

Held under the patronage of H.E. Dr. Mohamed bin Mubarak Bin Daina,
Minister of Oil & Environment, Special Envoy for Climate Affairs,
Kingdom of Bahrain



ETHYLENE MIDDLE EAST TECHNOLOGY (EMET) CONFERENCE & EXHIBITION

14-15 September 2022

Gulf Hotel & Convention Centre, Kingdom of Bahrain

Organized by



Co-Organized by



ENERGY EVENTS EXPERTS

Supported by



POST EVENT REPORT



**Ethylene
Middle East**

THIS IS AN EXCITING TIME IN THE ETHYLENE INDUSTRY IN THE REGION AS WELL AS GLOBALLY. GROWTH HAS BEEN SUSTAINED THROUGHOUT THE CHALLENGING AND UNPREDICTABLE BUSINESS ENVIRONMENTS THAT HAVE AFFECTED THE GLOBAL ECONOMY IN RECENT YEARS.



ABDEL HADI AL SUHAIMI

Conference Chairman, EMET 2022
Executive President, Saudi Chevron
Phillips Company (SCP) /
Jubail Chevron Phillips (JCP)

EMET 2022 HIGHLIGHTS

The 4th Ethylene Middle East Conference and Exhibition was held under the patronage of **H.E. Dr. Mohamed bin Mubarak Bin Daina, Minister of Oil & Environment, Special Envoy for Climate Affairs, Kingdom of Bahrain**, and welcomed over 400 participants over the 2-day event.

This edition was executed by the leadership of **Abdel Hadi Al Suhaimi**, Executive President, Saudi Chevron Phillips (S-Chem), the EMET 2022 Conference Chairman; **June Wispelwey**, Former CEO and Executive Director (retired), American Institute of Chemical Engineers (AIChE), the Conference Co-Chair; **Dr. Mohammed AlRabie**, Director - Engineering Department, Sadara Chemical Company, the Technical Committee Chairman; and **Gregory E. Yeo**, Chief Engineer (retired), ExxonMobil Chemical, Technical Committee Co-Chair.



400+
ATTENDEES

90+
COMPANIES

25+
COUNTRIES



EMET 2022 provided something for everyone, insights from industry leaders and experts, technical content for consideration to meet the future demands on reducing the industry's carbon footprint and case studies shared by your peers with creative and innovative solutions for improving operations safety, reliability and profitability.

AIVARS KRUMINS, McDERMOTT



Theme: Evolving the Ethylene Industry through Efficient Operations and Effective Technologies



Hassan Al-Khaldi, General Manager, Olefins BU, SABIC focused his keynote address on SUSTAINABILITY & ESG. He stressed the need for collaboration to develop and deploy the technology that ultimately links our industry into a circular carbon economy.



Dan Coombs, Executive VP (retired), LyondellBasell stressed how the industry must quickly improve its carbon footprint and the recycling of products to survive and the need to accelerate innovation.



Dr. Pratap Nair, President & CEO, Ingenero Inc, discussed the impact of digitalization and how it can transform the way ethylene manufacturers operate. He shared successful strategies of choosing the right technologies, their implementation, and perhaps most importantly, their ongoing effective use.



Dr. Richard Charlesworth, Executive Director, S&P Global Commodity Insights gave key insights on how companies can remain competitive and increase capital efficiency. He discussed on short and long-term strategies to form a roadmap to improve Capital Efficiency & Competitiveness in the Middle East.

From the left: **Shakeel Kadri**, Executive Director & CEO, CCPS stressed on the importance of **advancing** process safety culture, technical concepts and management practices; **promoting** process safety as a key societal value and foundation for **reasonable**, sustainable operation, enhancing individual & organizational process safety competence; and **fostering** collaboration within and across organizations at all levels.

From the right: **Mutlaq H. Al-Morished**, CEO, TASNEE emphasized on the important role that regional companies will play in the future of the ethylene industry. Ethylene and derivatives remain the key value levers for Middle East producers –current dynamics in feedstock & energy markets and macro-economics open new opportunities for olefins and beyond. He spoke about the competitive position of regional petrochemical producers.



Digitalization for Ethylene

Digitalization can be the most capital efficient means of making ethylene plants more profitable, reliable and sustainable. Applying data analytics such as machine learning and artificial intelligence to existing data can result in more timely insights that remove variability, identify operational efficiency gaps, and increase unit availability. The panelists provided their perspective on keys to success, problems encountered and the best technology to utilize for the Ethylene industry.

From left to right: (panelists) **Jim Brigman**, Managing Director, Ingenero Inc; **Ahmed Al-Zahrani**, Business & Services Vice President, Sadara Chemical Company; **Arun Babu**, Regional Head of Business Development, KBR Technology; **Saifuddin Sheikh**, Director - Business Consulting Operations, Aspen Technology; (moderator) **Nadia Al Amoudi**, Executive Director, Strategy and Operational Excellence, Saudi National Center of Environmental Compliance



Actionable Sustainability in Ethylene Manufacture

The global focus on Sustainability adds two new critical elements to this list: reduction in greenhouse gas emissions and elimination of plastic waste. New business strategies, investments and technologies will be required to achieve the reductions that global standards will demand in the next few years. The panelists discussed the development and implementation of actionable sustainability strategies that apply to the ethylene industry. They offered perspectives on technology, facilities, regulatory frameworks and geopolitical enablers that will drive this significant change to our industry.

From left to right: (panelists) **Salem N Al-Duhami**, Olefins Research Fellow, SABIC; **Eid Saad Al Juaid**, Executive Director, Licensing and Compliance, National Center for Environmental Compliance; **Jim Middleton**, Group Vice President, Ethylene Product Line and Technologies, Technip Energies; **Dan Coombs**, Executive VP (retired), LyondellBasell; (moderator) **Badr S. Aljohani**, Sustainability Manager - EHS&S, Sadara Chemical Company



Day 1, Wednesday, 14 September 2022

09:00 - 09:15
Conference Opening



Eithne Treanor
CEO, E Treanor Media
Moderator



Abdel Hadi Al Suhaimi
Executive President, Saudi Chevron
Phillips (S-Chem)
Conference Chairman



H.E. Dr. Mohamed Bin Mubarak Bin Daina
Minister of Oil & Environment, Special Envoy
for Climate Affairs, Kingdom of Bahrain
Speaker

09:15 - 09:30
Keynote Session



Eithne Treanor
CEO, E Treanor Media
Moderator



Hassan Al-Khaldi
General Manager, Olefins BU, SABIC
Speaker

09:30 - 10:15
Keynote Session: Innovation Necessary for
Driving Success in the Olefins Industry



Eithne Treanor
CEO, E Treanor Media
Moderator



Dan Coombs
Executive VP (retired), LyondellBasell
Speaker

10:30 - 11:15
Keynote Session: Capturing the Digitalization
Opportunity in Ethylene Manufacturing



Eithne Treanor
CEO, E Treanor Media
Moderator



Dr. Pratap Nair
President & CEO, Ingenero Inc
Speaker

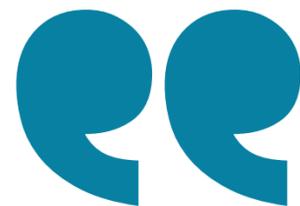
11:15 - 11:45
Plenary Speech: Capital Efficiency and
Competitiveness



Eithne Treanor
CEO, E Treanor Media
Moderator



Dr. Richard Charlesworth
Executive Director, S&P Global Commodity Insights
Speaker



EMET 2022 is one of the best events I have had the opportunity to attend. The keynote speeches set the right tone for the conference in terms of the vision and direction the industry is heading in. The general sessions provided valuable insights into current and future trends and challenges. The technical sessions served as a solid platform for discussions on key efforts and developments in the industry. All in all - a very well planned and thought out conference.

ABHILASH NAIR, FLOWSERVE CORPORATION

Day 1, Wednesday, 14 September 2022 (cont'd...)

12:40 - 14:00

Parallel Technical Sessions



Amer Saleem

Superintendent - Process Engineering,
Saudi Chevron Phillips (S-Chem)
Enhancing Reliability Session Chair



Rob Howard

Senior Director - Enterprise Solution Consulting, Aspen Technology
Application of Big Data, Digitalization and Optimization Session Chair

Increased Ethylene Furnace Efficiency and Control using Imaging Based Temperature Measurement and Visual Verification



Alan O'Donoghue

Applications Engineer – Asia Pacific & Middle East , J.M. Canty International Ltd
Speaker



Performance Optimization of Charge Gas Compressor In Ethylene Plant - Case Study

Mohamed Fekry

Technical Lead Engineer , Compressor Controls Corporation
Speaker

Ethane Cracker Furnace Coil Life Extension



Chaeung Im

Process Engineer Ethane Cracker, Petro Rabigh
Speaker



Real-Time Statistical Process Control of Ethylene and Its Derivatives

Manoj Tiwari

Sr. Product Quality Specialist, Sadara Chemical Company
Speaker

Impact of Sodium Contamination on the Cracking Furnace and Subsequent Cleanup Efforts



Vishal Karate

Technology Associate (Hydrocarbon and Utility) , Sadara Chemical Company
Speaker



Digitalization of Pressure Swing Adsorption (PSA) Control Valves to Improve Operational Reliability

Abhilash Nair

Director, Petrochemical Applications, Flowserve Corporation
Speaker

Predicting Radiant Tube Failure Due to Alumina Protective Layer Pitting



Mohammed Al-Qarni

Reliability Fixed Superintendent, Saudi Chevron Phillips (S-Chem)
Speaker



Next Generation of Production Optimization Delivers Benefits for Ethylene Manufacturer

Krishna Chada

Principal Solutions Consultant , Aspen Technology
Speaker

Day 1, Wednesday, 14 September 2022 (cont'd...)

14:15 - 15:15

Parallel Technical Sessions



Dr. Mohammed AlRabie

Director - Engineering Department , Sadara Chemical Company
Enhancing Reliability Session Chair



Muhammad Ilyas

Superintendent - Process Design Engineering , Sadara Chemical Company
Capital Efficiency and Competitiveness Session Chair

Online Repair of Leaking Condenser and Bypassing Tailing Tower Column



Fahad Abdulrahman Al-Hilali

Process Engineer, Saudi Chevron Phillips (S-Chem)
Speaker

Energy Savings for Steam Cracking Furnaces By Gas Turbine Integration



Jelle-Gerard Wijnja

Technology Manager Ethylene Furnaces, Technip Energies
Speaker

Thiophene – An Interesting Impurity From Naphtha Cracker



Senthil Murugan Rajappan

Senior Engineer, Sadara Chemical Company
Speaker

Process Intensification in the Petrochemical Industry: Olefins/Paraffins Separation



Asma Said Khamis Al Kharusi

Assistant Professor , University of Science, Malaysia (USM)
Speaker



Siva Kishore Kokkirapati

Lead Chemist, Sadara Chemical Company
Speaker

How Transformative Catalyst is Breaking Convention in Ethylene Production



Hussain Al Ramadan

Ethylene and Derivatives Catalyst Manager, Clariant Middle East
Speaker

Taking a Comprehensive Approach to Achieving 7% Improvement in Naphtha Furnace



Shardul Shindadkar

Projects & Business Development, Ingenero Inc
Speaker

Day 1, Wednesday, 14 September 2022 (cont'd...)

15:45 - 17:05

Parallel Technical Sessions



Dr. Mohammed AlRabie

Director - Engineering Department , Sadara
Chemical Company
Enhancing Reliability Session Chair



Dr. Mohammad Nahid Siddiqui

Professor of Chemistry - Chemistry Department and IRC for Membranes
& Water Security, King Fahd University of Petroleum & Minerals (KFUPM)
Addressing Sustainability Challenges Session Chair

Extending Turnaround Cycle in Ethylene Plant through Continuous Proactive Asset Monitoring



Shardul Shindadkar

Projects & Business Development, Ingenero Inc
Speaker

Low-Emission Cracking Furnace



Peter Oud

Product Development Manager Ethylene , Technip Energies
Speaker

Technology Development for Improving Performance of Cracking Furnace



Shigemoto Matsueda

QA & Engineering Manager, Kubota Saudi Arabia Company L.L.C.
Speaker

How to Reduce CO2 Emissions of Steam Cracking Furnaces



David J. Brown

Senior R&D Manager, AVGI
Speaker

Protecting Pygas First Stage Hydrogenation Reactor in Ethylene Plant



Faisal Al-Malki

Process Engineer, Saudi Chevron Phillips (S-Chem)
Speaker

CO2 Reduction: A Cost Effective Solution to Provide Sustainability by Reducing GHG Emissions from an Ethylene Plant



Jose De Barros

Vice President Ethylene Business Group, Lummus Technology
Speaker

Improvement of Acetylene Reactor Run Length



Abdulrahman Bakri

Process Engineer Ethane Cracker, Petro Rabigh
Speaker

Sustainable CAPEX Efficient Ethane Cracker Designs



Paul Langston

Chemical Engineer , KBR Technology
Speaker



Michael J. Tallman

Director - Olefins Technology, KBR Technology
Speaker

Day 2, Thursday, 15 September 2022

08:00 - 08:30
Opening Remarks



Eithne Treanor
CEO, E Treanor Media
Moderator



Shakeel Kadri
Executive Director & CEO, CCPS
Speaker

08:30 - 08:50
Keynote Session - Future Outlook of Ethylene and Olefins



Eithne Treanor
CEO, E Treanor Media
Moderator



Mutlaq H. Al-Morished
CEO, TASNEE
Speaker

08:50 - 09:10
Technical Session - Plant Sustainability Industry 4.0



Eithne Treanor
CEO, E Treanor Media
Moderator



Yousef Al-Haddad
Ethylene Sr. Production Engineer - Innovation Enabler , EQUATE Petrochemical Company
Speaker

09:10 - 09:30
Technical Session - Using Thermal Imaging and a Cloud Platform to Optimize Cracking Furnace Efficiency in Real Time



Thomas Heinzerling
Senior VP Advanced Operations, Linde Engineering
Speaker



James Cross
Global Industry Manager, AMETEK, Inc.
Speaker

09:45 - 10:45
Executive Panel Discussion: Digitalization for Ethylene



Nadia Al Amoudi
Executive Director, Strategy and Operational Excellence, Saudi National Center of Environmental Compliance
Moderator



Saifuddin Sheikh
Director - Business Consulting Operations, Aspen Technology
Speaker



Ahmed Al-Zahrani
Business & Services Vice President, Sadara Chemical Company
Speaker



Jim Brigman
Managing Director, Ingenero Inc
Speaker



Arun Babu
Regional Head of Business Development, KBR Technology
Speaker

11:00 - 12:00
Executive Panel Discussion: Actionable Sustainability in Ethylene Manufacture



Badr S. Aljohani
Sustainability Manager - EHS&S, Sadara Chemical Company
Moderator



Dan Coombs
Executive VP (retired), LyondellBasell
Speaker



Jim Middleton
Group Vice President, Ethylene Product Line and Technologies, Technip Energies
Speaker



Salem N Al-Duhami
Olefins Research Fellow, SABIC
Speaker



Eid Saad Al Juaid
Executive Director, Licensing and Compliance, National Center for Environmental Compliance
Speaker

Day 2, Thursday, 15 September 2022 (cont'd...)

12:45- 13:45

Parallel Technical Sessions



Amer Saleem

Superintendent - Process Engineering, Saudi Chevron Phillips (S-Chem)
Mitigating Risk and Prioritizing Safety Session Chair



Jim Brigman

Managing Director, Ingenero Inc
Application of Big Data, Digitalization and Optimization Session Chair

Impact of Modularisation of Ethylene Plant on HSE Design practices



Jerome Hocquet

Risk Quantification Department Head – HSE Design | Process and Technology Division, Technip Energies
Speaker

Improve Margins By Aligning Planning and APC Using Dynamic Real Time Optimization for Ethylene Plants



Satyadev Susarla

Principal Solution Consultant , Aspen Technology
Speaker

Effective Learning Curve Through Swiss Cheese Model Application in Incident Management System



Nileshkumar Patel

Process Safety Technology Leader, Sadara Chemical Company
Speaker

Effective Use of Hybrid Modeling Using Big Data to Enhance Process Efficiency & Energy Optimization in Ethylene Plant in Real Time



Nihar Gulwadi

Regional Head - MENA, Ingenero Inc
Speaker

A Case of Successful & Safe Project Completion - Ethylene Oxide & Propylene Pipeline for Value Park



Muhammad Ilyas

Superintendent - Process Design Engineering , Sadara Chemical Company
Speaker

Delivering on SABIC's Sustainability Goals through Real Time Energy Optimization



Azzam Homeida

Operation & Sustainability Engineer , SABIC - KEMYA
Speaker



Faisal Baksh

Principal Solution Consultant, Aspen Technology
Speaker



Sandeep Ghorpade

Senior Solution Consultant, Aspen Technology
Speaker

Day 2, Thursday, 15 September 2022 (cont'd...)

14:00 - 15:00

Parallel Technical Sessions



Fadi Mhaini

Managing Director - MENA, Lummus Technology
Enhancing Reliability Session Chair



Yvon Simon

Ethylene Technology Manager - Process and Technologies Division ,
Technip Energies
Addressing Sustainability Challenges Session Chair



Optimization in Ethylene Cold Section Distillation Columns (Debutanizer and C3 Splitter Columns)

Abdullah Al-Zeer

Process Engineer, Saudi Chevron Phillips (S-Chem)
Speaker



Hppe Plant Ethylene Purge Recovery Enhancement

Rayyan Radhan

Production Assistant Manager, Sadara Chemical Company
Speaker



Suez WTS Yield Up Anti-Coke Technology for Steam Cracking Furnaces

Joop Dees

Product Application, SUEZ Water Technologies & Solutions
Speaker



The Wonder of Garbage: How to Turn Plastic Waste Into Cracker Feedstock?

Veronique Reich

Principal Process Engineer, Olefins Technology, Technip Energies
Speaker



Improved Dilution Steam Generation Operational Reliability

Dr. Bhaskar Reddy Aluri

Lead Scientist, Sabic Technology Centre
Speaker



Addressing Sustainability in Olefins Feedstock Selection and Production Planning & Optimization

Manuel Dias

Solution Advisor – Production and Value Chain Optimization,
Aspen Technology
Speaker



Thamer A Al-Seraihi

Manager, Process Engineering, SABIC - YANSAB
Speaker



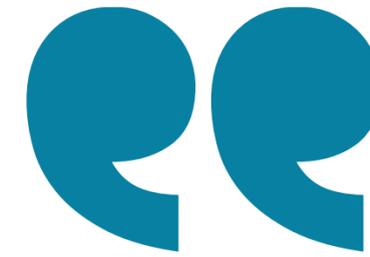
Piyush Jain

Principal Solution Consultant , Aspen Technology
Speaker



Deepak Sharma

Sr. Innovation & Petrochemical Technologist , Nalco Water, An Ecolab
Company
Speaker



The conference was very interesting, as well as the organization of the event and its participants

**EKATERINA CHKOLA,
ZMK TECHNOLOGIES GmbH**

The organizers of the event should be commended. It was very well set up and executed. I would definitely recommend this to anyone interested in the industry or region.

**DAN COOMBS,
RETIRED LYB AND EXECUTIVE CHAIRMAN PCT**

Exhibiting Companies

Leading companies in the ethylene industry attended the event

1. SABIC
2. Petro Rabigh
3. S-Chem
4. Technip Energies
5. Ingenero
6. Schmidt + Clemens
7. Nalco Water
8. Kubota
9. Aspentech
10. Dorf Ketal
11. Pall Corporation
12. CCPS
13. AIChE
14. Parallox
15. Zymeflow
16. Flexim
17. Manoir Pitres
18. Suez Water Technologies and Solutions
20. Gulf Downstream Association
21. Halliburton
22. Koch Engineered Solutions
23. Umicore
24. IMI Critical



EMET Campaign Reach

JUNE - SEPT
SOCIAL MEDIA REACH

131,000+

IMPRESSIONS

2900+

REACTIONS

JUNE - SEPT
EMAIL CAMPAIGN REACH

830,000+

EMAIL SENDS

210,000+

EMAIL OPENS

The American Institute of Chemical Engineers (AIChE) presents:
Ethylene Middle East Technology Conference
14 - 15 September 2022 | In-person | Kingdom of Bahrain



Less than 10 days to go until EMET 2022, are you ready?

Held from 14-15 September 2022, technical experts from all over the world will share practical experiences, innovative ideas, and strategies at EMET 2022. Meet and connect with ethylene industry leaders and senior executives from the regional petrochemicals market, including producers, operators, owners, and technology & solution providers.

[Register now and save \\$200](#)

Ready for EMET 2022?



What can you do at EMET 2022?

Meet industry colleagues, potential buyers & suppliers, and solution & technology providers like Sabic, Tasnee, Aspentech, Ingenero, Technip Energies, Sadara, S-Chem, Petro Rabigh, and many more.



At EMET, we have a line-up of speakers who will discuss key...

The #Ethylene Middle East Technology Conference is just a fe...

#EMET2022



WATCH THE EVENT HIGHLIGHTS

The 2-day conference brought together the movers and shakers of the region's ethylene industry. The event gave the attendees a unique platform to expand connections, share vital information, and strengthen the foundation of the sector.



Conference Chairman



Abdel Hadi Al Suhaimi
Executive President,
Saudi Chevron Phillips (S-Chem)
Conference Chairman

Conference Co-Chair



June Wispelwey
Former CEO and Executive Director
(retired), American Institute of
Chemical Engineers (AIChE)

Steering Committee



Dr. Faisal M. Al-Faqeer
CEO,
Sadara Chemical Company



Ibrahim Al-Rushoud
President - Affiliates,
Sipchem



Jamal AlEnaizi
Production Director-Ethylene,
EQUATE Petrochemical Company



Jim Middleton
Group Vice President, Ethylene
Product Line and Technologies,
Technip Energies



Dr. Pratap Nair
President & CEO,
Ingenero Inc



Yasser Abdulrahim Alabbasi
President, GPIC (Gulf Petrochemical
Industries Company)

Technical Committee Chairman



Dr. Mohammed AlRabie
Director - Engineering Department ,
Sadara Chemical Company

Technical Committee Co-Chair



Gregory E. Yeo
Chief Engineer (retired),
ExxonMobil Chemical

Technical Committee



Amer Saleem
Superintendent - Process
Engineering, Saudi Chevron
Phillips (S-Chem)



Fadi Mhaini
Managing Director - MENA,
Lummus Technology



Jim Brigman
Managing Director,
Ingenero Inc



Dr. Mohammad Nahid Siddiqui
Professor of Chemistry -
Chemistry Department and IRC
for Membranes & Water Security,
King Fahd University of Petroleum
& Minerals (KFUPM)



Muhammad Ilyas
Superintendent - Process Design
Engineering ,
Sadara Chemical Company



Rob Howard
Senior Director -
Enterprise Solution
Consulting,
Aspen Technology



Dr. Yunusa Umar
Associate Professor,
Jubail Industrial College
and University



Yvon Simon
Ethylene Technology Manager -
Process and Technologies Division,
Technip Energies

Thank you to our Sponsors & Partners

PRIME SPONSOR



PLATINUM SPONSORS



GOLD SPONSOR



SILVER SPONSORS



MEDIA PARTNERS

