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Digitalizing Process Engineering for a Sustainable Future

MAY 6-8, 2024 | Dhahran Expo, Kingdom of Saudi Arabia

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Poster Program

Day 1 - Monday, 06 May 2024
Kingdom of Saudi Arabia

09:00 - 18:00 **Monday Poster Session**

Topics	Topics	Topics
Effective Management of Safety Instrumented Systems Speaker **Dinu Caragheorghe** Control System Engineer, Aramco	*Ammonium Bisulfide and Ammonium Chloride Corrosion Control in Reactor Effluent Air Cooler Systems: An Operational and Engineering Experience in Aramco Refineries.* Speaker **Abdullah Alratoee** Engineer, Aramco	*CCTV Migration from Analogue to Digital Solutions* Speaker **Dinu Caragheorghe** Control System Engineer, Aramco
Jazan Refinery Complex (JzRC) Pathways to Sustainability Speaker **Nidal A Samad** Operations Engineer Specialist, Aramco	*The Role of CCUS Technology in the Oil and Gas Industry* Speaker **Mohammed Rustom** BD Director, Honeywell UOP	*An Asset Management Maturity Benchmarking Model* Speaker **Dr. Khalid Al-Jabr** Engineering Specialist, Aramco
Kgp RO Quality Challenges and Improvements. Speaker **Abdullah Aldadi** Associate Engineer, Aramco	*Sru Thermal Oxidizer Oxygen Analyzer Upgrade* Speaker **Ahmad Almousa** Process Engineer, Aramco	*Design of Wate Cooking Oil-to-Biodiesel Facility: A Case Study of Bahrain* Speakers **Ajaz Rashid** Assistant Professor, University of Bahrain **Muhammad Rizwan** Assistant Professor , University of Bahrain
Integrating Safety, Operation, Maintenance and Environmental (S.O.M.E) Aspects during Detail Engineering Phase Speaker **Rusheed Aldossari** Engineer, Self Employed	*Waste Heat Recovery in the Process of Sour Water Stripping (SWS)* Speaker **Hae Yong Noh** Senior Process Engineer, Aramco	*Best Practice to Mitigate High Risk of Improper Chemicals Management* Speaker **Heba Alhabboubi** Senior Lab Scientist, Aramco
Aspen Plus Simulation: High-Valuable Syngas and High-Surface Area Modified Biochar from Pyrolysis of Chlorella Pyrenoidosa Speaker **Gus Ali Nur Rohman** Graduate Student / Process Engineer, King Fahd University of Petroleum & Minerals (KFUPM)	*Mesoporous ZSM-5 Additive for Catalytic Cracking of Waste Plastics in Vacuum Gas Oil to Light Olefins* Speaker **Abdulkadir Tanimu**, King Fahd University of Petroleum & Minerals (KFUPM)	*Asset Predictive Analytics Digital Solution* Speaker **Abdullah Albannay** Digital Project Lead, Aramco
Water Treatment Optimizer Speaker **Mohammed Aldossary** Process Engineer, Aramco		*Advancing H2S Removal in Multiphase and Singe Phase Streams: A Laboratory Investigation of Novel Nano-Enhanced Scavenging Agents* Speaker **Ahmed Akram** CTCO, Samaa Technologies Co. Ltd.

Day 2 - Tuesday, 07 May 2024
Kingdom of Saudi Arabia

09:00 - 18:00 **Tuesday Poster Session**

Topics	Topics	Topics
Heat Integration of an Industrial Crude Plant Distillation Unit Using Pinch Analysis Speaker **Saba Alomari** Student, University of Bahrain	*Optimizing Operations Unleashing Efficiency in Desalter Health for Enhanced Profitability - a Process Excellence & Techno-Economic Study* Speaker **Michael Lam** Systems Performance Engineer, SLB	*Veolia's Comprise* Analytic Tool for Ethylene Cracked Gas Compressor System Assets, Helps Producers Meet Their Sustainability Objectives* Speaker **Naveen Agrawal** Digital Analytics Product Owner, Veolia Water Technologies & Solutions
Reducing Fuel Gas Usage in Sru Claus Burners for Improved Energy Efficiency, BTEX Destruction, and Sustainable Tgtu Operations Speaker **Mohammed Aldossary** Process Engineer, Aramco	*Rejected Gas Recovery System for Gas Oil Separation Plants (Two Inventions)* Speaker **Abdulrahman Alshehri** Lead Engineer, Aramco	*Predicting Crude Quality in Gas Oil Separation Plants Using Hybrid AI: Physics Driven Machine Learning Modelling* Speakers **Syed Abrar Ahmed** Senior Process Engineer, Aramco **Abdullah Alhussain** Process Engineer, Aramco
Robust Automation and Analytics Lead to Improved Fouling, Emulsion, and Corrosion Control in Ethylene Plants Speakers **William Choueri** Global Product Manager, Veolia Water Technologies & Solutions **Oreste Vassillo** Senior Product Application Leader HPI/CPI Middle East, Veolia Water Technologies & Solutions	*Carbon Capture and Storage Pilot Project* Speaker **Massimo Capra** Process Manager, Aggreko	*Non-Contact Radar Wellhead Growth Monitoring Digital Solution to Protect Well Integrity* Speaker **Jai Chainani** Senior Process Control Engineer, Aramco
Economic Optimization of the Energy Portfolio Management at Hard-to-Abate Industries Speaker **Alaa Alsaffar** Instructor, University of Bahrain	*Energy Conservation & Emissions Reduction through Sustainability Digital Soltions* Speaker **Mohammed Al Buainain** Associate Engineer, Aramco	*Real-Time Framework to Detect Leaks in Industrial Heat Exchangers Network* Speaker **Abdulrahim Mohammed** Data Analytics Engineer, Bapco Energies
Effective Propane Preservation Strategy Speaker **Rayan Aldahan** Associate Process Engineer , Aramco	*Lummus Hybrid Cracking Heater* Speaker **Hani Alkhalifah** Sr Licensee Support Spec II, Lummus Technology	*Optimizing Methanol Synthesis: Integration of a Digital Twin with Aspen HYSYS for Enhanced Plant Performance and Profitability* Speaker **Yomna Ayyad** Student, University of Bahrain
King Faisal University: A Pioneering story with patents Speaker **Hany M. Abd El-Lateef** , KFU - King Faisal University	*Eco-Friendly Decarbonization Process to Convert Carbon Dioxide to Liquid Fuels* Speakers **Shamsa Alderei** Student, United Arab Emirates University **Amna Almahri** Student, United Arab Emirates University	*Advanced Filtration Solutions to Optimize Clean Hydrogen Production* Speaker **Hassan Al Saiood** Principal Field Scientist, Pall Corporation

Day 3 - Wednesday, 08 May 2024

Kingdom of Saudi Arabia

09:00 - 15:00   **Wednesday Poster Session**

Topics	Topics	Topics
NGL Quality Journey Towards Digitalization at Saudi Aramco Speaker **Taib Abang** Engineering Consultant, Aramco	*Elimination of Dry-out Gas Flaring during Natural Gas Liquids Recovery Process Start-up* Speakers **Ahmed Al Ahmed** Process Engineer, Aramco **Abdulaziz Alaql** Process Engineer, Aramco	*Hybrid AI - Industrializing Physic Based Model from Engineering to Operation* Speaker **Muhamad Zaki Bin Zaini** Digital Production BDM, SLB
Performance Analysis of Innovative Multi- Stage High Oily Industrial Wastewater Treatment System Speaker **Faisal Bader Almutairi** Engineer, Aramco	*Techno-Economic Analysis and ML-Based Optimization of Advanced Solvent Looping and Stripper-Free Absorption Process for Pre-Combustion CO2 Capture from a Smr Plant* Speaker **Jun-Ho Kang** Senior Developer, DogWoodAI	*Guided Experimental Design for Modeling Methane Dehydroaromatization Reaction Systems* Speaker **Byanne Malluhi** Student, Texas A&M University at Qatar
Process Optimization with an Efficient Separation Section: A Case Study on Scaleup of Enhanced Olefin Production from Butenes Speaker **Dr. Qi Xu** Engineering Specialist, Aramco		*Smart Solutions for Integrated, Optimized and Predictive Refinery Operations* Speakers **Ashly Titus** Business Applications Section Head, Saudi Aramco Jubail Refinery Company (SASREF) **Hamoud Al-Zuabi** IT Analyst , Saudi Aramco Jubail Refinery Company (SASREF)
Green Hydrogen – Electrolysers, Comparision, Evaluation & Hydrogen Usages Speaker **Mihir Patel** Engineering Manager - Major Contracts, Muscat Engineering Consultancy Ltd.		*Conversion of High-Moisture Wastes into Fuels and Chemicals Via Hydrothermal Technologies* Speaker **Dwi Hantoko** Researcher , King Fahd University of Petroleum & Minerals (KFUPM)
Sweet Gas Recycles for NGL Recovery Enhancements Speaker **Rayan Aldahan** Associate Process Engineer , Aramco		
Flaring and GHG Emissions Minimization By Eliminating Off-Gas Flaring - a Success Story Speaker **Mohammed Albuainain** Process Engineer, Aramco		
Gasification Technology: Unlocking the Potential of Sustainable Aviation Fuel Production. Speaker **Daffer Alyami** Manager, Aramco		

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