TUESDAY, OCTOBER 25 • 7:30AM - 8:00AM – Registration & Continental Breakfast

Oakwood

8:00AM The Frank P. Lees Memorial Lecture: Ms. Susan Wang, Vice Chair of the Board, Formosa Plastics Group

8:45AM The Future of Process Safety - Dr. Sam Mannan, MKOPSC and Trish Kerin, IChemE Safety Centre

9:45AM Break and Exhibit Hall - Ballroom

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<td>Case Study/Lessons Learned I</td>
<td>Risk Assessment I</td>
<td>Process Mgmt for Safety II</td>
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10:15AM Normalizing Deviance: 30 Years after the Challenger Explosion* Joey Cranston, Albuquerque

"Mitigation of boilover using floating beads" Hiroshi Koseki, NRIIFD

"What value has quantitative risk assessment? What factors do we have to reckon with in explaining its results?" Hans Pasman, MKOPSC

"Data Analytics/Data Management Solutions to Manage Pipeline Integrity and Comply with New PHMSA Regulations" Steve Arendt, ABS Group

10:45AM "West Texas Fertilizer Explosion" Vanessa Allen Sutherland Chairperson, US Chemical Safety and Hazard Investigation Board

"Smart HAZOPs - PHAs in a Cash Constrained Environment" Chris Israni, ERM

"Towards a framework for developing a Real-Time Risk Assessment and Decision-Making Tool" Rym Kanes, ExxonMobil Qatar

"Development of New Pipeline Integrity and Failure Assessment Tool" Arafat A localize, Saudi Aramco

11:15AM "Macqueno Incident" Mary Beth Mulcahy, US Chemical Safety and Hazard Investigation Board

"CFD Explosion Sensitivity Analysis" Dennis Taylor, Worley Parsons

"Developing Early Risk Detection and Preparedness System with Risk Analysis and Confi gency Plan." Joon-Yeoul Oh, TAMU Kingsville

"Consequence Analysis of the Accidental Release of Supercritical CO2 from High Pressure Pipelines" Qingsheng Wang, Oklahoma State University

11:45AM "Control Room Design: Best Practices and Lessons Learned from a Multi-Disciplinary Perspective" Mary Lane, BAW Architecture

Using Societal Expectations to Set Tolerable Quantitative Risk Criteria for Low-Probability High-Consequence Events* Lon Santis, APT

"Report on the PHMSA Regulation Workshop" Jeffrey Marx, Quest Consultants

12:15PM Lunch and Exhibit Hall - Ballroom

Explosion Hazards Safety Culture Process Mgmt for Safety II Case Study/Lessons Learned II

1:15PM "Expanded Techniques to Determine Ignition Probability" Troy Bennett, ExxonMobil

"Applying Predictive Analytics to Process Safety Leading Indicators" William Brokaw, Kestrel

"Zero Based Maintenance Program" Matt Falzone, Shell

"Investigating improved methods for the application of anticipated congestion in early design stage explosion modeling" Andrew Staszak, MMI Engineering

1:45PM "New Findings in the Prediction of DDTs at Large Scales" Scott Davis, GexCon

"Mentoring New PPS Engineers" Laura Bellman, Covestro

"Process Safety for OHS Professionals" Trish Kerin, IChemE

"Lessons in Process Safety Management Learned in an Explosion Accident in Taiwan" Hong-Jang Liaw, National Kaohsiung University of Science and Technology

2:15PM "Catastrophic Domino Effect Due to Projection Of Structural Fragments Generated by Inner Explosions of Tanks And Vessels" Alejandro Castellanos, Universidad de los Andes

"Process Safety Culture in the Offshore Oil Drilling industry: The Cuban Regulatory approach," Ruben Ferro, ORASEN

"Journey towards Risk based Process Safety" Prashanthi Bhupathi, Reliance Industries

"Results Matter: Three Case Studies Comparing and Contrasting PFD and HaZOp Reviews" Rosalynn MacGregor, Sapphire Engineering

2:45PM Break and Exhibit Hall (*Door Prizes at 3:00PM) - Ballroom

Dispersion and Source Term Risk Assessment/LOPA II Consequence Analysis I Human Factors

3:15PM "Multiscale Modeling of Buoyant Fires" Niveditha Krishnamoorthy, CD Adapco

"Multi-Community Risk Assessment Framework for Drinking Water" Tom Lowry, Sandia National Laboratories

"Evaluation beyond a consequence-only approach: When is it really needed?" Savio Vianna, Genesis Oil and Gas

"Managing procedures in hazardous industries: Deep compliance, surface compliance, and adaptive compliance" Mark Griffin, University of Western Australia

3:45PM "Evaluation of Computational Fluid Dynamics (CFD) vs. Target Gas Cloud for Indoor Gas Detection Design" James McNay, Microspack

"Assessing Risk in the Supply Chain Using the Bowtie Method" John Kill, ERM

"Mitigation of Industrial Hazards by Water Spray Curtains" Delphine Laboureure, Von Karman Institute of Fluid Dynamics

"Utilizing "Scenario Based Risk Assessment" Methodology to Support Operations Teams during Abnormal Events" John Craik, Human Centered Solutions

4:15PM "Large-Scale Vented Deflagration Tests" Peter Diakov, BakerRisk

"Mind the gap – Improving process safety with an integrated approach using risk assessments, incident analyses & audits" Joep Winters, CGE


"A Modern Control Room – Human Factors and their Impact on Plant Safety and Optimization" Hampus Scharing, CGM

4:45PM "Experimental investigation of blast wave propagation in an urban environment" Charline Fouchier, Von Karman Institute of Fluid Dynamics

"A Resilience Index for Process Safety Analysis" Richard Vazquez Roman, Instituto Tecnol´ogico de Coalya

"Process Safety - Equations of State" Brian Dickson, University of Strathclyde

"Admitting Human Error in the Workplace: The Mindset Shift to Attaining Reliable Human Performance" David Wilbur, Vetbery

5:15-7:00PM Cocktail Reception (*Door Prizes at 6:00PM) - Ballroom

5:30-7:30PM Poster Session - Inside Ballroom
Wednesday, October 26 • 7:30AM-8:00AM – Continental Breakfast

Oakwood
Mr. John DeLeeuw, Pilot, American Airlines

8:45AM
Presentation of Trevor Kletz Merit Award, Harry West Service Award, & Lamiya Zain Memorial Safety Scholarship – Dr. Sam Mannan, MKOPSC

9:15AM
Break and Exhibit Hall – Ballroom

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PSM for Contractors
Facility Siting
Hazard Assessment
LNG

10:00AM
"Improving Contractor Safety Experience & Engagement” Greg Fletcher and Katherine Molly, North Highland
"The Safest Facilities are Created During Concept, Siting, and Engineering Design” Victor Edwards
"What is a ‘Facility Level’ Hazard Analysis Anyway?” Ryan Morton and Mostafa Saadi, Anadarko Petroleum
"Risk Benchmarking for Onshore and Offshore LNG Developments” Vijay Raghunathan, DNV GL

10:30AM
"Roles of Contractors in Process Safety” Shell; Naftiz Tamim, MKOPSC
"LNG Facility Siting – An Alternative Approach” Francisco Santos, ExxonMobil
"Maximizing the Benefit of Early-Stage CFD Ventilation Analyses to Reduce Fire and Explosion Hazards” Drew Botwinick, GasCon
"Improving Prevention and Mitigation Efforts Related to Accidental Releases of LNG” Jesse Brumbaugh, Smith & Burgess

11:00AM
"Challenges in applying the principles of Process Safety Management to University Laboratories” Tomasz Glewski, TAMU
"Modifying and Using PHA Risk Matrices for Facility Siting Risk Assessments” Mark Prewitt, DCP Midstream
"Explosion Mitigation of Methane-Air Mixtures by Ultrafine Chemical Active and Inert Powders” Xinjun Wang, China Jiliang University
"High Pressure Relief Systems in LNG Receiving Terminals – A Safety Case for HP Flare” Sunny Chol, IRESIC

11:30AM
Lunch and Exhibit Hall – Ballroom

Human Factors
Relief Systems
Instruments/Controls
Reactive Chemicals

12:30PM
Human Error Reduction: Timely Lessons from Neuroscience Mike Mangan, Dekra Insight
"Static Head – The Unrecognized Hazard in Relief System Design” Robert Siml, Siemens
"The Role of Process History in Reducing False Alarms” Alan Mahoney, PPCL
"Thermal Decomposition Mechanisms of 1H-1,2,4-Triazole Derivatives: Theoretical Study” Wasana Kowkhul, Fukuoka University

1:00PM
Human Error Reduction: Timely Lessons from Neuroscience Mike Mangan, Dekra Insight
"Make Inlet Piping and PSV One System” Boyd George
"General Method for Uncertainty of Safety Integrity Level Calculations” Randy Freeman
"Isoperibolic study of hydroxylamine in aqueous solutions in the presence of selected inorganic salts” Maria Papadaki, University of Patras

1:30PM
"Fatigue Monitoring in Offshore Energy Operations” Ranjana Mehta, TAMU
"Align PHA Scenarios with PSV Calculation File Cases” Jody Olsen
"Pros & Cons of Electronic Marshalling for a Safety System” Manuel Hernandez, Fluor
"The hazards associated with the ignition sensitivity of hybrid mixtures” Emmanuel Addai, University of Magdeburg

2:00PM
Break and Exhibit Hall (*Door Prizes at 2:30PM) – Ballroom

Vapor Cloud Explosions
Facility Siting
OESI
Reactive Chemicals

2:45PM
"Accounting for Channeling and Shielding Effects for Vapor Cloud Explosions” James Wesevich, Waldinger Applied Science
"Probabilistic Approach to Deriving Oil Spill Size” Elaine Kleiner, BSEE
"Effects of environmental temperature and heat dissipation condition on thermal runaway of lithium ion battery during charge-discharge process” Linsheng Guo, Nanyang Tech University

3:15PM
"A Review of Very Large Vapour Cloud Explosions” Graham Atkinson, UK Health and Safety Office
"Layout optimization for Onshore and Offshore LNG Projects” Mukundray Dave, Becthel
"A Novel Oil-Water Emulsion Burner Concept for Offshore Oil Spill Clean Up” Kemal Saravava, Worcester Polytechnic Institute
"Development of Reaction Kinetic Model of Alkali Catalyzed Phenol-Formaldehyde Reactive System” Surendra Singh, iKINETIC

3:45PM
"Modelling and validation of atmospheric expansion and near-field jet dispersion for pressurised vapour or two-phase orifice releases” Henk Wittix, DNV GL
"Risk Assessment for Evacuation of Hazardous Materials in Ports” Burak Cankaya, Lamar University
"The Impact of Subsea Gas Releases and Resulting Gas Plumes Using Techniques in Computational Fluid Dynamics” Subajen Sivandran, BMT
"A study of effective mitigation system for accidental hydrogen fluoride releases” Seungho Jung, Ajku University

4:30PM
Engineering Ethics Session (1 hr) – Brazos Room

6:30PM
Symposium Banquet at Traditions Club – (Ticketed Event)

Buses arrive at 6:00 at the Fountain Entrance
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<td>Safety Culture Panel Discussion - Mark Griffon, Retired US Chemical Safety Board Member</td>
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<td>10:00AM</td>
<td>&quot;A Global Stochastic Programming Approach&quot; Carl Laird, Purdue University</td>
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<td>10:30AM</td>
<td>&quot;Reducing Human Error in Crane and Hoist Operations&quot; Irene Jian, Atkins</td>
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<td>&quot;The Challenges in Achieving Compliance to RAGAGEP in Process Safety Management Enforcement and the Impact of Non-Compliance to Budget and Schedule&quot; Bob Brown</td>
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<td>11:30AM</td>
<td>&quot;CCPS' Vision 2020 - An Industry View&quot; Cheryl Grounds, BP</td>
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**Note:**
- "Ocean Energy Equipment Reliability Efforts" Jim Pettigrew, OESI
- "Case Study of Relief Analysis of Compressor Stations" Kumud Chaurasia, Lloyd's Register
- "Network Analysis of Sources of Perceived Complexity in 22 Nuclear Power Plant Incidents" Farzan Sasangohar, TAMU
- "Benefits of Simple Consequence Modeling for Burner Management Systems" Matthias Braedel, aeSolutions
- "Lessons from Recent US Onshore and Offshore Accident Investigations" Steve Arendt, ABS Group
- "A Framework for identification of Lessons Learned from Offshore Operational Data" William Nelson, DNV GL
- "Are We Missing Any Detonations?" Max Kolbe, Genesis Oil and Gas