



**MEPEC 2024**  
MIDDLE EAST PROCESS ENGINEERING  
CONFERENCE & EXHIBITION

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The Definitive Event for Process Engineering in the Middle East

# Digitalizing Process Engineering for a Sustainable Future

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





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**Program**

# Day 1 - Monday, 06 May 2024

Kingdom of Saudi Arabia

07:30 -	<b>Registration</b>
08:00 - 09:00	<b>VIPs &amp; Guests Arrival</b>
09:00 - 09:20	<b>Opening Remarks from 2024 MEPEC Conference Chairman</b>  Hall 1  Master of Ceremony <b>Eithne Treanor</b> FOUNDER & CEO, E Treanor Media  Speaker <b>Walid A. Al Naeem</b> Vice President & Chief Engineer, Aramco
09:20 - 09:40	<b>Keynote Session: Sustainable future - Key insights into the opportunities for Middle Eastern energy</b>  Hall 1  Highlight Shell's progress toward its sustainability goals, core beliefs, and its revised Energy Transition Strategy. Provide insights and learnings from some of the changes taking place within Shell assets  Facilitator <b>Eithne Treanor</b> FOUNDER & CEO, E Treanor Media  Keynote Speaker <b>Elise H Nowee</b> President, Shell Catalysts & Technologies
09:40 - 10:00	<b>Keynote Session: Scaling Technologies for the Future: Our Approach to Collaborative Development and Innovation</b>  Hall 1  How the process technology development landscape has changed over time, including the specific needs today. Need for accelerated development and deployment - how to manage risk and leverage new approaches. Collaboration between Operators and Technology providers. Collaboration between technology companies.  Facilitator <b>Eithne Treanor</b> FOUNDER & CEO, E Treanor Media  Keynote Speaker <b>Bryan Glover</b> Chief Technology & Growth Officer, Honeywell
10:00 - 11:00	<b>Break &amp; Exhibition Networking</b>
11:00 - 12:00	<b>Strategic Panel: Role of Process Excellence in Driving Sustainability</b>  Hall 1  How to leverage the power of process excellence to cope with the upcoming storm of global climate risks.  Moderator <b>Eithne Treanor</b> FOUNDER & CEO, E Treanor Media  Speakers

**Hassan Hussain Al Hosani** Senior Vice President Projects and Technical, ADNOC Refining  
**Ebubekir Koyuncu** Chief Executive Officer, Air Products Qudra  
**Tim McMinn** Vice President , ExxonMobil Technology and Engineering Company (EMTEC)  
**Mahdi F. Aladel** Chief Executive Officer, Aramco Ventures

12:00 - 13:00 **Exhibition Networking**

13:00 - 14:00 **Technical Session I**

Process Excellence I 📍 Session Room A, Hall 2	New Energies I 📍 Session Room B, Hall 2	Digitalization I 📍 Session Room C, Hall 2	Decarbonization & Energy Transition VII 📍 Session Room D, Hall 2
<p>Moderator <b>Kelepile E. Meleloe</b> Engineer, Aramco</p> <hr/> <p><i>Managing High-Risk Transitions: How Petro Rabigh Partnered with Grace to Deliver Refinery Value and Successfully Manage Technology Change</i></p> <p>Speakers <b>Graeme MacAulay</b> Technical Service Manager, W.R. Grace &amp; Co <b>Ahmed Aladwani</b> Process Engineer, Petro Rabigh</p> <hr/> <p><i>Leverage Process Simulation Tool for FCC Catalyst Selection</i></p> <p>Speaker <b>Mohammad Rakib</b> Research Science Specialist, Aramco</p> <hr/> <p><i>Elimination of Dry-out Gas Flaring during Natural Gas Liquids Recovery Process Start-up</i></p> <p>Speakers <b>Abdulaziz Alaql</b> Process Engineer, Aramco <b>Ahmed Al Ahmed</b> Process Engineer, Aramco</p>	<p>Moderator <b>Dr. Basim Abussaud</b> Chair, King Fahd University of Petroleum &amp; Minerals (KFUPM)</p> <hr/> <p><i>Overcoming Modularisation Challenges for Low Carbon Hydrogen (LCH) Plants</i></p> <p>Speaker <b>Eric Maina</b> Engineering Manager, MCDERMOTT</p> <hr/> <p><i>Ereact™: Production of Chemicals and Sustainable Aviation Fuels Using Electrified Synthesis Gas Generation</i></p> <p>Speakers <b>Aadesh Harale</b> Research Science Specialist, Aramco <b>Adam Kadhim</b> Product Line Director, Topsoe</p> <hr/> <p><i>Technoeconomic Study on the Thermochemical Recycling of Waste Plastic to Produce Dimethyl Ether</i></p> <p>Speaker <b>Mohammad Awwad</b> Master Student, KAUST Catalysis Center</p>	<p>Moderator <b>Dr. Steve Hall</b> Industry Consultant, Self Employed</p> <hr/> <p><i>End-to-End Optimization of Stabilization Columns through Advanced Process Control</i></p> <p>Speakers <b>Alaa Aljassim</b> Process Engineer, Aramco <b>Waled Bin Howiml</b> Process Engineer, Aramco</p> <hr/> <p><i>AI-Enhanced Gasoline Blending System for Refineries</i></p> <p>Speaker <b>Abdul Gani Abdul Jameel</b> Associate Professor, King Fahd University of Petroleum &amp; Minerals (KFUPM)</p> <hr/> <p><i>AI Approach to Real Manufacturing World: AI Solution for an HCR Plant and AI Hybrid Solution for a TDM Plant</i></p> <p>Speaker <b>Chang-Ha Lee</b> CEO, DogWoodAI &amp; Yonsei University</p>	<p>Moderator <b>Dr. Nasiru M. Tukur</b> Engineering Consultant, Aramco</p> <hr/> <p><i>A Plant's Sustainability By Utilizing Flare Gas Recovery System</i></p> <p>Speakers <b>Abdulaziz Al Qubali</b> Project Engineer, Aramco <b>Naseem Al Rashedi</b> Supervisor Project Engineer , Aramco</p> <hr/> <p><i>Incremental Approach to Decarbonization for Steam Crackers</i></p> <p>Speaker <b>Jose De Barros</b> Vice President, Ethylene Business Group, Lummus Technology</p> <hr/> <p><i>Unlocking Sustainable Chemistry: Landfill Gas Utilization for Green Chemical Production</i></p> <p>Speaker <b>Sami Alrashidi</b> Technology Management Engineer, SIRC Saudi Investment Recycling Company</p>

14:00 - 14:30 **Break & Exhibition Networking**

14:30 - 15:30 **Technical Session II**

Process Excellence II 📍 Session Room A, Hall 2	Decarbonization & Energy Transition I	Digitalization II 📍 Session Room C, Hall 2	Process Excellence XI 📍 Session Room D, Hall 2
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	📍 Session Room B, Hall 2		
<p>Moderator <b>Shakeel Kadri</b> Executive Director, CCPS</p> <hr/> <p><i>Manage Process Safety By Making an Big Impact on Nuisance Alarm Management</i></p> <p>Speaker <b>Jai Chainani</b> Senior Process Control Engineer, Aramco</p> <hr/> <p><i>Achieving Operational Excellence through SSX</i></p> <p>Speaker <b>Mohammad Albuzaid</b> President, KANZ</p> <hr/> <p><i>Evaluation of the Disposal of a Sour Water Stream to Protect the Integrity of a Flare System in an Oil and Gas Processing Facility</i></p> <p>Speaker <b>Simon Wohnsiedler</b> Lead Process Engineer, Aramco</p>	<p>Moderators <b>Tim McMinn</b> Vice President , ExxonMobil Technology and Engineering Company (EMTEC) <b>Dr. Debalina Sengupta</b> Program Director, Coastal Resilience, Texas Sea Grant, Texas A &amp; M University</p> <hr/> <p><i>Valorizing Biomass Waste into Activated Carbon for a Low Carbon Economy</i></p> <p>Speakers <b>Manar Al Attar</b> Student, International Maritime College of Oman <b>Anfal Al-Shezawi</b> Process Engineer (Student), International Maritime College of Oman</p> <hr/> <p><i>Reduction of CO2 Emissions on the Crude Desalting Systems: A Focus on Fourth-Generation Dual-Frequency Electrostatic Technology</i></p> <p>Speakers <b>John Philip Marshal</b> Process Engineer, SLB <b>Arun Goel</b> Concept Solution Engineering Manager, SLB</p> <hr/> <p><i>Membrane Reactors for Low Carbon Hydrogen Production</i></p> <p>Speaker <b>Alaa Albasry</b> Associate Engineer, Aramco</p>	<p>Moderator <b>Faisal Ahmad Raza</b> Technical Expert - Process, SLB Saudi Arabia</p> <hr/> <p><i>Enhancing Reaction Furnaces Temperature Monitoring through Machine Learning</i></p> <p>Speaker <b>Abdullah Alhumaid</b> Associate Engineer, Aramco</p> <hr/> <p><i>Digitization of Gas-Oil Separation Plant (GOSP) Space Using an Hybrid/AI Model</i></p> <p>Speakers <b>Faisal Ahmad Raza</b> Technical Expert - Process, SLB Saudi Arabia <b>Mohamed Nassar</b> MENA Tech Sales, SLB</p> <hr/> <p><i>Advanced Process Control Tools Toward Plant Optimization.</i></p> <p>Speakers <b>Almuhannad Basuni</b> Advanced Process Control Engineer, Saudi Aramco Mobil Refinery Company Ltd. (SAMREF) <b>Safi M. AlBuhairi</b> Process Control Specialist, Saudi Aramco Mobil Refinery Company Ltd. (SAMREF)</p>	<p>Moderator <b>Dr. Mohamed Bin Shams</b> Professor, University of Bahrain</p> <hr/> <p><i>Evaluation of the Maturity LEVEL of the Process Safety Culture for OIL and Gas Industry Workers in a Region of the Middle EAST</i></p> <p>Speaker <b>Leonardo Cotrufo</b> Lead Engineer, Aramco</p> <hr/> <p><i>Samref SRU Catalyst Management, Retrofit and Optimization Initiatives during the 2023 T/A</i></p> <p>Speakers <b>Khalid Ghazal</b> Technical Process Engineering (Sulfur &amp; Amine Specialist), Saudi Aramco Mobil Refinery Company Ltd. (SAMREF) <b>Marc Elia</b> Regional Sales Manager, Axens</p> <hr/> <p><i>Consequences and Mitigations to High Sulfur Condenser Inlet Temperature</i></p> <p>Speaker <b>Ziyad Alshahrani</b> Process Engineer, Aramco</p>

15:30 - 16:30 **Technical Session III**

Process Excellence III 📍 Session Room A, Hall 2	Decarbonization & Energy Transition II 📍 Session Room B, Hall 2	Digitalization III 📍 Session Room C, Hall 2	Digitalization VII 📍 Session Room D, Hall 2
<p>Moderator <b>Dr. S M Zakir Hossain</b> Associate Professor, University of Bahrain</p>	<p>Moderators <b>Tim McMinn</b> Vice President , ExxonMobil Technology and</p>	<p>Moderator <b>Fawaz Sahan</b> Senior Engineering Consultant, IIoT Leader and Chairman</p>	<p>Moderator <b>Dr. Steve Hall</b> Industry Consultant, Self Employed</p>

<p><i>Chevron Lummus Global's Hydroprocessing Success at Jazan Refinery</i></p> <p>Speaker <b>Suresh Kumar Nellore</b> Manager, Technical Services, Chevron Lummus Global (CLG)</p>	<p>Engineering Company (EMTEC) <b>Dr. Debalina Sengupta</b> Program Director, Coastal Resilience, Texas Sea Grant, Texas A &amp; M University</p>	<p>of Instrumentation Standards, Aramco</p>	<p><i>Enhancing Ethylene Steam Cracker Equipment Design through AI: Addressing Thermal Stresses and Predicting Remaining Useful Life in Cold Boxes</i></p> <p>Speakers <b>Saravana Bhavan Baskaran</b> Engineering Specialist, Aramco <b>Prashant Kumar</b> Senior Business System Analyst, Aramco <b>Joud Al Jalaoud</b> Data Scientist, Aramco</p>
<p><i>An Optimal Crude Oil Selection in a Refinery with Lube Hydroprocessing Capacity</i></p> <p>Speaker <b>Lujayn Alsayooif</b> Economic Optimization Specialist, Bapco Energies</p>	<p><i>Blue Hydrogen and Ammonia: Large Scale with Ultra Low Carbon Intensity</i></p> <p>Speaker <b>Jesper Poulsen</b> Licensing Manager, Topsoe</p>	<p><i>Industrial Internet of Things Architecture Standardization (Benefits, Challenges &amp; Remediations)</i></p> <p>Speakers <b>Dr. Mohammed A Alsaeed</b> Engineering Consultant, Aramco <b>Omar Alabdulwahed</b> Senior Engineer, Aramco</p>	
<p><i>Enhancing Safety and Emergency Response in Industrial Processes: Implementation of HF Alky Critical Operating Parameter (COP) for Hazard Mitigation.</i></p> <p>Speaker <b>Almuhannad Basuni</b> Advanced Process Control Engineer, Saudi Aramco Mobil Refinery Company Ltd. (SAMREF)</p>	<p><i>Performance Evaluation of Membrane Reactor for Low Carbon H2 Production</i></p> <p>Speaker <b>Rakesh Kumar</b> Lead Engineer, Aramco</p>	<p><i>Physics-Informed Automated Discovery of Kinetic Rate Models</i></p> <p>Speaker <b>Miguel Ángel de Carvalho Servia</b> PhD Candidate, Imperial College London</p>	<p><i>AI Based Multi-Unit Real Time Optimizer (First Refinery in the Middle East)</i></p> <p>Speakers <b>Othman Shamrani</b> Automation &amp; Control Sys. Unit Yanbu Refinery Department, Aramco <b>Raad Bassam Mulla</b> DT &amp; Energy Teams Leader - Yanbu Refinery Department, Aramco</p>
	<p><i>Carbon Dioxide Transport with Impurities: Optimal Design and Operation of Pipelines</i></p> <p>Speaker <b>Ahmed Alhajaj</b> Assistant Professor, Khalifa University</p>	<p><i>Innovative Process Analyzer Technology for Measuring Gas Composition</i></p> <p>Speaker <b>Ali Aldossary</b> Engineering Specialist, Aramco</p>	<p><i>Phosphate Injection Prediction Tool</i></p> <p>Speaker <b>Abdulsalam Ali</b> Process Engineer, Aramco</p>

## 17:30 - 18:15 Inauguration Ceremony and VIP Exhibition Tour

Master of Ceremony

**Weam Al Dakheel** Journalist and TV Presenter, Saudi Arabia

Speakers

**Wail A. Al Jaafari** Executive Vice President Technical Services, Aramco

**Dr. Darlene Schuster** Executive Director & CEO, American Institute of Chemical Engineers (AIChE)

## 18:15 - 18:30 Break

## 18:30 - 19:00 Gala Dinner Reception

## 19:00 - 20:30 Gala Dinner (by invite only)

📍 Emerald Hall



# Day 2 - Tuesday, 07 May 2024

Kingdom of Saudi Arabia

07:30 -	<b>Registration</b>
08:00 - 09:00	<b>VIPs &amp; Guests Arrival</b>
09:00 - 09:20	<b>Keynote Session: Innovating for Sustainability in the Emerging Low Carbon Energy Landscape</b> 📍 Hall 1  Master of Ceremony <b>Osama Al-Ansari</b> Master of Ceremonies, Saudi Arabia  Keynote Speaker <b>Dr. Khalid Al-Qahtani</b> Senior Vice President, Engineering Services, Aramco
09:20 - 09:40	<b>Keynote Session: A Balancing Act: Current and Future Realities in the Energy Transition Through Process Technologies and Innovation</b> 📍 Hall 1  Master of Ceremony <b>Osama Al-Ansari</b> Master of Ceremonies, Saudi Arabia  Keynote Speaker <b>Leon de Bruyn</b> President and CEO, Lummus Technology
09:40 - 10:30	<b>Special Featured Panel: Bridging the Learning Gap between Academia and Industries</b> 📍 Hall 1  Strategies for closer collaboration, curriculum alignment, and skills development between academia and process engineering industries. Industry leaders and academic experts share insights to prepare students for real-world challenges and enhance industry relevance in academic curricula.  Moderator <b>Eithne Treanor</b> FOUNDER & CEO, E Treanor Media  Speakers <b>Saad H. Binmatlig</b> President & CEO, Yanbu Aramco Sinopec Refinery Co. (YASREF) <b>Bassam Al Bokhari</b> CEO, EnergyTech <b>Dr. David Dixon</b> Professor, South Dakota School of Mines & Technology <b>Prof. Abdulrahman Al Lily</b> Vice President for Graduate Studies and Scientific Research, KFU - King Faisal University
10:30 - 11:00	<b>Break &amp; Exhibition Networking</b>
11:00 - 12:00	<b>Strategic Panel: Accelerating the Energy Transition with Digitalization &amp; Artificial Intelligence</b> 📍 Hall 1  Where are the best use cases in the field, how to connect with the right capabilities/talent, what does success look like, etc?  Moderator <b>Eithne Treanor</b> FOUNDER & CEO, E Treanor Media  Speakers <b>Bart Boesmans</b> Chief Technology Officer, ACWA Power

**Norm Gilsdorf** CEO, Plant.Digital

**Dr. Kian Mossanen** CIO and SVP, Siemens Energy

**Ahmad Al-Abdrabbuh** Senior Executive Vice President & Board Director, Yokogawa MEA

12:00 - 13:00 **Exhibition Networking**

13:00 - 14:00 **Technical Session IV**

Process Excellence IV 📍 Session Room A, Hall 2	New Energies II 📍 Session Room B, Hall 2	Digitalization IV 📍 Session Room C, Hall 2	Decarbonization & Energy Transition VIII 📍 Session Room D, Hall 2
<p>Moderator <b>Fadi Mhaini</b> Vice President &amp; Managing Director, MENA, Lummus Technology</p>	<p>Moderator <b>Mohammad Mozahar Hossain</b> Professor, King Fahd University of Petroleum &amp; Minerals (KFUPM)</p>	<p>Moderator <b>Saifuddin Sheikh Sr.</b> Director – Solution Consulting, AspenTech</p>	<p>Moderator <b>Dr. S M Zakir Hossain</b> Associate Professor, University of Bahrain</p>
<p><i>Discover Your Plant Potentials</i></p> <p>Speaker <b>Mohamed Abouzid</b> Process Engineer, TASNEE</p>	<p><i>Methanol to Jet: A Promising Pathway for Sustainable Aviation Fuel</i></p> <p>Speaker <b>Mohammed Rustom</b> BD Director, Honeywell UOP</p>	<p><i>Refinery Energy Demand Forecasting through Data Analytics and Machine Learning – a Case Study</i></p> <p>Speakers <b>Omar Naeem</b> Lead Digitalization &amp; Optimization Engineer, Aramco <b>Muhammad Abbas</b> Engineering Specialist, Aramco</p>	<p><i>Techno-Economic-Environmental Analysis of Hydrogen Production and Transportation Network in Saudi Arabia</i></p> <p>Speaker <b>Fatimah Alhassan</b> Student, King Fahd University of Petroleum &amp; Minerals (KFUPM)</p>
<p><i>Integrating Safety, Operation, Maintenance and Environmental (S.O.M.E) Aspects during Detail Engineering Phase</i></p> <p>Speaker <b>Rusheed Aldossari</b> Engineer, Self Employed</p>	<p><i>Simulation of Bio-Oil Production from Fast Pyrolysis of Dates Waste Biomass in Saudi Arabia to Produce Fuels and Chemicals</i></p> <p>Speaker <b>Ariel Gursida</b> PhD Student, King Fahd University of Petroleum &amp; Minerals (KFUPM)</p>	<p><i>Saudi Aramco's Process Digital Twins: Advances &amp; Implementation Strategy</i></p> <p>Speaker <b>Abdullah Alghazal</b> Process Optimization Engineer, Aramco</p>	<p><i>Challenges and Opportunities for Integration of Mixed Plastic Waste and Plastic Derived Oil into Refineries, Crackers and Plastic Sinks</i></p> <p>Speakers <b>Rasha Daadoush</b> Co-Lead - Aramco Sabic Circular Solutions Technology Integration Team, Aramco <b>Salahdine EL Idrissi</b> Engineer Specialist, Aramco</p>
<p><i>Benefits of Switching from Conventional High Temperature to Low Temperature Catalyst in the Tail Gas Treating Unit</i></p> <p>Speaker <b>Khalid Nadhem</b> Senior Process Engineer, Bapco Energies</p>	<p><i>Leveraging Digital Process Twins for Efficient and Flexible Hydrogen Production: From Design to Operation</i></p> <p>Speaker <b>Taseer Seer</b> Senior Applications Engineer, Siemens</p>	<p><i>Refinery Wide Process Simulation Digital Twin (PSDT)</i></p> <p>Speaker <b>Majed Aldalbahi</b> Digital Transformation Lead, Aramco</p>	<p><i>Methane Pyrolysis Integration for Low Carbon Ammonia and Urea Production</i></p> <p>Speaker <b>Muhamad Reda Galih Pangestu</b> M.Sc. Candidate, King Fahd University of Petroleum &amp; Minerals (KFUPM)</p>

14:00 - 14:30 **Break & Exhibition Networking**

14:30 - 15:30 **Technical Session V**

Process Excellence V 📍 Session Room A, Hall 2	Decarbonization & Energy Transition III 📍 Session Room B, Hall 2	Digitalization V 📍 Session Room C, Hall 2	Process Excellence XII 📍 Session Room D, Hall 2
<p>Moderator <b>Amer Saleem</b> Manager Technology and Sustainability, Saudi Chevron Phillips (S-Chem)</p> <hr/> <p><i>Correlation for Condensed Hydrocarbon Fraction Provides Better Water Dew Point Estimation in Column Overhead Systems</i></p> <p>Speakers <b>Fatima Janahi</b> Associate Senior Process Engineer, Bapco Energies <b>Velmurugan Venkatesan</b> Superintendent RHC and Projects, Bapco Refining</p> <hr/> <p><i>Impact of Dynamic Flare Analysis on Cost, Safety and Environment</i></p> <p>Speaker <b>Taseer Seer</b> Senior Applications Engineer, Siemens</p> <hr/> <p><i>Turnaround Cycle Optimization a Trade-Off between Production Loss and Catalyst Lifetime Abstract</i></p> <p>Speaker <b>Mahmoud Elsayed</b> Lead Process Engineer, SABIC ARRAZI</p>	<p>Moderator <b>Dr. Gopal Juttu</b> Research Science Consultant, Aramco</p> <hr/> <p><i>Techno-Economic Analysis of Ammonia for Power Generation Application in the Middle East Region</i></p> <p>Speaker <b>Mohammed Dayili</b> Project Engineer, Aramco</p> <hr/> <p><i>Experimental Study of Methane Pyrolysis for Hydrogen Production</i></p> <p>Speaker <b>Omar Behar</b> Post Doctoral, King Abdullah University of Science and Technology (KAUST)</p> <hr/> <p><i>Carbon Capture and Storage Pilot Project</i></p> <p>Speaker <b>Massimo Capra</b> Process Manager, Aggreko</p>	<p>Moderator <b>Nihar Gulwadi</b> Regional Head - MENA, Ingenero Inc</p> <hr/> <p><i>Artificial Intelligence Associated Drones Solutions for Waste Disposal Management in the Process Industries</i></p> <p>Speaker <b>Burri Harsha Vardhan Reddy</b> Senior Data Consultant, Artificial Intelligence Global Company (AIGC)</p> <hr/> <p><i>Refinery Advisory Hub- a Conceptual Promising Use Case of Large Language Models (LLM)</i></p> <p>Speakers <b>Arun Kumar Thalondan Poyithaya</b> Business System Analyst, Aramco <b>Raad Bassam Mulla</b> DT &amp; Energy Teams Leader - Yanbu Refinery Department, Aramco <b>Reema Alamoudi</b> Associate IT System Analyst, Aramco</p> <hr/> <p><i>Surrogate Based Mixed Integer Linear Programming Model for Decarbonization of an Integrated Gas-Oil Separation Network</i></p> <p>Speaker <b>Abdullah Bahamdan</b> PhD Candidate, Imperial College London</p>	<p>Moderator <b>Hashem Al-Hashem</b> Leader, GAS &amp; ARRAZI Project, SABIC</p> <hr/> <p><i>Improving Air Separation Plant Energy Intensity By Optimizing Its Operation</i></p> <p>Speaker <b>Mohammed Almutawa</b> Process Engineer, SABIC</p> <hr/> <p><i>Pinch Analysis, a Retrofit Approach for Process and Energy Optimization in Crude Oil Refinery and Downstream Processes. Opportunity for Reduction in Emissions and Opex.</i></p> <p>Speaker <b>Syed Abbas Raza</b> Lead Process Engineer, Muscat Engineering Consultancy Ltd.</p> <hr/> <p><i>Improve CDU Corrosion Mitigation Strategy through Cloud-Based Ionic Modelling</i></p> <p>Speaker <b>Cristian Spica</b> Senior Application Engineer, OLI Systems Inc.</p>

15:30 - 16:30 **Technical Session VI**

Process Excellence VI 📍 Session Room A, Hall 2	Decarbonization & Energy Transition IV 📍 Session Room B, Hall 2	Digitalization VI 📍 Session Room C, Hall 2	Process Excellence XIII 📍 Session Room D, Hall 2
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<p>Moderator <b>Claudia Janse van Rensburg</b> Regional Marketing Manager EMEA, W.R. Grace &amp; Co</p> <hr/> <p><i>System Reliability and Sustainability Improvement in DSG at Ethylene Plant</i></p> <p>Speaker <b>Mohammad Imran Khan</b> Senior Production Engineer, Saudi Chevron Phillips (S-Chem)</p> <hr/> <p><i>Jazan Refinery Complex - Pathway to Environmental Sustainability</i></p> <p>Speaker <b>Nidal A Samad</b> Operations Engineer Specialist, Aramco</p> <hr/> <p><i>Fix Combustion Control Malfunction</i></p> <p>Speaker <b>Emad Fallatah</b> Staff Engineer, Advanced Process Control, SABIC ARRAZI</p>	<p>Moderator <b>Dr. Gopal Juttu</b> Research Science Consultant, Aramco</p> <hr/> <p><i>Evaluating the Risks and Framework for Hydrogen Fuel Road Transportation in Bahrain</i></p> <p>Speaker <b>Bassam Alhamad</b> Assistant Professor, University of Bahrain</p> <hr/> <p><i>Transition to Lower Carbon Fuels</i></p> <p>Speakers <b>Romain Roux</b> Vice President Decarbonization &amp; Consulting, Axens <b>Joseph Ibrahim</b> Managing Director, Axens</p> <hr/> <p><i>Carbon Emissions Management and Decision Support Made Easy By Digital Solution</i></p> <p>Speaker <b>Saifuddin Sheikh</b> Sr. Director – Solution Consulting, AspenTech</p>	<p>Moderator <b>Dr. Rohit Patwardhan</b> Sr. Engineering Consultant, Aramco</p> <hr/> <p><i>Real Time Economic Performance System</i></p> <p>Speakers <b>Shashikant Ramsangar</b> Senior Engineer, Aramco <b>Parandhama Gudapati</b> Lead Business System Analyst, Aramco</p> <hr/> <p><i>Forecasting Process Faults Using Machine Learning in a Reactive Absorption Case Study</i></p> <p>Speaker <b>Yasser Al-Goufily</b> Scientist, SABIC</p>	<p>Moderator <b>Faisal Ahmad Raza</b> Technical Expert - Process, SLB Saudi Arabia</p> <hr/> <p><i>Aramco Way of Managing Advanced Process Control Portfolio</i></p> <p>Speaker <b>Ali Altayeb</b> Associate APC Engineer, Aramco</p> <hr/> <p><i>Troubleshooting Vertical Reboiler Performance in a Stabilizer Plant By Leveraging Digital Aspen HYSYS Simulation</i></p> <p>Speaker <b>Majed A. Al-Jeshi</b> Process Engineer, Aramco</p> <hr/> <p><i>Optimization of ULSD Vacuum Drying and Thus Reducing Equipment Counts/Sizes; Saving Steam Consumption and Energy Resulting Reducing Carbon Foot Print</i></p> <p>Speakers <b>Rajib Talukder</b> Lead Engineer, Aramco <b>Prabhas Mandal</b> Operations Engineer Specialist, Aramco</p>
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# Day 3 - Wednesday, 08 May 2024

Kingdom of Saudi Arabia

07:30 -	<b>Registration</b>
08:00 - 09:00	<b>VIPs &amp; Guests Arrival</b>
09:00 - 09:20	<b>Keynote Session: Commitment to Innovation and Process Excellence</b> 📍 Hall 1  Master of Ceremony <b>Osama Al-Ansari</b> Master of Ceremonies, Saudi Arabia  Keynote Speaker <b>Dr. Ali Abdullah Al-Meshari</b> Senior Vice President, Technology Oversight and Coordination, Aramco
09:20 - 09:40	<b>Keynote Session: A Perspective on Technology Development at SABIC</b> 📍 Hall 1  Master of Ceremony <b>Osama Al-Ansari</b> Master of Ceremonies, Saudi Arabia  Keynote Speaker <b>Ernesto Occhiello</b> EVP, Technology and Innovation, SABIC
09:40 - 10:00	<b>Keynote Session: Creation of sustainable value: Industrial Automation to Industrial Autonomy</b> 📍 Hall 1  Master of Ceremony <b>Osama Al-Ansari</b> Master of Ceremonies, Saudi Arabia  Keynote Speaker <b>Norinao Sato</b> President and CEO - Saudi & President and CEO - Middle East and Africa, Yokogawa
10:00 - 10:30	<b>Break &amp; Exhibition Networking</b>
10:30 - 11:30	<b>Strategic Panel: Hydrocarbon Plant of the Future</b> 📍 Hall 1  What does the next generation of refineries/chemical plants look like, what do they produce, where will they be, how will they decarbonize, etc?  Moderator <b>Shakeel Kadri</b> Executive Director, CCPS  Speakers <b>Dr. Rajesh Gattupalli</b> Vice President & General Manager, Honeywell UOP <b>Menahi Al Utaibi</b> Vice President of Manufacturing, Saudi Aramco Jubail Refinery Company (SASREF) <b>Mariano Delpozo</b> VP, Engineering & Technical Services, SATORP <b>Fabien Lundy</b> EMEA Commercial VP, Axens <b>Lada Kurelec</b> General Manager Polymers Technology & Innovation, SABIC

11:30 - 12:30 **Exhibition Networking**

12:30 - 13:30 **Technical Session VII**

Process Excellence VII 📍 Session Room A, Hall 2	Decarbonization & Energy Transition V 📍 Session Room B, Hall 2	Process Excellence VIII 📍 Session Room C, Hall 2	New Energies III 📍 Session Room D, Hall 2
<p>Moderator <b>Dr. Hayat Abdulla Yusuf</b> Head of Scientific Research Department, University of Bahrain</p>	<p>Moderator <b>Dr. Ranjit Kulkarni</b> General Manager , Honeywell UOP</p>	<p>Moderator <b>Shakeel Kadri</b> Executive Director, CCPS</p>	<p>Moderator <b>Dr. Anas F. Alkhani</b> Engineering Specialist, Aramco</p>
<p><i>Design and Operation of Various Gas-Liquid Distributors for Trickle Bed Reactors</i></p>	<p><i>Using Low Carbon Hydrogen for Olefins Decarbonization: Operational and Economic Considerations</i></p>	<p><i>Novel Approach for Increasing Gas Production and Enhancing Controllability for Upstream Degassing Tanks Toward Process Excellence</i></p>	<p><i>Photocatalytic Hydrogen Generation from Seawater Using High Performance Polymeric Materials</i></p>
<p>Speaker <b>Pradyut Kumar Dhar</b> Senior Engineer - Research and Analytical Services Department, Aramco</p>	<p>Speaker <b>Ibrahim Sedie</b> Process Engineer, SABIC</p>	<p>Speakers <b>Hussain Abualsaud</b> Process Engineer, Aramco <b>Mohammed Alwani</b> Engineer, Aramco</p>	<p>Speakers <b>Ghalya Alabdulla</b> Chemical Engineer, Texas A&amp;M University at Qatar <b>Noora Alsubaiei</b> Graduate, Texas A&amp;M University at Qatar</p>
<p><i>Heat Integration of an Industrial Crude Plant Distillation Unit Using Pinch Analysis</i></p>	<p><i>Process Results and Operational Experience from the Dmx™ Demonstrator Installed at Arcelormittal's Steel Mill at Dunkirk, France</i></p>	<p><i>Plant Optimization – Begins with Right Concept and Effective Detailed Design</i></p>	<p><i>Potential of Lcaf As a Complementary Tool for Decarbonizing the Aviation Industry</i></p>
<p>Speaker <b>Saba Alomari</b> Student, University of Bahrain</p>	<p>Speaker <b>Peggy Chan</b> Technology Engineer, Axens</p>	<p>Speaker <b>Saravanavel Muthiah Ponnusamy</b> Process Engineering Manager, SLB</p>	<p>Speaker <b>Dr. Nasiru M. Tukur</b> Engineering Consultant, Aramco</p>
	<p><i>TC2C™ - More Carbon-Effective Conversion of Crude Oil into Chemicals</i></p> <p>Speakers <b>Derek Jones</b> Principal Technology Specialist, Lummus Technology <b>Mazin Tamimi</b> Lead Lab Scientist, Aramco</p>		<p><i>Accelerating Scale up of the Hydrogen Economy with Systems-Level Strategic Evaluation</i></p> <p>Speaker <b>Faisal Baksh</b> Solutions Consultant, AspenTech</p>

13:30 - 14:00 **Break & Exhibition Networking**

14:00 - 15:00 **Technical Session VIII**

Process Excellence IX 📍 Session Room A, Hall 2	Decarbonization & Energy Transition VI 📍 Session Room B, Hall 2	Process Excellence X 📍 Session Room C, Hall 2	Digitalization VIII 📍 Session Room D, Hall 2
<p>Moderator <b>Faisal Ahmad Raza</b> Technical Expert - Process, SLB Saudi Arabia</p>	<p>Moderator <b>Dr. Ranjit Kulkarni</b> General Manager , Honeywell UOP</p>	<p>Moderator <b>Dr. Mohamed Bin Shams</b> Professor, University of Bahrain</p>	<p>Moderator <b>Nihar Gulwadi</b> Regional Head - MENA, Ingenero Inc</p>

<p><i>Best Practices in Design, Operation and Data Interpretation of Fixed Bed Pilot Scale Units to Overcome Scale-up Challenges for Hydroprocessing Catalysts</i></p> <p>Speaker <b>Pradyut Kumar Dhar</b> Senior Engineer - Research and Analytical Services Department, Aramco</p>	<p><i>Low Carbon Ammonia Technology optimization – moving projects forward to achieve Net Zero targets</i></p> <p>Speaker <b>Tim Ballai</b> Product Manager, Honeywell UOP</p>	<p><i>Techno-Economic Assessment of Crude Oil/Water Emulsion Separation Efficiency</i></p> <p>Speaker <b>Mashhor Aljabrine</b> Senior Engineer, Aramco</p>	<p><i>SRU Incinerator Fuel Gas Intelligence Optimizer</i></p> <p>Speaker <b>Mohammed Aldossary</b> Process Engineer, Aramco</p>
<p><i>Tackling the Dual Challenge with Embedded AI</i></p> <p>Speaker <b>Nooh Isa Mualem</b> Principal Solution Consultant, AspenTech</p>	<p><i>Use of Spiral Tube Heat Exchangers in Hydroprocessing Units</i></p> <p>Speaker <b>Jan Reneteau</b> Managing Director, NECTIS</p>	<p><i>The Deployment of New Technologies and Initiatives in Samref's SRU</i></p> <p>Speaker <b>Khalid Ghazal</b> Technical Process Engineering (Sulfur &amp; Amine Specialist), Saudi Aramco Mobil Refinery Company Ltd. (SAMREF)</p>	<p><i>Harnessing Machine Learning for Precise Prediction of Fuel Gas Consumption</i></p> <p>Speaker <b>Abdulmohsen Alnafea</b> Associate Engineer, Aramco</p>
<p><i>Trays in Amine Sweetening Contactor- Process Excellence in Debottlenecking with the Right Approach</i></p> <p>Speaker <b>Michael Lam</b> Systems Performance Engineer, SLB</p>	<p><i>Forced Periodic Feed-Composition Switching to Address Methane Dehydroaromatization Catalyst Deactivation Challenge</i></p> <p>Speaker <b>Mamoun Al-Rawashdeh</b> Assistant Professor, Texas A&amp;M University at Qatar</p>	<p><i>Enrich Your Sulfur Plant Two Case Studies with High Level Oxygen Enrichment Implemented in Sulfur Recovery Unit Revamps</i></p> <p>Speaker <b>Abdulaziz Alkhalid</b> Process Specialty Engineer, Fluor Corporation</p>	<p><i>A Data-Driven Framework for Monitoring the Operation of Chemical Plants: Application to Monitor a Bench-Scale Fischer Tropsch Process</i></p> <p>Speaker <b>Nour Basha</b> PhD Graduate, Texas A &amp; M University</p>

15:00 - 16:00

## Closing Ceremony

📍 Hall 1

Master of Ceremony

**Weam Al Dakheel** Journalist and TV Presenter, Saudi Arabia

Produced 06 May 2024

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