**2019 INTERNATIONAL SYMPOSIUM
IN MEMORY OF DR. SAM MANNAN**

Beyond Regulatory Compliance: Making Safety Second Nature

In Association with iChemE

**Preliminary Schedule | Subject to change**

| DAY 1: TUESDAY, OCTOBER 22 • 7:00AM- 8:00AM – Registration & Continental Breakfast |
| --- | --- |
| **Ballroom** | **Keynote Speaker: Jerry Wascom, Vice President, Operational Excellence - Safety, Security, Health & Environment, ExxonMobil Corporation.** |
| **8:00AM** | **State of the Mary Kay O'Connor Process Safety Center - Dr. Jim Holste, MKOPSC Interim Director** |
| **8:45AM** | **Break and Exhibit Hall - Ballroom** |
| **9:15AM** | **Track I: Management, Operational, and Offshore** |
| **10:30AM** | **Track II: Human Factors - People in Action** |
| **11:45AM** | **Track III: Design and Analysis** |
| **12:45PM** | **Track IV: Research and Next Generation** |

**tracks**

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<tbody>
<tr>
<td><strong>Advancing Assets Integrity Management to Meet Safe, Reliable, and Sustainable Operations</strong></td>
<td><strong>A Practical Approach to Preventing Systematic Error in the Maintenance of Instrumented Safeguards</strong></td>
<td><strong>Reverend Bayes, Meet Process Safety: Use Bayes’ Theorem to establish site specific confidence in your LOPA calculation</strong></td>
<td><strong>Dust Explosions and Collapsed Ductwork</strong></td>
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<tr>
<td>Abdul Aldeeb, Siemens</td>
<td>Angela Summers, SIM-TECH</td>
<td>Dave Grattan, aeSolutions</td>
<td>Russell Ogle, Exponent</td>
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<tr>
<td><strong>Determination of Corrosion Velocity in Industrial Equipment Working under Dual Environments, Combustion and Steam</strong></td>
<td><strong>Are you struggling with your Asset Integrity program?</strong></td>
<td><strong>Model-Based Systems Engineering for Design, Management, and Governance of Protective Systems</strong></td>
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<tr>
<td>Anibal Alviz Meza, PhD, Industrial University of Santander</td>
<td>Katherine Anderson, ioMosaic</td>
<td>Dr. Diana Gallart Hamilton, Texas A&amp;M University</td>
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<tr>
<td><strong>Managing an Instrumented Protective Systems Program for a Petrochemical Facility</strong></td>
<td><strong>PPE - Can you have too much of a good thing?</strong></td>
<td><strong>An Approach based on FME-AH-ZOP and Bayesian-LOPA for Risk Analysis in LNG Storage Tanks</strong></td>
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<tr>
<td>John Hall, Eastman</td>
<td>Sean Dee, Exponent</td>
<td>Ximing Hu, Ransing Tech University</td>
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<tr>
<td><strong>Choosing Functional Safety Field Instrumentation - Certified, Prior Use or both?</strong></td>
<td><strong>Effective Remedies for Enhancing Safe Operations Through Analysis of Organizational Safety Climate</strong></td>
<td><strong>Environmental influences on Process Safety</strong></td>
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<tr>
<td>Luis M.F. Garcia Garcia, Siemens</td>
<td>Nir Keren, Iowa State University</td>
<td>Maria Papadaki, University of Patras Greece</td>
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<tr>
<td><strong>Rethinking Process Safety &amp; Risk Management in Operations – The Emergence of ORM Digital Twins</strong></td>
<td><strong>Are biases towards the recent past causing us to unintentionally expose personnel to increased levels of risk?</strong></td>
<td><strong>Modeling Ice and Wax Formation in a Pipeline in the Arctic Environment</strong></td>
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<tr>
<td>Abilash Menon, Sphera</td>
<td>Karen Vilas, BakerRisk</td>
<td>Hongfei Xu, MKOPSC</td>
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<td><strong>Engaging Your Safety Culture Appreciatively</strong></td>
<td><strong>Crude Oil by Rail Accidents: Cross-industry Learning for High Hazard Sectors</strong></td>
<td><strong>Experimental study on radiant heat hazard from vertically oriented rectangular source jet fires</strong></td>
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<td><strong>Optimizing Plant Fire Water Requirement for Worst-Case Scenario through Consequence Analysis</strong></td>
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<td>Negrao Ataide, STTIB/Industry Technology College</td>
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**Cocktail Reception with Exhiitors | *Door Prizes at 5:30PM* - Ballroom**
DAY 2: WEDNESDAY, OCTOBER 23 • 7:00AM-8:00AM – Continental Breakfast

Keynote Speaker: Dr. Elaine Oran,
Tees Eminent Professor, Department of Aerospace Engineering, Texas A&M University Member, National Academy of Engineering

Presentation of Trevor Kletz Merit Award, Harry West Service Award, & Lamiya Zahin Memorial Safety Scholarship – Dr. Jim Holste, MKOPSC

Break and Exhibit Hall – Ballroom

SESSIONS

Track I: Management, Operational, and Offshore

Tracks:
- TBA

Chairs:
- TBA

Sessions:
- Offshore Case Studies
- Human Performance
- Consequence Analysis II
- Next Generation Process Safety

Track II: Human Factors - People in Action

Tracks:
- TBA

Chairs:
- TBA

Sessions:
- Lessons from Risk Assessment of 6th Generation Drill-ships and Semi-Submersible
- Wael Abouamin, Energy Risk Consulting

Track III: Design and Analysis

Tracks:
- TBA

Chairs:
- TBA

Sessions:
- A Quantitative Multi-Cluster Model for the FSRU-LNGC System
  - Chenji Li, MKOPSC

10:45AM

How to Improve the Trust in Safety Related Sensors

Wolter Last, Hint Global

11:15AM

Wide Temperature Range Biocompatible Herders for Rapid Oil Spill Response

Dali Huang, MKOPSC

11:45AM

Lunch and Exhibit Hall – Ballroom

SESSIONS

Track I: Human Factors - People in Action

Tracks:
- TBA

Chairs:
- TBA

Sessions:
- Incident Response and Project Planning
- Safety Culture, Leadership, and Training
- Risk Assessment II
- Reactive Chemicals/Flammability

12:45PM

When to Shut-down? How to Recover? Hurricanes Versus Tropical Storms Impacts

Kumar Chris Israni, ERM Environmental Resources Management

1:15PM

Safer Industry Through Industry Engagement, Undergraduate Education and Continuing Training

Kok-Hwa Lim, Singapore Institute of Technology

1:45PM

Integration of Process Safety into Engineering Design during Offshore Project Execution

Edward Liu, Wood PLC

2:15PM

Break and Exhibit Hall (*Doors Prizes at 3:00PM) – Ballroom

SESSIONS

Track II: Human Factors - People in Action

Tracks:
- TBA

Chairs:
- TBA

Sessions:
- Operational Lessons
- Learning from Incidents
- Process Design and Mitigation Systems
- Explosive Monitoring

3:00PM

Managing the Risks of Rapid Oil Production Expansion in the Permian Basin

Stewart Behie, Occidental Petroleum Corp

3:30PM

On the Impact of OPex Discourse on Process Safety Management

Dr. Farshad Nourai, proNEXO

4:00PM

Lessons Learned - How to Make Them Stick

Jack Chosnek, KnowledgeOne LLC

4:30PM

Engineering Ethics Session, Lindsey Brodemark (1 hr)

Symposium Banquet at Kyle Field (Ticketed Event)

Kyle Field tour starts at 5:45pm (Optional with Banquet Ticket)

Dinner: 6:30PM (Texas A&M University Mascot Reveille is stopping by for photography session with Banquet Attendees)
**DAY 3: THURSDAY, OCTOBER 24 • 7:00AM-8:00AM – Continental Breakfast**

**Ballroom**

**8:00AM**
Keynote Speaker: Dr. Andrew Hopkins, Emeritus Professor, College of Arts and Social Science, Australian National University

**9:00AM**
Symposium Program Announcements

**9:15AM**
Break and Exhibit Hall - Ballroom

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**Sessions**

10:00AM
- PSM Alarm Management – “It’s Alarming”
  Dana Cooper, Cooper Hayes LLC
  Procedural Systems as Independent Layers of Protection: Are We Giving More Credit Than is Due?
  S Camille Peres, Texas A&M University - MKOPSC
- Keynote Speaker: Dr. Andrew Hopkins
- Continental Breakfast

10:30AM
- Safeguards Verification
  Abdullah AlMulla, SABIC
  Analysis of the Low Perception of Risk: Causes, Consequences and Barriers
  Salvador Avila Filho, Universidade Federal da Bahia, Polytechnic Institute
- Numerical Simulation for Effect of Mitigation System on Ammonia Release Dispersion
  Shinhee Choi, Ajou University
- Impact of particle density on dust cloud characteristics in the minimum ignition energy testing apparatus using high-speed digital in-line holography
  Ankit Saini, MKOPSC

11:00AM
- Process Safety Leading Key Performance Indicators
  Dani Bou Reslan, Yanbu Aramco Sinopec Refining Company
  Enhancing Safety Through strengthening Human Barrier
  Sriddhar Ketavarapu, Kuwait Oil Company
- Inherent Safety as a driver for business success in the Oil & Gas Industry
  Hari Attal, Chevron
- Experimental Study of an Iron-Based Metal-Organic Framework as Flame Retardant for Poly (methyl methacrylate) (PMMA)
  Ruiqing Shen, MKOPSC

11:30AM
- How are You Misusing Leading Indicators?
  Gregg Kiihne, BASF
  Crosswalk of Human Reliability Methods of Offshore Oil Incidents
  Ronald Boring, Idaho National Laboratory
- Studying the Inherent Safety of Flare Utilization Alternatives during Abnormal Operations
  Vasiliki Kazantzi, University of Thessaly
- Effects of non-uniform blockage ratio and obstacle spacing on flame propagation in premixed H2/O2 mixtures
  Cassio Bruno Ahumada, MKOPSC

12:00PM
Networking Lunch (In Ballroom)

1:00PM-2:30PM
Tour to Disaster City (Ticketed Event)

**MARY KAY O’CONNOR PROCESS SAFETY CENTER TEXAS A&M ENGINEERING EXPERIMENT STATION**

Visit [mkosymposium.tamu.edu](http://mkosymposium.tamu.edu) for more information.