ICFMCE 2018: Technical Program, 20-22 November 2018, Building 1, Petroleum Institute, Khalifa University, Abu Dhabi

Time	20 November
1300-1700	Registration (room 1013)
1645-1745	Reception (ADCO Auditorium and room 101)
	Opening Session (ADCO Auditorium)
1745-1800	Welcome address: Dr. Arif Sultan Al Hammadi (Executive Vice President, Khalifa University) & ICFMCE 2018 Co-chairs (Prof A Elkamel, Khalifa University & Prof R Gani, PSE for SPEED Company)
1800-1845 (Plenary)	Dr S Griffiths; Khalifa University of Science & Technology, Abu Dhabi (Prof Gani session Chair) - *System design for achieving very high shares of renewable electricity*
1900	End of session

Time	21 November – ADCO Auditorium	21 November – Room 1003
0900-1000 (30 min Keynote)	Prof E Zondervan (Chair)	Prof L Zhang (Chair)
	Prof E Zondervan (University of Bremen) *Design of bio-based supply chains*	Prof L Zhang (Dalian University of Technology) *An optimization-based computer-aided molecular and mixture design framework*
	Dr B Sarup (AlfaLaval-Denmark) *Feedstock and pre-treatment processing options for production of HVO biofuels*	Prof MR Eden (Auburn University) *Component based development of computer-aided tools for different applications*
1000-1045 (15-min Oral)	Mr LKK Maia (Univ Bremen) - *Energy storage in the context of grid flexibility: A Case Study of the German electricity grid*	K Rambabu, G Bharath, Anjali Achazhiyath Edathil, Priyabrata Pal, Fawzi Banat (Khalifa University) - *Green synthesis of zinc oxide nanoparticles using Tamarindus indica leaves and its application for dye ultrafiltration*
	Dr OW Lukman (PT Badak-Indonesia) - *Amine circulation rate optimization of gas purification unit in LNG Plant Bontang*	Prof C Kiparissides (CERTH, CPERI) - *From molecular to plant scale computer aided design of polymer manufacturing processes*
	Shahid Rabbani, Hamid Abderrehmane, Mohamed Sassi (Masdar Institute, KU) - *Comparative Study of effect of water, gas and foam flooding on enhanced oil recovery (EOR)*	Samah E.E Warrag and Maaike C. Kroon (Petroleum Institute, KU) - *Capturing Impurities from Oil and Gas Using Deep Eutectic Solvents*
1045-1100	*Break*	
1100-1140 (Plenary)	Prof JH Lee, KAIST, South Korea (Prof Pistikopoulos session Chair) - *Analysis of CO2 capture and utilization technologies for sustainable carbon management*	

1145-1215	Poster presentations (5 min oral presentations) P1, P2, P3, P7, P11, P12 (Prof P Liu session Chair)	Poster presentations (5 min oral presentations) P4, P5, P6, P8, P9, P10 (Prof SB Anne session Chair)
1215-1300	*Lunch (Cafeteria – near building 1)*	
1300-1400	Poster Session (poster presentation and discussion at the posters) Outside ADCO Auditorium	
1400-1530 (30-min Keynote)	Prof M Wang (Chair)	Prof F Hassan (Chair)
	Prof F Manenti (Politecnico di Milano) *Acid gas to syngas™ (AG2S™) technology for CO2 utilization: from theory to industrial applications*	Prof F Hassan (Texas A&M University) *Designing for small-scale, distributed and unconventional feedstocks*
	Prof M Wang (University of Sheffield) *Process and Energy Systems Engineering: CCUS and beyond …*	Prof P Liu (Tsinghua University) *Modelling and optimization of power generation and transmission planning: Applications in China*
	Prof SB Anne (National Institute of Technology – Warangal) *Energy efficiency and CO2 management*	Prof M Kroon (Khalifa University) -*Hydrophobic deep eutectic solvents and their applications*
1530-1545	*Break*	
1545-1645 (15-min Oral)	Dr V Ramsagar (NIT Warangal) - *Integration of a Calcium looping system for CO2 capture in an Indian natural gas fired combined cycle power plant : A feasibility study*	Mouna Zaidani, Jehad Abed, Mohamed Sassi (Masdar Institute, KU) - *Two-phase flow hydrodynamics of trickle bed reactors at the pore scale using the phase field method*
	Dr E Oko (University of Sheffield) - *Experimental study of CO2 solubility in high concentration MEA solution for intensified solvent-based carbon capture*	Dra M Khaleel (Khalifa University) - *Amine-functionalized hierarchical Zeolites for Carbon Dioxide capture*
	Mr HA Balogun (Khalifa University) - *Roles of microalgae in CO2 management: A modeling approach*	Dra M Khaleel (Khalifa University) - *Optimizing hierarchical Zeolites for applications in catalysis*
	D. Bahamon and Lourdes F. Vega (Khalifa University) - *Tuning adsorbent materials to optimize CO2 capture at industrial conditions.*	Prof H Naseh (Aerospace Research Institute) - *Catalyst bed multi-objective optimization*
1645-1730 (Plenary)	Prof EN Pistikopoulos, Texas A&M University, USA (Prof Lee session Chair) - *Multi-scale Energy Systems Engineering*	

Time	22 November – ADCO Auditorium	22 November – Room 1003
	ADCO Auditorium	**Room 1003**
0900-1000 (30-min Keynote)	Prof T Majozi (Chair)	Prof P Varbanov (Chair)
	Prof I Mujtaba (Bradford University) - *Water- One of the grand challenges of the world*	Prof P Varbanov (Brno University of Technology) - *Process Integration, Saving Energy, Resources And Emissions*
	Prof T Majozi (University of the Witwatersrand) - *On Mathematical optimization methods for consideration of water-energy nexus in synthesis of chemical plants*	Prof S Macchietto (Imperial College) - *Optimal cleaning scheduling and flow control of heat exchanger networks under fouling: recent advances*
1000-1100 (15-min Oral)	Mr MK Amosa (University of the Witwatersrand) - *Towards sustainable water solutions: Specific cake resistance as a vital index for filtration throughput*	Dr J Zhu (South-East University of China) - *Generalized active disturbance rejection control for the boiler-turbine unit using multi-objective optimization and extended state observer*
	Priyabrata Pal, Aiza Gay Corpuz, Fawzi Banat (Khalifa University) - *Removal of Oil from Wastewater using Colloidal Gas Aphrons*	Dr P Sha (South-East University of China) - *Data-driven state monitoring of thermal power plant devices using density peaks clustering and evidential K-nearest neighbor classifier*
	Prof C Kiparidissides (CERTH, CPERI) - *Recent advances in nanotechnology-based water purification methods*	Dr. Falah Alhameli (University of Waterloo & Khalifa University) - *A Mixed-Integer programming approach for data clustering in support of scheduling and planning decisions*
	Mr. O Ualibek (Nazarbayev University) - *Plasmonic metal nanostructures*	Mr X Fan (University of South-Eastern Norway) - *Facile synthesis of NFL-ZnWO4 for pseudo-capacitor applications*
1100-1115	*Break*	
1115-1215 (30-min Keynote)	Prof I Mujtaba (Chair) **ADCO Auditorium**	
	Prof A Kokossis (Technical University Athens) - *An integrated approach for the development of renewable supply chains and industrial symbiosis networks*	
	Prof SS Mansouri (Technical University of Denmark) - *Process systems engineering for efficiently achieving circular economy*	
1215-1245	**Closing Session & Awards:** Prof A Almansoori (Khalifa University) & Prof R Gani (PSE for SPEED Company)	
1245-1330	*Lunch (Cafetria near building 1)*	
1400 -	Visit to Khalifa University (prior arrangement necessary)	

Online registration to participate is open. Visit the conference website to register: http://www.icfmce.org/reg.html

For further information, contact Ms. Yedda Q. YE, ICFMCE 2018 Conference Secretary (ICFMCE 2018 <icfmce@iased.org>)