

Technical Session - HALL 1

DAY 1 10 February 2016

Keynote Speech

NOVEL CATALYSTS / PROCESSES FOR REFINING APPLICATIONS

Chair: Kazuhiro Inamura • **Co-Chair:** Nilesh Chandak

13:50 - 14:15	TAKREER Research Centre	S.GnanaPragasam	A novel approach to characterize cracking catalysts particles by laboratory deactivation method
14:15 - 14:35	Idemitsu Kosan Co.,Ltd.	Tetsuya Fukunaga	Development of Halogen-Modified Pt/KL catalyst for Aromatization Process from Light Naphtha
14:35 - 14:55	Masdar Institute	Saepurahman	Electrospun silica supported pt/fkl zeolite fibers for naphtha aromatization
14:55 - 15:15	BASF	Vasileios Komvokis	Novel boron based FCC catalyst technology for improved metal tolerance
15:15 - 15:35	Petroleum Institute	Abdullah S Berrouk	Process simulation investigation of decomposition of hydrogen sulfide into hydrogen and sulfur
15:35 - 15:45			Q&A

Technical Session 1

BOTTOM OF THE BARREL UPGRADING

Chair: Gnanapragasam Singaravel • **Co-Chair:** Yoshifumi Hiramatsu

16:00 - 16:25	Johnson Matthey	B. de Graaf	Maximizing propylene and petrochemicals in resid fluid catalytic cracking
16:25 - 16:45	Neste Jacobs Oy	Matti Koskinen	How to Improve Residual Hydrocracker in Practice
16:45 - 17:05	JGC Catalysts and Chemicals Ltd.	Yuji Shirahama	Approach for yields-up of light olefins in FCC reaction
17:05 - 17:25	Albermarle	Subramani Ramachandran	Iron & calcium contamination in RFCC operations – identification, troubleshooting and mitigation strategies
17:25 - 17:45	Saudi Arabian Oil Company	Omer Refa Koseoglu	Hydrocracking catalyst development and commercialization
17:45 - 17:55			Q&A

Technical Session 3

DAY 2 11 February 2016

Keynote Speech

ADVANCES IN ASSETS INTEGRITY MANAGEMENT

Chair: Mabruk Issa Suleiman • **Co-Chair:** Akram Alfantazi

8:45 - 9:10	TAKREER Research Centre	Mabruk Issa Suleiman	Simulating process plant corrosivity using a pilot plant
9:10 - 9:30	Idemitsu Kosan Co.,Ltd.	Hideaki Shiotani	Sulfur speciation analysis in condensate by GC-SCD with silver nitrate
9:30 - 9:50	TAKREER	Prashanth Markonda Koteswara	Failure in shell of interpass absorption tower in sulfuric acid regeneration unit (SARU) – An experience
9:50 - 10:10	NALCO Champion Ltd.	Walter Militello	Mitigation of crude unit overhead corrosion through improved monitoring & online control
10:10 - 10:30	Petroleum Institute	Gisha Elizabeth Luckachan	Self-healing anticorrosion coatings of polypyrrol carbon black composites
10:30 - 10:40			Q&A

Technical Session 5

STRATEGIES FOR WASTE STREAMS UTILIZATION

Chair: Isam Janajreh • **Co-Chair:** Rizwan Ahmed

10:55 - 11:20	Qatar University	Muftah H. El-Naas	Assessment of a new process for CO2 capture
11:20 - 11:40	Masdar Institute	Inas M. AlNashef	Separation of aromatics using novel green solvents
11:40 - 12:00	Masdar Institute	Isam Janajreh	Numerical and experimental assessment of direct contact membrane desalination
12:00 - 12:20	Axens	Tom Frising	Refinery off-gases processing unit - olefins purification and recovery
12:20 - 12:40	Masdar Institute	Inas M. AlNashef	Novel green solvents for CO2 capturing
12:40 - 12:50			Q&A

Technical Session 7

ALTERNATIVE FUELS & CHEMICALS RESOURCES

Chair: Stephane Morin • **Co-Chair:** Haitem Hassan-Beck

14:00 - 14:25	Axens	Madeleine Mitschler	How is R&D essential in Alternative Fuels Technology development for a more sustainable refining industry?
14:25 - 14:45	Masdar Institute	Tariq Shamim	Hydrogen generation in a three reactor chemical looping reforming process
14:45 - 15:05	Petroleum Institute	Abhijeet Raj	Effects of oxygenated fuel addition to diesel on particulate matter (PM) emissions
15:05 - 15:25	Lanzatech	Patrick Sajbel	Monetizing PSA tailgas through gas fermentation
15:25 - 15:35			Q&A

Technical Session 9

Technical Session - HALL 2

DAY 1 10 February 2016

Keynote Speech

PROCESS OPTIMIZATION, TROUBLESHOOTING AND ENERGY MANAGEMENT IN REFINERIES

Chair: Muftah El-Naas • **Co-Chair:** Abdulhamid Mohamed

13:50 - 14:15	Masdar Institute	Mohamed Sassi	Experimental investigation of flow regime transition and pressure buildup due to fine deposition in a trickle-bed reactor
14:15 - 14:35	Axens	Payam Heidararabi	Unveiling your plant energy saving potential
14:35 - 14:55	Aspen Technology	Saif Sheikh	An approach to management of crude preheat train fouling using engineering tools
14:55 - 15:15	Missouri University of Science and Technology	Muthanna Al-Dahhan	Statistical and chaotic time series analysis approach to determine and to on-line monitor flow regime in upflow moving packed bed hydrotreater reactor using gamma ray densitometry
15:15 - 15:35	TAKREER Research Centre	Mohammad Shamsuzzoha	Systematic procedure for simulation of a crude distillation unit
15:35 - 15:45			Q&A

Technical Session 2

EFFICIENT METHODOLOGIES FOR OPTIMIZING R&D ACTIVITIES

Chair: Muthanna El-Dahhan • **Co-Chair:** Abraham George

16:00 - 16:25	Helmholtz Zentrum Muenchen – German Research Center for Environmental Health	Thomas Groeger	The application of comprehensive two-dimensional gas chromatography for the qualitative and quantitative analysis of modern and complex petrochemical matrices
16:25 - 16:45	ANSYS India	Lalithakumar Srinivasa Mohan	Computational fluid dynamics of refinery equipment and modeling counter-current flow
16:45 - 17:05	Chemspeed Technologies	Amira Abou-Hamdan	The global challenges in chemicals and energy – how to standardize and accelerate R+D within the oil and gas industries
17:05 - 17:25	Grace	Stefan Brandt	Successful new catalyst development using realistic pilot plant testing
17:25 - 17:45	hte GmbH	Florian Huber	High throughput testing of resid hydroprocessing & naphtha reforming catalysts
17:45 - 17:55			Q&A

Technical Session 4

DAY 2 11 February 2016

Keynote Speech

NOVEL CATALYSTS / PROCESSES FOR REFINING APPLICATIONS

Chair: Mikael Berthod • **Co-Chair:** Hamid Al-Megren

8:45 - 9:10	King Abdulaziz City for Science and Technology	Hamid A. Almegren	Effect of promoters and supports on the catalytic activity of CoMo catalyst in thiophenes hydrodesulfurization
9:10 - 9:30	Honeywell UOP	Ali Jahel	Optimizing R&D activities for improved mercury guard adsorbents development
9:30 - 9:50	Axens	Christophe Pierre	Leveraging gasoline and aromatics integrated schemes thanks to technology
9:50 - 10:10	JGC Catalysts and Chemicals Ltd.	Hisaya Ishihara	Advanced diesel hydrotreating catalyst with superior activity and stability
10:10 - 10:30	Masdar Institute	Saepurahman	Electrospun composite zeolite- nickel oxide- tungsten oxide fibers
10:30 - 10:40			Q&A

Technical Session 6

PROCESS OPTIMIZATION, TROUBLESHOOTING AND ENERGY MANAGEMENT IN REFINERIES

Chair: Mohamed AIMusharfy • **Co-Chair:** Abdullah Berrouk

10:55 - 11:20	Missouri University of Science and Technology	Muthanna Al-Dahhan	Benchmarking CFD and new mechanistic approach for enabling scale-up of petroleum refinery multiphase reactors via sophisticated measurement techniques
11:20 - 11:40	Idemitsu Kosan Co.,Ltd.	Ryo Tanabe	Improvement of RFCC unit startup
11:40 - 12:00	TAKREER Research Centre	Tommy Firmansyah	Use of computational fluid dynamics analysis to predict solidification time of waxy hydrocarbon oil
12:00 - 12:20	TAKREER Research Centre	Mohammad Abdur Rakib	Riser modeling of a resid fluid catalytic cracking (RFCC) Unit
12:20 - 12:40	Reliance Industries Limited	Vinay Naik	Optimization of propylene recovery units to recover maximum propylene from refinery LPG
12:40 - 12:50			Q&A

Technical Session 8

PROCESS OPTIMIZATION, TROUBLESHOOTING AND ENERGY MANAGEMENT IN REFINERIES

Chair: Mohammad Abdur Rakib • **Co-Chair:** Mohamed Sassi

14:00 - 14:25	CEPSA	Jesus Lazaro	Modelling of ULSD units as a valuable tool for researching and refineries
14:25 - 14:45	TAKREER Research Centre	Hala Haitham Hejazi Kelani	Predictive Model of a Gas oil Hydrotreater Unit for Studying Different Feeds.
14:45 - 15:05	TAKREER Research Centre	Nilesh Chandak	Optimization of hydrocracker pilot plant operation for Base Oil production
15:05 - 15:25	TAKREER Research Centre	Mustafa Karakaya	Modeling and Simulation of Heavy Oil Hydrocracking Using the Continuous Lumping Approach
15:25 - 15:45	Inprocess Tech & Consulting Group S.L & Aspen Technology	Josep-Anton Feliu	Optimize Hydrogen Network in Refineries with Rigorous Simulation Tools
15:45 - 15:55			Q&A

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