

Technical Session HALL 1

DAY 1 11 February 2015

MATERIALS & CORROSION

Chair: Dr. Mabruk Issa Suleiman, Takreer Research Centre • **Co-Chair:** Dr. Raed Hashaikh, Masdar Institute

14:15 - 14:45	TRC	Mabruk Suleiman	Sulphur Species Corrosivity in Refinery Feed Stock
14:45 - 15:05	Hiroshima University	Yoshinori Isomoto Oka	Erosion-Corrosion Phenomena in Industrial Plants and Experimental Analysis
15:05 - 15:25	Khalifa University	Kyriaki Polychronopoulou	A Surface Analytical Investigation of a Two-step Cerium Conversion and Propylene Glycol Treatment on an AA2024-T3 Aluminum Alloy Cladding Layer
15:25 - 15:45	Petroleum Institute	Gisha Elizabeth Luckachan	Anticorrosion coatings of Chitosan Modified with Glutaraldehyde and Silica in a layer-by-layer Coating with Polyvinyl Butyral
15:45 - 15:55		Q & A	

Technical Session 1A

DAY 2 12 February 2015

COMPUTATIONAL FLUID DYNAMICS

Chair: Dr. Mohammad A Rakib, Takreer Research Centre • **Co-Chair:** Dr. Abdullah Berrouk, Petroleum Institute

8:00 - 8:30	Technip	Eusebius Gbordzoe	Advancing FCC Technology using Computational Fluid Dynamic (CFD) Techniques
8:30 - 8:50	ANSYS	Maciej K. Ginalski	Flow Induced Vibrations – Review of Modelling Techniques for CAE Users
8:50 - 9:10	CPFD	Peter Blaser	Validation and Utilization of CFD for Reducing CO Emissions from an FCC Regenerator
9:10 - 9:30	Idemitsu	Tomoyuki Ide	Utilization of CFD for Refineries
9:30 - 9:50	Petroleum Institute	Abdallah S. Berrouk	The Role of Computational Particle-Fluid Dynamics in the Optimization of Fluid Catalytic Cracking Units
9:50 - 10:00		Q & A	

Technical Session 2A

CATALYSIS

Chair: Dr. Mikael Berthod, Takreer Research Centre • **Co-Chair:** Dr. GnanaPragasam Singaravel, Takreer Research Centre

10:20 - 10:50	TRC	GnanaPragasam Singaravel	Catalytic Evaluation of Resid Fluid Catalytic Cracking Catalysts: Comparison of Catalytic Activity with Commercial Result
10:50 - 11:10	Axens	Marie-Amélie Baudry	High-Severity Fluid Catalytic Cracking Technology: Technology Development to meet Petrochemical Demand by Residue Upgrading
11:10 - 11:30	BASF	Vasileios Komvokis	FCC Catalysts and Additives Innovation to Improve Metals Passivation and Maximize Propylene and LPG Olefins
11:30 - 11:50	Grace GmbH	Daniel McQueen	Grace RFCC Catalyst Technology: a History of Innovation in Catalysis
11:50 - 12:10	Masdar Institute	Raed Hashaikh	Fabrication of Zeolite Nanofibers through Electrospinning
12:10 - 12:20		Q & A	

Technical Session 3A

PROCESS MODELING & SIMULATION

Chair: Prof. Mohammed Sassi, Masdar Institute • **Co-Chair:** Mr. Mohamed Al-Musharfy, Takreer Research Centre

14:40 - 15:10	PSE	Constantinos C. Pantelides	Equation Oriented Process Modeling Technology: Recent Advances & Current Perspectives
15:00 - 15:30	Aspentech	Dinu Ajikutira / Saif Sheikh	Equation Oriented Modeling of Refinery Reactors in Aspen HYSYS Petroleum Refining
15:30 - 15:50	TRC	Haitem Hassan-Beck	A Mathematical Programming Approach for Optimizing Propylene Yield in FCC Unit
15:50 - 16:10	TRC	Anood Taher	Steady State Model of a CCR Naphtha Reformer
16:10 - 16:20		Q & A	

Technical Session 4A

Technical Session HALL 2

DAY 1 11 February 2015

PILOT TESTING

Chair: Prof. Jorge Ancheyta, Instituto Mexicano del Petroleo • **Co-Chair:** Mr. Nilesh Chandak, Takreer Research Centre

14:15 - 14:45	Instituto Mexicano del Petroleo	Jorge Ancheyta	Development of a Process for Upgrading of Heavy Petroleum: From Pilot Plant to Semi-Commercial Level
14:45 - 15:05	UOP	Kerry Crosby	History and Function of Pilot Plants at UOP
15:05 - 15:25	TRC	Haitem Hassan-Beck	The Introduction of New ULSD Catalyst: A Pilot Plant Study
15:25 - 15:45	TRC	Abdulhamid Mohamed	A Feasibility Study on a Mothballed HDS Unit to Process HGO Producing ULSD
15:45 - 16:05	TRC	Nilesh Chandak	A Pilot Plant Study to Determine Operational Factors of HDS Catalyst
16:05 - 16:15		Q & A	

Technical Session 1B

DAY 2 12 February 2015

SUSTAINABILITY AND INTEGRITY

Chair: Dr. Tahier Ramadan, Takreer • **Co-Chair:** Dr. Isam Janajreh, Masdar Institute

8:00 - 8:30	Masdar Institute	Tariq Shamim	Hydrogen Production using Chemical Looping Reforming
8:30 - 8:50	KFUPM	M. Ba-Shammakh	A Mathematical Model for Oil Refinery with CO ₂ Constraint
8:50 - 9:10	Masdar Institute	Djaved Belasri	Power Production from Biogas Derived from Organic Fraction of Municipal Solid Waste in Abu Dhabi
9:10 - 9:30	Masdar Institute	Dyana Marline Ambrose	Development of a FFS tool for the inspection of corrosion under insulation
9:30 - 9:50	Takreer	Shekhar Roy	Failure / Cracking Problem in Di-Ethanol Amine Piping in Amine Treating Unit - An experience
9:50 - 10:00		Q & A	

Technical Session 2B

PROCESS ENGINEERING

Chair: Prof. Muftah El-Naas, UAE University • **Co-Chair:** Dr. Haitem Hassan-Beck, Takreer Research Centre

10:20 - 10:50	ART	Babu Patrose	Leading the Way with Fixed Bed Resid Hydroprocessing Technologies
10:50 - 11:10	KBC	Azhari Dafaalla	Pinch Analysis, A Rigorous Approach in Optimizing Complex H2 Networks
11:10 - 11:30	Kuwait Institute for Scientific Research	Sultan M. Al-Salem	Application of Polymeric Membranes in Refinery Off-Gases for Light Gases Recovery
11:30 - 11:50	TRC	Amena Al Maqtari	Technical & Economic Feasibility of Hydrogen Recovery from ADR Off Gas Streams
11:50 - 12:10	Aspentech	Saif Sheikh	Integrated Engineering Approach to Optimize Refinery Processes
12:10 - 12:20		Q & A	

Technical Session 3B

CHARACTERIZATION & ANALYSIS

Chair: Dr. Kazuhiro Inamura, Takreer Research Centre • **Co-Chair:** Mr. Abraham George, Takreer Research Centre

14:40 - 15:10	UOP	Kurt M. VandenBussche	Recent Progress in the Advanced Characterization of Refining and Petrochemicals Technologies
15:00 - 15:30	Khalifa University	Dimitrios C. Kyrtis	Laser Diagnostics: A Versatile Tool for the Exploration of Chemically Reacting Flow Processes
15:30 - 15:50	Masdar Institute	Isam Janajreh	Alternative Treatment of Petroleum Waste via Thermochemical Conversion
15:50 - 16:10	TRC	Abraham George	Bio-Jet Production and Testing for Demonstration Flight at Abu Dhabi
16:10 - 16:20		Q & A	

Technical Session 4B