindeu Frank Okwose, Muhammad Abid</u>	#OP-85 (10:15 - 10:30): "A Novel Polymeric Membrane Modification Using Hydrophilic Ionic Liquid" <u>Mohamed Zoubeik, Amgad Salama, Amr Henni</u>

10:30-11:00

Coffee Break and Poster Session

Poster Session-3 (Foyer Area)

Judges: Gopalakrishnan Kumar & Majeda Khraisheh

10:30-11:00

- #PP-47:** "Synthesis of Sulfur Functionalized Polyolefins via Ring-Opening Metathesis Polymerization of Oxanorbornene and its Copolymerization with Cyclic Comonomers " Santhosh Kumar Podiyanachari, Upendar Reddy G., Ihor Kulai, Antsar Rih Hlil, Mohammed Al Hashimi, Hassan S. Bazzi
- #PP-48:** "Light Responsive CO-Release from Polymeric Material Synthesized via Ring Opening Metathesis Polymerization (ROMP)" Upendar Reddy Gandra, Alessandro Sinopoli, Snezana Zaric, Muhammad Sohail, Mohammed Al Hashimi, Hassan S. Bazzi
- #PP-50:** "New Class of Immobilized Transition Metal-catalysts on Functionalized Metal-Organic Framework (MOF) and Their Catalytic Properties" Palani Elumalai, Hind Mamlouk, Sherzod Madrahimov
- #PP-16:** "Catalytic Performance of Binary Palladium Nanoalloys@Nanoclay Towards Low Temperature Methane Oxidation" Siham Al Qaradawi, Yahia Ahmad, Assem Mohamed, Khaled Mahmoud
- #PP-51:** "Enhancement of the Properties of the Conjugated Polymers via UV and Thermal Post-processing" Maciej Barlog, Da Seul Yang, Jinsang Kim, Mohammed Al Hashimi
- #PP-52:** "Functionalized Metal-Organic Frameworks (MOFs) as Green Catalysts for Aerobic Oxidation of Alcohols" Tala Shawwa, Ahmed Mohamed, Palani Elumalai, Sherzod Madrahimov
- #PP-54:** "Novel Synthesis of Full Conjugated Monomers Based on N-Alkyl-Bisthiazole-Dicarboximide Derivatives for Transistor Electronic Applications" Marc Bonachi Comi, Salauddin Attar, Dusan Srebojebric, Kontastinos Kakosinos, Mohammed Al Hashimi
- #PP-55:** "Selective Dimerization of Ethylene to 1-Butene with Ni (II) based Metal Organic Framework Catalyst" Hind Mamlouk, Palani Elumalai, Sherzod Madrahimov
- #PP-56:** "Highly active, separable and recyclable MOF iridium catalysts for C-H borylation reactions" Fatimah Khan, Binish Hussain, Hind Mamlouk, Palani Elumalai, Sherzod Madrahimov
- #PP-57:** "Thiazole coupled NDI-PDI polymers as non-fullerene acceptors" Salahuddin Sayedshabbir Attar, Dusan Sredojevic, Sarbajeet Banerjee, Lei Fang, Mohammed Al Hashimi
- #PP-58:** "Polyisobutylene chain-end modification via organocatalytic nucleophilic conjugate additions" Ihor Kulai, Thomas Malinski, David E. Bergbreiter, Mohammed Al Hashimi, Hassan S. Bazzi
- #PP-59:** "Investigating Photodegradation of Poly(3-hexylthiophene-2, 5-diyl) for Solar Applications" Taha Kubbar, Elizabeth Abraham, Maha Al Sheeb, Konstantinos Kakosimos, Mohamed Al Hashimi
- #PP-71:** "Highly active and bifunctional NiCoO₂ synthesized using single solution combustion synthesis for alkaline fuel cell" Anchu Ashok, Anand Kumar, Faris Tarlochan
- #PP-80:** "Solar syngas production from CO₂ and H₂O in a SnO₂/SnO based two-step thermochemical cycle" Rahul Bhosale, Suliman Rashid
- #PP-83:** "Solar Powered Encontech Engine for Reverse Osmosis Desalination" Gorakshnath Takalkar, Rahul Bhosale, Suliman Rashid
- #PP-98:** "Co-doped Ni-oxide for hydrothermal processing of pinewood" Vinod S Amar, Anuradha R Shende, Bharath Maddipudi, Rajesh V Shende
- #PP-42:** "Advanced oxidation process with concentrated solar for treatment and disinfection of wastewater: A review" Nirali Tulsidas Dudhrejia, Sayali Sham Rajale, Ram Kishore Singh
- #PP-100:** "Graphene functionalized Mn:Ti oxides for energy storage" Joseph Houck, Vinod S Amar, Rajesh V Shende

Wednesday - April 24, 2019

Parallel Sessions-6

	ROOM - AI JAWHARA-1	ROOM - AI JAWHARA-2	ROOM - AI JAWHARA-3
	Solar Energy-II Session Chairs: Mingyuan DU & Abdul Shakoor	Energy Storage and Management-II Session Chairs: Ahmad Ayesh & Ibrahim AbuReesh	CO₂ Capture, Utilization, and Storage-I Session Chairs: C. S. Mathpati & Hazim Qiblawey
11:00-12:30	#OP-19 (11:00 - 11:15): "Novel Semi-Automatic Method to Optimize Multi-Lamp High Flux Solar Simulators" <u>Konstantinos E Kakosimos, Ali Arshad, Mohammed Hassan, Safeer Hafeez, Bassam Khalil, Mohammed Al Hashimi</u>	#OP-52 (11:00 - 11:15): "Modelling and simulation of a PV-Battery Storage System for a University campus, aiming self-sufficient renewable operation" <u>Christos Samlis, Spyridon Chapaloglou, Athanasios Nesiadis, Konstantinos Atsonios, Nikos Nikolopoulos, Panagiotis Grammelis</u>	#OP-93 (11:00 - 11:15): "CO ₂ Capture from Liquid Fuel Based Power Plants using CLC: Thermodynamic Modeling and Ni-Fe Oxygen Carrier Development" <u>Ahmed Aheed Ali Mohammed</u>
	#OP-264 (11:15 - 11:30): "Solar thermochemical conversion of CO ₂ using ceria based redox materials" <u>Gorakshnath Takalkar, Rahul Bhosale</u>	#OP-78 (11:15 - 11:30): "An Overview on Fundamentals and Applications of Redox Flow Batteries for Energy Storage" <u>Ahmed Sadiq, Belabbes Merzouqui, Fathima Fasmin, Muthumeenal Arunachalam, Sabah Mariyam, Kenza Maher, Aziz Kheireddine, Md Ruhul, Mohamed Madjet</u>	#OP-203 (11:15 - 11:30): "CO ₂ Utilization to Enhance Formaldehyde Production from Methanol" <u>Hesan ElFaki, Ahmed AlNouss, Fadwa Eljack</u>
	#OP-151 (11:30 - 11:45): "Experimental Investigation of Wind Loads Acting on the Heliostats of Solar Power Tower Plant and Its Variation with Varying Aspect Ratios" <u>Rakesh Singhai, Nitin D Banker, Harender Sinhar</u>	#OP-185 (11:30 - 11:45): "Effect of Optical Thickness on the Melting of Phase Change Material During Thermal Energy Storage for Concentrated Solar Power" <u>Muhammad Mustafizur Rahman, Marwan Belaed, Rasim Guldiken</u>	#OP-205 (11:30 - 11:45): "Projection of CO ₂ Emissions for Future Energy Scenario of Pakistan Including China Pakistan Economic Corridor" <u>Rakesh Singhai, Nitin D Banker, Fahim Khokhar, Ayesha Malik, Sofia Baig</u>
	#OP-173 (11:45 - 12:00): "Realising the Need for Load Management and Starting Circuits for Solar DC Milk Chillers by Field and Lab Tests" <u>Prasanna Naveen Kumar J, Shaji Sidney, Mohan Lal D</u>	#OP-189 (11:45 - 12:00): "Multi-objective Machine Learning Algorithm for Power Management of Complex EV Powertrain Structure" <u>Yusuf Engin Tetik, Huseyin Ayhan Yavasoglu, Huseyin Gunhan Ozcan</u>	#OP-181 (11:45 - 12:00): "Influence of carbon uniformity on its characteristics and adsorption of CO ₂ and CH ₄ " <u>Ahmed Awadallah-F, Shaheen A Al Muhtaseb</u>
	#OP-107 (12:00 - 12:15): "A Model of Solar Energy Growth in Africa" <u>Humphrey Adun, Eric Chekwube Okonkwo, Neyre Tekbiyik Ersoy, Mustafa Dagbasi</u>	#OP-213 (12:00 - 12:15): "Exploring energy analysis process with bim towards lifecycle information flow" <u>Ahmad Mohammad Ahmad, Sergio Rodriguez, Mian Atif Hafeez, Dawood Nashwan, Khalid Naji</u>	#OP-122 (12:00 - 12:15): "Microwave carbonation of thermal power plant flue gas/CO ₂ for soil remediation and stabilization in case of CO ₂ sequestration" <u>Yildirim Ismail Tosun</u>
	#OP-264 (12:15 - 12:30): "Numerical investigation of parabolic dish solar collector integrated co-generation plant using different working fluids" <u>Muhammad Abid, Muhammad Sajid Khan, Tahir Abdul Hussain Ratlamwala, Khuram Pervez Amber</u>	#OP-56 (12:15 - 12:30): "Air-conditioning System Combined Liquid Desiccant and R718 Centrifugal Heat Pump" <u>Seiichi Yamaguchi, Hajime Yabase, Kiyoshi Saito, Hiroshi Hasuike, Hayato Sakamoto, Satoru Matsumoto, Masatoshi Harada</u>	#OP-73 (12:15 - 12:30): "Development of Novel Ionic Liquids Functionalized Porous Materials for CO ₂ Capture Applications" <u>Amr Henni, Mohammed Mohamedali, Hussameldin Ibrahim</u>
12:30-13:45 Lunch (The Bridge, Intercontinental Hotel)			

Wednesday - April 24, 2019

Parallel Sessions-7

	ROOM - AI JAWHARA-1	ROOM - AI JAWHARA-2	ROOM - AI JAWHARA-3
	Water and Wastewater Treatment Session Chairs: Zuomin Dong & Adnan Midilli	Catalysis and Energy Materials-I Session Chair: Mohammed Al Hashimi	Biomass and Biofuels-II Session Chairs: Abdulaziz Atabani & Rajesh Shende
14:00-15:30	#OP-267 (14:00 - 14:15): "Advanced wastewater treatment using microalgae under cold climate conditions: effect of temperature on removal of nutrients and organic carbon" <i>Fares Almomani, Banu Ormici</i>	#OP-96 (14:00 - 14:15): "Miniaturized and structured reactors in the petrochemical industry - Technology highlights" <i>Mamoun Al Rawashdeh</i>	#OP-275 (14:00 - 14:30): "Valorization of Spent Coffee Grounds (SCGs) to Biofuels and Value-added Products: Pathway towards Integrated Bio-refinery" <i>Abdulaziz Atabani (Invited Talk)</i>
	#OP-88 (14:15 - 14:30): "The periodic feed pressure technique: an innovative antifouling technology for the filtration of oily wastewater" <i>Amgad Salama, Zoubeik Mohamed, Amr Henni</i>	#OP-17 (14:15 - 14:30): "Synthesis and characterization of aerosol particles and reactions for the solar driven Hybrid-Sulfur-Ammonia water-splitting cycle" <i>Navaira Fathima, Agni E Kalyva, Athanasios G Konstandopoulos, Konstantinos E Kakosimos</i>	#OP-251 (14:30 - 14:45): "Thermodynamic feasibility of a biomass and wind assisted system for electricity and synthetic methanol production" <i>Farrukh Khalid, Moiz Maroof Ali, Yusuf Bicer</i>
	#OP-147 (14:30 - 14:45): "Functionalized 3D graphene aerogel for oil sorption from wastewater" <i>Junaid Saleem, Usman Bin Shahid, Gordon Mckay</i>	#OP-235 (14:30 - 14:45): "Bridging homogeneous and heterogeneous catalysis through MOF support platforms and other efforts to obtain new class of highly active recyclable catalysts" <i>Sherzod Madrahimov, Hind Mamlouk, Elumalai Palani</i>	#OP-177 (14:45 - 15:00): "Spectral, Biological and Corrosion Inhibition aspects of Bio-oil from Aquatic Biomass" <i>Gopalakrishnan Kumar, Arvindnarayan Sundaram, Shobana Sutha, Dharmaraja Jeyaparakasha, Vadivel Muthu, Atabani Abdulaziz</i>
	#OP-248 (14:45 - 15:00): "Microplastics pollution in surface water of Rawal lake, Pakistan: A comparison of two sampling methods" <i>Rabia Nousheen, Imran Hashmi</i>	#OP-18 (14:45 - 15:00): "Numerical design and experimental evaluation of a solar reactor for the catalytic dry reforming of methane" <i>Tayseir Mohammed, Jawad Sarwar, Konstantinos E Kakosimos</i>	#OP-74 (15:00 - 15:15): "CFD Modeling of a Dual Fluidized Bed Gasifier" <i>Naresh Dattatray Hanchate, C. S. Mathpati</i>
	#OP-79 (15:00 - 15:15): "Thermodynamic Analysis of a Resilient Solar Powered Thermal Desalination System with Energy Recovery by Multigeneration Including Organic Rankine Cycle and Pressure Retarded Osmosis" <i>Muhammad Luqman, Ikhlas Ghat, Fatima Zahra Lahlou, Moiz Maroof, Tareq Al Ansari, Yusuf Bicer</i>	#OP-244 (15:00 - 15:15): "Homogeneous polymer-supported ruthenium metathesis catalysts" <i>Hassan Bazzi, Mohammed Al Hashimi</i>	#OP-178 (15:15 - 15:30): "Impact of additives and biofuel properties on combustion and emission characteristic of the gas turbine" <i>Manigandan Sekar, Gunasekar Pitchamuthu, Venkatesan Subramaniam, Nithya Subramaniam, Gokulnath Govindhan</i>
	#OP-123 (17:45 - 18:00): "Equilibrium Solubility, Modeling and Enthalpy of CO2 Absorption in Aqueous Blend of Methyl diethanolamine and Arginine at low pressure" <i>Ahmed Goma Talkhan, Mustafa S. Nasser Mustafa S. Nasser Mustafa S. Nasser, Muftah H. El Naas, Abdelbaki Benamor, Abdelwahid Azzi, S. A. El Tayeb, S. M. El Marsafy</i>	#OP-129 (15:15 - 15:30): "Is there any change in the ocean wave characteristics off Qatar in the last 40 years?" <i>Vethamony P., Ebrahim Al Ansari, Samiksha S Volvaiker</i>	

15:30-16:00

Coffee Break and Poster Session

Poster Session-4 (Foyer Area)

Judges: Anand Kumar & Amr Henni

15:30-16:00

- #PP-40:** "Recovery of volatile fatty acid from marine macroalgae hydrolysate using energy efficient thermo-acidic coupled ultrasonic homogenization" Gopalakrishnan Kumar, Rajeshbanu Jeyakumar, Ushman Mohammad, Kavitha Selvi, Yukeshkannah Raju, Gunasekaran Mukunt
- #PP-43:** "Polyethylene glycol (PEG) based elastomeric membranes: Determination of the minimum PEG content to achieve maximum CO₂ gas solubility/selectivity" Reem Samir Azam, Vivek Vasagar, Ramesh Ramakrishnan, Mohammad Korany Hassan, Mariam A Al Maadeed, Majeda Khraisheh, Sergei I Nazarenko
- #PP-46:** "Performance Comparison of Natural Gas and Renewable-based Power and Desalination System for Polygeneration" Houd Al Obaidli, Yusuf Bicer, Tareq Al Ansari
- #PP-60:** "Eugenol Azodyes Synthesis and applications in anion sensing" Abdelrahman Karim, Hani Tabba, Yousef Hijji
- #PP-61:** "Dinitrophenyl hydrazone as a colorimetric chemical sensor for cyanide detection" Alla Bakr, Yousef Hijji
- #PP-72:** "Effects of Climate Change on information technology and Built Environment in Lagos" Joel Chidi Agwokun
- #PP-73:** "Assessment of Environmental Impact of Greening and Deforestation in Enugu, Nigeria" Daniel Chinedu Nzekwe
- #PP-74:** "Characterization of Polysulfone/Diisopropyl 1-alkyl-3-methylimidazolium Bistriflamide (DPS) Ionic Liquids Membranes for High Pressure Gas Separation Applications" Khadija M. Zadeh, Dorra Turki, Mohammad K. Hassan, Abedalkhader I. Alkhouzaam, Syed M. Zaidi, Majeda Khraisheh
- #PP-75:** "Solar Syngas and Hydrogen Production via Metal Oxide Based Two-Step Methane Reforming and H₂O Splitting Cycle" Rahul Bhosale, Gorakshnath Takalkar, Suliman Rashid
- #PP-82:** "Thermal analysis of a single evacuated tube heat pipe solar collector applicable for the solar powered desalination" Gorakshnath Takalkar, Rahul Bhosale, Suliman Rashid
- #PP-84:** "Kinetic Study for Olive Oil Mill Waste Water Treatment Process Using Ultrasound and Titanium Dioxide Catalyst" Abeer Al Bsoul, Amani Al Othman, Mohammad Al Shannag, Muhammad Tawalbeh
- #PP-85:** "Optimal conditions for OMW treatment using ultrasound oxidation alone and in combination with other AOPs" Abeer Al Bsoul, Mohammad Al Shannag, Muhammad Tawalbeh, Ahmed, A. Al Taani, Walid K. Lafi, Mohammad Alsheyab
- #PP-86:** "Microbial Fuel Cells (MFCs) for Bioelectrogenesis and Bioelectrochemical Treatment (BET) of Petrogenic Hydrocarbon Contaminated Soils" Mohanakrishna Gunda, Riyadh I. Al Raoush, Ibrahim M. Abu Reesh
- #PP-87:** "Zirconium phosphate-ionic liquid composite membranes for PEM fuel cells operating at 200°C" Muhammad Tawalbeh, Amani Al Othman, Paul Nancarrow, Ahmad Kaki, Karim El Ahwal, Bassam El Taher
- #PP-90:** "Heat driven pump for reverse osmosis desalination" Maxim Glushenkov, Alexander Kronberg, Torben Knoke, Eugeny Y Kenig
- #PP-76:** "Thermodynamic efficiency analysis of metal oxide - metal sulfate based solar driven water splitting cycle" Rahul Bhosale, Suliman Rashid
- #PP-36:** "Kinetic characteristics and modeling of microalgae growth and CO₂ biofixation considering the coupled effects of light intensity and dissolved inorganic carbon" Fares Almomani
- #PP-91:** "Design and simulation of mono-ethylene glycol (MEG) Recovery unit" Asmaa Othman, Fares Almomani, Majeda Khraisheh, Ahmed Alnouss
- #PP-101:** "The Removal of Emulsified Oil From Produced Water Using Synthetic Resins" Hania Albatrni, Raafat Alenany, Nagat Alrefaei, Mai Bassam, Wisam Alsaba, Mohamed Zamzam, Shadwa Safwat, Hazim Qiblawey, Majeda Khraisheh

Wednesday - April 24, 2019

Parallel Sessions-8

	ROOM - AI JAWHARA-1	ROOM - AI JAWHARA-2	ROOM - AI JAWHARA-3
	Climate Change, Invention and Innovation-II Session Chairs: Wei Huang & Krishna Kumar Kanikicharla	Catalysis and Energy Materials-II Session Chairs: Mohammed Al Hashimi	Photovoltaics Session Chairs: Hajime Yabase & Mohammed Ali H Salah Saad
16:00 - 18:00	#OP-114 (16:00 - 16:30): "Future Scenarios of Climate Change over Qatar and Adjacent Region" <u>Krishna Kumar Kanikicharla</u> , Abdulrahman Al Ansari, Mohammed Al Sulaiti, Akio Kitoh (Invited Talk)	#OP-20 (16:00 - 16:15): "Solar spectrum characterization in Qatar and estimated impact on human health and energy technologies" <u>Konstantinos E Kakosimos</u> , Shaikha Aljaber, Dima Abu Alhawa, Laya Roustazadeh, Fatima Al Khal, Amani Grati, Asma Abousrafa, Eleni Fthenou, Mohammed Al Hashimi	#OP-22 (16:00 - 16:15): "Environmental evaluation of Utilising 1 MW Grid-Connected Solar Photovoltaic System in Boubyan and Failaka Islands in Kuwait" <u>Abdulla Al Rashidi</u>
	#OP-16 (16:30 - 16:45): "Predictions of NEE variations for future Climate Warming in an Alpine Meadow on the Tibetan Plateau" <u>Mingyuan Du</u> , Yingnian Li, Fawei Zhang, Liang Zhao, Hongqin Li, Song Gu, Seiichiro Yonemura, Yanhong Tang	#OP-236 (16:15 - 16:30): "The mechanism of the base-free Ru(PTA)4Cl ₂ catalyzed hydrogenation of CO ₂ to formic acid" <u>Edward Brothers</u> , Rajesh Raju	#OP-55 (16:15 - 16:30): "The effect of the frame material and shape on the operating temperature of free-standing silicon photovoltaic panel" <u>Sandro Nizetic</u> , Ivo Marinic Kragic, Filip Grubisic Cabo, Agis M Papadopoulos
	#OP-15 (16:45 - 17:00): "Climate change impact on seasonal incidence of mite "(Tetranychus urticae)" on eggplant "(Solanum melongena)" and its control using bio-pesticides" <u>Sunil Kumar Ghosh</u>	#OP-237 (16:30 - 16:45): "Carbon-hydrogen bond activation by transition metal complexes" <u>Snezana Zaric</u> , Dragan Ninkovic, Salvador Moncho, Michael Hall, Edward Brothers	#OP-197 (16:30 - 16:45): "Comparative review of cleaning techniques for solar photovoltaic (PV) farms" <u>Muneera S. Al Qahtani</u> , Yusuf Bicer, Muammer Koç
	#OP-184 (17:00 - 17:15): "Application of artificial neural network (ANN) model for forecast energy efficiency of the cryogenic liquefaction system in the meaning of sustainability" <u>Elif Altıntaş</u> , Mert Tolon, Arif Karabuğa, Zafer Utlu	#OP-272 (16:45 - 17:00): "Nano-confined-mediated Nitrogen-rich Nanoporous Carbon Nitride with Inbuilt Basic Sites for CO ₂ Adsorption" <u>Md Abdul Wahab</u> , Jorge N Beltramini, Ahmed Abdala	#OP-230 (16:45 - 17:00): "Numerical Investigation of a Photovoltaic thermal (PVT) system performance under in Irbid-Jordan Climate conditions" <u>Mohammed Al Odat</u> , Isam Qasem, Mohamad Okour
	#OP-220 (17:15 - 17:30): "Maximum and Minimum Temperature trends Analysis over Seasons of Different Climatic Zones of Pakistan from 1978-2016" <u>Fasiha Safdar</u> , Muhammad Fahim Khokhar, Muhammad Arshad, Muhammad Zeeshan	#OP- (17:00 - 17:15): "CO ₂ Utilization in Natural Gas Conversion to Chemicals and Fuels from the Micro-scale to the Macro-scale" <u>Nimir Elbashir</u>	#OP-211 (17:00 - 17:15): "Assesment by occupational health and safety of photovoltaic systems configuration" <u>Begum Erten</u> , Arif Karabuga, Zafer Utlu
	#OP-102 (17:30 - 17:45): "The impact of Urban Heat Island (UHI) phenomenon on the climate of Qatar" <u>Mohammed Ibrahim Al Marzooqi</u> , Rajesh Govindan, Tareq Al Ansari, Krishna Kumar Kanikicharla	#OP-11 (17:15 - 17:30): "Mechanism of water oxidation through cobalt oxide catalysts cobalt with phosphines" <u>Salvador Moncho Escriva</u> , Predrag Petrovic, Edward N. Brothers, Staff Sheehan, Paul T. Anastas	#OP-198 (17:15 - 17:30): "Solar PV and wind driven energy system for carbon capturing, urea and hydrogen production" <u>Haris Ishaq</u> , Osamah Siddiqui, Ghassan Chehade, Ibrahim Dincer
	#OP-106 (17:45 - 18:00): "Sour Gas Market Players in the GCC: Facts and Challenges" <u>Abdelbaki Beanmor</u> , Shifa Shaikha, Ibbelwaleed Hussein, Osama Ahmed	#OP-171 (17:30 - 17:45): "Comparison of dmfc performance through different approaches" <u>Mustafa Umüt Karaoğlan</u> , Alper Can Ince, Andreas Glüsen, Can Ozgur Colpan, Martin Müller, Detlef Stolten, Nusret Sefa Kuralay	#OP-77 (17:30 - 17:45): "Sustainable cities: a platform for connecting density with energy performance of urban areas" <u>Ehsan Ahmadian</u> , Behzad Sodagar, Glen Mills, Chris Bingham
			#OP-32 (17:45 - 18:40): "Karstification Genesis and Evolution, South Mosul, Case Study" <u>Thanoon Hamid Al Dabbagh</u> , Salim Qasim Al Naqip
	18:15-18:45		
	Transportation from Intercontinental Hotel to Marsa Malaz Kempinski, The Pearl - Doha		
	19:00-21:30		
	Gala Dinner and Award Ceremony (Marsa Malaz Kempinski, The Pearl - Doha)		
	21:30-22:00		
	Transportation from Marsa Malaz Kempinski, The Pearl - Doha to a) Retaj Al Rayyan Hotel and b) Ezzan Hotel		

Thursday - April 25, 2019

8:00-8:30

Transportation from a) Retaj Al Rayyan Hotel and b) Ezdan Hotel to Intercontinental Hotel

Thursday - April 25, 2019

Parallel Sessions-9

ROOM - AI JAWHARA-1

Advanced Materials-II

Session Chairs: Gopalakrishnan Kumar & Ibrahim Dincer

#OP-46 (9:00 - 9:15): "Titania nanotube arrays in energy and environmental applications" Dong Suk Han, Sun Hee Yoon, Nimir Elbashir, Hyunwoong Park#OP-67 (9:15 - 9:30): "Synthesis and testing of Graphene hydrogels surfaces for Nucleate boiling heat transfer (NBHT) augmentation" Shoukat Alim Khan, Nurettin Sezer, Muammer Koc#OP-118 (9:30 - 9:45): "Evaluating the performance of mixtures of amino acid L-Alanine and classical hydrate inhibitors in mitigating methane hydrate formation" M. Fahed Aziz Quresh, Majeda Khraisheh, Fares Almomani#OP-137 (9:45 - 10:00): "Fabrication of portable environmental gas sensors based on spinel ferrite nanoparticles" Ahmad Ayesha, Mohammad Abu Haija#OP-121 (10:00 - 10:15): "Algal Cells Harvesting using cost-effectiveness magnetic nano-particles" Fares Almomani, Rahul Bhosale, Majeda Khraisheh#OP-148 (10:15 - 10:30): "Ultra-fast super absorbent polymeric films and aerogels using plastic wastes for oil clean-up from wastewater" Junaid Saleem, Gordon Mckay

ROOM - RUBY

Environmental Issues-II

Session Chairs: Abdul Shakoor & Mustafa Saleh Nasser

#OP-47 (9:00 - 9:15): "Gender differences in indoor environmental satisfaction in offices in Asia" Madhavi Indraganti#OP-99 (9:15 - 9:30): "Study of the drying behavior of food waste samples prior to pyrolysis using different drying models" Samar Elkhailifa, Tareq Al-Ansari, Hamish Mackey, Gordon Mckay#OP-233 (9:30 - 9:45): "A comprehensive approach for the integration of public transportation and land-use: The case of West Bay, Business District of Doha (State of Qatar)" Mahmoud Alsaeed, Raffaello Furlan#OP-108 (9:45 - 10:00): "Achieving sustainable environmental goals during Mega Sports Events: Lessons learned towards hosting a green World Cup 2022 in Qatar" Rima Isaifan, Mohammed Ayoub#OP-215 (10:00 - 10:15): "Walkable and cycling spaces in GCC Regions" Ahmad Mohammad Ahmad#OP-62 (10:15 - 10:30): "Thermal Comfort, indoor environmental satisfaction and spatial configuration in educational buildings in Qatar" Madhavi Indraganti, Mark Major, Ahmad Ahmed, Rowaida Elnahas, Noor Al Nassor, Moza Al Naema

9:00-10:30

10:30-11:00

Coffee Break

Thursday - April 25, 2019

Parallel Sessions-10

ROOM - Al JAWHARA-1

Advanced Materials-III

Session Chairs: Majeda Khraisheh & Ram B. Gupta

#OP-154 (11:00 - 11:15): "Design and synthesis of nano, micro and new hybrid micro-nano surfaces coatings for nucleate pool boiling heat transfer" Shoukat Alim Khan

#OP-157 (11:15 - 11:30): "Fines and Gas Flow Influence on Pore Morphology in Saturated Sand using Micro-Computed Tomography" Jamal A. Hannun, Riyadh I. Raoush, Zaher A. Jarrar, Khalid A. Alshibli, Jongwon Jung

#OP-165 (11:30 - 11:45): "Synthesis and characterization of a new tetranuclear copper (II) complex using a schiff base ligand" Ahmad Ayesah, Amel Messai, Fatima Aouaidjia, Rachid Siab

#OP-192 (11:45 - 12:00): "Model elastomeric thiol-ene networks membranes: Correlation of free volume, crosslink density, and gas transport properties" Mohammad K. Hassan, Vivek Vasagar, Ramesh Ramakrishnan, Mariam A. Al Maadeed, Majeda Khraisheh, Sergei I. Nazarenko

#OP-245 (12:00 - 12:15): "Development of Aluminum Foam Sandwich Composites for Energy Applications" Vasanth Chakravarthy Shunmugasamy, Bilal Mansoor

#OP-270 (12:15 - 12:30): "Synthesis and Electrochemical Characterization of ZrO₂ Coated Lithium-rich Li_{1.2}Ni_{0.16}Mn_{0.56}Co_{0.08-x}Cr_xO₂ Cathodes" Umair Nisar, Rana Abdul Shakoor, Siham Al Qaradawi, Ramazan Kahraman, Jefin James Abraham

#OP-104 (12:30 - 12:45): "Reaction kinetics of carbon dioxide in aqueous blends of N-methyldiethanolamine and Potassium salts of Glycine using the stopped flow technique" Nafis Mahmud, Abdelbaki Benamor, Mustafa Nasser

ROOM - RUBY

CO₂ Capture, Utilization, and Storage-II

Session Chairs: Hazim Qiblawey & Rajesh Shende

#OP-110 (11:00 - 11:15): "CO₂ Utilization for the Production of Ethylene Oxide as an Intermediate for Ethylene Glycol: Economic and Environmental Assessment" Ahmed Elrashidy, Omar Ashour, Garad Mohamud, Mohamed Mohamed, Ahmed Adan, Ahmed Alnouss

#OP-265 (11:15 - 11:30): "Ferrite based redox materials for Solar thermochemical splitting of H₂O/CO₂" Gorakshnath Takalkar, Rahul Bhosale

#OP-112 (11:30 - 11:45): "Economic and Environmental Assessment of CO₂ Utilization for Acetic Acid Production" Mohamed Abou Nada, Ahmed Alnouss, Gordon Mckay, Tareq Al Ansari

#OP-273 (11:45 - 12:00): "Synthesis of Silica Supported Ni Catalyst for Carbon Dioxide Methanation Reaction" Ahmed Aheed, Mohd Ali H Saleh Saad, Anand Kumar

#OP-81 (12:00 - 12:15): "Mechanistic study for unraveling the photoelectrochemical CO₂ reduction to formic acid at a mixed ternary (CuFeO₂) and binary (CuO) phases" Sun Hee Yoon, Hyunwoong Park, Nimir Elbashir, Dong Suk Han

#OP-90 (12:15 - 12:30): "Carbon Capture Through Reaction with Steel-Making Dust: A Statistical Optimization" Mohamed Hosni Ibrahim, Muftah Hassan El Naas, Saad Ali Al Sobhi

#OP-101 (12:30 - 12:45): "Experimental determination of kinetics of the reaction between carbon dioxide and mixtures of DES/ MDEA" Hani Ababneh, Abdelbaki Benamor, Muftah H. El Naas

11:00-12:30

12:45-13:15

Closing Remarks at Al JAWHARA-1

13:15-14:30

Lunch (The Square Resturant, Intercontinental Hotel)

15:00-15:30

Transportation from Intercontinental Hotel to a) Retaj Al Rayyan Hotel and b) Ezdan Hotel