

## **PROGRAM GUIDE**

| SUNDAY, AUGUST 30     |   |
|-----------------------|---|
| 12:00 PM –<br>5:00 PM | REGISTRATION  |
|                       | MONDAY, AUGUST 31   |
| 8:00 AM               | Welcome from Committee Chair<br>John Mason – <i>Agrium, Inc.</i>  |
| 8:10 AM               | Paper 1A - Keynote Address 60 Years: History of the AIChE Ammonia Safety Symposium Jim Richardson – Clariant Venkat Pattabathula – Incitec Pivot Ltd.         |
| 9:00 AM               | Paper 1B Improved Safety and Reliability by Improved Trip Interlock Systems K. R. R. Kumar, R. Raghavan – Nagarjuna Fertilizers and Chemicals Ltd.            |
| 9:30 AM               | COFFEE BREAK  |
| 10:00 AM              | Paper 1C Surprising Internal Damages on a Horizontal Ammonia Converter Basket Ashutosh Shukla, Arie de Bruijne, Michel Warzee – Yara Pilbara Fertilizer       |
| 10:30 AM              | Paper 1D From Potentially Unsafe to Unsafe by Inadequate Tube Plugging Joost Roes – Stamicarbon   |
| 11:00 AM              | Paper 1E Commissioning of 2 x 50000 MT Ammonia Storage Tanks Iftikhar H. Turi – <i>Qatar Fertilizer Company</i>   |
| 11:30 AM              | LUNCH BREAK   |
| 1:30 PM               | Paper 2A Lower Cost Operation with Low Pressure Drop Support Grids in HTS and LTS Shift Reactors Christopher Biegel — Agrium, Inc. Dan Morton — Haldor Topsøe |

| 2:00 PM              | Paper 2B Overpressure and Vacuum Protection Challenges for Low-Pressure and Atmospheric Storage Tanks David Pierce — Southern Ionics John Mason — Agrium, Inc.                         |  |
|----------------------|--|--|
| 2:30 PM              | Paper 2C Retubing Experience of Synthesis Loop WHB No 1 and Failure of Incoloy WHB No 2 Geoff Blewett, Tamvada Srinivas, Giridhara Raju – Qatar Fertlizer Company                      |  |
| 3:00 PM              | COFFEE BREAK   |  |
| 3:30 PM              | Paper 2D  Catastrophic Explosion in the CO <sub>2</sub> Removal Unit of an Ammonia Plant  Alireza Orooji, S.Sajjad Hosseininia, Ehsan Askari Mahvelati  – Pardis Petrochemical Company |  |
| 4:00 PM              | Paper 2E Implementation of Best Practices for Improvements in Reformer Performance and Reliability James R. Widrig – Quest Integrity Group Giuseppe Franceschini – Yara International  |  |
| 4:30 PM              | Paper 2F Flange Disassembly – An Underrated Source of Safety Incidents Sam Tait – Methanex New Zealand Ltd.  |  |
| TUESDAY, SEPTEMBER 1 |  |  |
| 8:00 AM              | Paper 3A State-of-the-Art Leak Detection for Ammonia   |  |

| 8:30 AM | Paper 3B Pulsations and Vibrations Control in Urea Constantino Bruni, Leonardo Galimberti – Ca |
|---------|--|
| 9:00 AM | Paper 3C   |

Glenn W. Parizot - KBR

Steve Wilmes – James Chemical Engineering Wajid Bhatti, Azzam Azmi – Fauji Fertilizer Company 9:30 AM

10:00 AM Paper 3D

10:30 AM

**Plants** asale S.A. **Evaluation of Ammonia Converter Shell with Cracked** 

> **Weld Defects for Continued Operation** Ara Nalbandian - Thielsch Engineering, Inc.

Piping and a Barge Loading Facility Andy Vluggen – OCI Nitrogen (Sitech) Dwight Eldredge - Yokogawa

**COFFEE BREAK** Cleaner for Longer - Meeting the Reliability and **Purification Demands of the Ammonia Process** 

M. J. Cousins, P. J. Carnell - Johnson Matthey Paper 3E The Process Safety Engineer's Role in Ammonia Plant **Design and HAZOP Facilitation** 

| 11:00 AM               | Paper 3F  Management of Remaining Life Based on the Outer Surface Conditions of Catalyst Tubes  Toshikazu Shibasaki, Takashi Hokamura – Chiyoda Corporation Brian Shannon – HScan International Company |  |
|------------------------|---|--|
| 11:30 AM               | FREE TIME   |  |
| WEDNESDAY, SEPTEMBER 2 |   |  |
| 8:00 AM                | Paper 4A  Managing Cold Temperature and Brittle Fracture Hazards in Ammonia-Related Industries  Daniel Benac, Dorothy Shaffer, David Wood — Baker Engineering and Risk Consultants, Inc.                |  |
| 8:30 AM                | Paper 4B Reformer Balancing for Optimization of the PCS Nitrogen Trinidad Unit 2 Primary Reformer Hugo S. Roberts – Johnson Matthey Process Technology Lawrence Sandy – PCS Nitrogen Trinidad           |  |
| 9:00 AM                | Paper 4C New Sealing System for the Main Flange Connections of Reactor 105-D Norbert Brett – SKW Stickstoffwerke Piesteritz Jurgen Deininger – TUEV SUED Franz Raymann – Nord-Lock                      |  |
| 9:30 AM                | COFFEE BREAK  |  |
| 10:00 AM               | Paper 4D Root Cause Analysis of Incidents During LTS Catalyst Reduction and Primary Reformer Coking Event Eugene Britton, Kateryna Gliebova – Mosaic Fertilizer Timothy Rembold – Clariant              |  |

Challenges in the Integration of the QAFCO 5 & 6 Mega

The Value of Primary Reformer Temperature

**Ureaknowhow.com Urea Incident Database:** 

Jo Eijkenboom, Mark Brouwer – *Ureaknowhow* 

Oscar Olatte - BD Energy Systems, LLC

Steam Reformers Overheating: Absolute Protection

Kendra Briggs, Jamie Chisamore – Johnson Matthey

10:30 AM

11:00 AM

11:30 AM

1:30 PM

2:00 PM

Paper 4E

Paper 4F

**LUNCH BREAK** 

Paper 5A

Paper 5B

**Now Available** 

**Fertilizer Complex**Andrea Zambianco – *Saipem*Mohamed Noueiri – *QAFCO* 

**Balancing and Monitoring**Michael Dean – *C. F. Industries, Inc.* 

**Learning from Each Other** 

|                       | A Case Study on Ammonia Plant<br>Shahryar Khajehnajafi, Azar Shahraz – <i>Safer Systems LLC</i>   |  |
|-----------------------|---|--|
| 3:00 PM               | COFFEE BREAK  |  |
| 3:30 PM               | Paper 5D GPIC Experiences in PG Cooler (E-301) Fouling Eyad Rafei – Gulf Petrochemical Industries Company (GPIC)  |  |
| 4:00 PM               | Paper 5E Tube-to-Tube Sheet Weld Scanning System Jen Peter Bertelsen – Force Technology   |  |
| THURSDAY, SEPTEMBER 3 |   |  |
| 8:00 AM –<br>12:00 PM | Roundtable Session Program  This year's Roundtable Session seeks to encourage open exchange and discussion through brief presentations from panelists followed by a question-and-answer session on the following topics:  Topic 1: Post-Weld Heat Treatment  Topic 2: High-Speed Equipment Monitoring and |  |

**Protection Systems** 

**Topic 3:** Operator Training **Topic 4:** Industry Incidents

**Automated Sensor Placement for Industrial Plants:** 

2:30 PM

Paper 5C