Tuesday 5 November 2024

10:00  Registrations open

10:30-12:30  Sphera Solutions
Wolters Kluwer: Introduction to Bowties, Critical Barrier Management and Barrier Health Through an Interactive Board Game
IChemE: Battery Energy Storage System (BESS) Hazards–A Process Safety Approach
IChemE Safety Centre: Are You Safety Curious? From Compliance to Safety Curiosity

12:30-13:30  Registrations/break for exhibition and poster viewing (lunch provided)

13:30-13:45  Opening session
Welcome–Eamon Chandler, Chair, Hazards 34 Technical Committee

13:45-14:30  Plenary presentation
Bhopal, 40 Years On
Fiona Macleod, Independent Consultant

14:30-15:15  Registrations/break for exhibition and poster viewing

This is a draft programme and is subject to change.

www.icheme.org/hazards34
Wednesday 6 November 2024

11:00–11:30
Dolphyn Hydrogen–Safety and Regulatory Challenges on the Offshore Production of Hydrogen from Wind
Laura Bond, ERM, UK

Evoking the Harshness of Risk Control from Blast Instrument to Precision Tool for Cutting Risk
Andrew Braze, Air-Blk, UK

Remote Operations–Cybersecurity Risk?
Matt Vickers, Abbott Risk Consulting, UK

The Integration of Qualitative Human Factors Safety Critical Task Analysis with Water Engineering Risk Assessments
Jame Henderson, Human Reliability Associates, UK

Design Considerations for Pressurised Flare and Void Systems for Efficient CO2 Management
Hugh Manuel-Dias Rodriguez, Siemens, Portugal

11:30–12:00
LTS Future: Development of Safe Hydrogen Pipeline Operational Procedures
Max Kornmeier, SGN, UK

Risk Appetite in Heavy Industries, an Insurance Perspective
Rafuors Mouhamed, CHA-Hardy, UK

Acceleration Adoption of PHA At Tools
Angus Kiddie, Process safety Matters, UK

Safety Critical Task Analysis–Lessons from Industry
Davide Porter, Ratiocine, Solutions, Malaysia

Process Safety Assurance Studies for CCUS Projects
Zurajda Mail Yussuff, Petrobas, Malaysia

12:00–12:30
The Invisible Threat: Navigating the Safety Risks of the Global Hydrogen Economy
Steve Elliott, Schneider Electric, UK

Visualising Risk Reduction Utilising Weighted Bowtie Diagrams for Enhanced Risk Assessment, Management and Communication
Colin Charland, HSE, UK

Can We Use AI to Turn Observations into Leading Indicators of Safety Culture and Plant integrity?
San Richards, Empirysa, UK

Safety Psychology and the Design of Control Critical Systems
Rachel Bennett, RMI Integrity Consulting, UK

Lessons Learned from Process and Technical Safety in CCUS Projects
Hugh Sadlee, WOP, UK

12:30–13:00
Hazard Study 0 Case Study, Retrofitting an Industrial Burner for Hydrogen Fuel
Oyinda Gunn, Axiom, UK

Update to the UK Pipeline Quantitative Risk Assessment Guideline IChemE/DoE/2
Michael Acton, DNV, UK

Digital Cutting Inspection Portal–AI Driven
Shahin Al-Beshir, AINODC, UAE

Storm Preparedness for Mobile Offshore Drilling Units: An Example of Decision Making Under Uncertainty
Simon Dunford, HSE, UK

An Updated Release Model for High-pressure CO2 Pipelines: Validation of Discharge and Dispersion Predictions Against CO2PTRANS Experiments
Ian Stens, DNV, UK

13:00–14:00
Lunch break with poster and exhibition viewing

14:00–14:30
It’s OK, We Have a Back-up
Roger Stokes, Bakerloo, UK

Saving the Invisible
Trish Korn, IChemE Safety Centre, Australia

Safety Considerations for Hydroelectric/Surgical Metal Recovery from Lithium-ion Batteries
Takanori Iinuma, University of Sheffield, UK

A Model to Assess the Risk of Organisational Change
Lorraine Braden, Braden Consulting, UK

The Revolution Balancing Method in HSE’s PI RRM Model
Andrew Newton, HSE, UK

14:30–15:00
How Safe Are Your Isolations? Lessons and Improvements to Isolation Management from an Operator’s Perspective
Milti Hadzis, Waha Energy, UK

Are You Confident of the Status of the Safety Critical Systems? Can You Demonstrate Whether It is Fully Operational, Degraded, or Inoperable?
Eben Bailey, Waha Energy, UK

Lithium-ion Battery Storage–New Technology, Same Old Process Safety Principles?
Ben Smith, Anip, Australia

Experience in the Application of Functional Mapping as a Human-centred Design Technique for High Hazard Industry
Ian Stuart, LOD, UK

Digital Platform for Leakage Analytics
Kieran McDiarmid, Cadent Gas, UK

15:00–15:30
Perpetual Persistence of Poor Procedures
Andrew Braze, Air-Blk, UK

Facilitated discussion

Approaches for lithium-ion Battery Consequence Assessments
Christopher Gold, GoSs, UK

Facilitated discussion

Exploratory Numerical Simulations of Ungrounded and Ignited Ammonia Releases
Jennifer Wen, University of Surrey

15:30–16:00
Modelling II

Modelling II

Modelling II

Modelling II

Modelling II

Water
Lithium-ion batteries
Human Factors
Modelling

Pipelines & Processes
Risk Assessment & Management
Lithium-ion batteries
Human Factors
Modelling

Pipelines & Processes
Risk Assessment & Management
Lithium-ion batteries
Human Factors
Modelling

Pipelines & Processes
Risk Assessment & Management
Lithium-ion batteries
Human Factors
Modelling

Pipelines & Processes
Risk Assessment & Management
Lithium-ion batteries
Human Factors
Modelling

16:00–16:30
SAFEN: Loss of Containment Frequency Models
Ingar Fossen, Salten, Norway

Investigation of Hazardous Area Zone Extents for Boilers in the Water Industry Including a Comparison to IChemE’s Risk
Tim Jones, RPS Group, UK

NeTech Hazards–Wild Weather
Anne Russell, RAS, UK

Is It Time Process Safety Embraced Biological Hazards?
Patrick Swiders, PM Group, Ireland

16:30–17:00
PolyPhAR: An Analytical Solution to the Dimensional/Transverse Compressible Pipe-Flow Equations
Andrew Newton, HSE, UK

Understanding Major Hazard Area Classification Implications of Emerging Near Net Zero Technologies Implemented in the Water Industry
Adriana Byun Cordoba, Arzchos, UK

Integration of Climate Change Risk Management in a Pre-existing Risk Matrix in the Engineering Sector
Paula Sara Salomao, Hatch, Brazil

Sailing the Super tanker–Improving Process Safety Management Control and Reporting Systems
Ashish Pandya and Laxme Patted, DNV, UK

17:00–17:30
Experimental Characterisation and Modelling for Improved Safety of Purging Operations
Kevin Gault, GRTgaz, France

Facilitated discussion

Facilitated discussion

Facilitated discussion

Impact of Clogging Change on Pressure Relief Devices
Robert Rich, Air-Blk, UK

17:30–18:00
Flash Poster Session

Drinks and light refreshments in exhibition area

This is a draft programme and is subject to change.
**Thursday 7 November 2024**

**Hazards34**

**10:00-10:30**

**Refreshment break with poster and exhibition viewing**

**10:30-11:00**

**Failure of the Vacuum in a Vacuum Insulated Hose While Transporting Liquid Hydrogen**
Richard Goff, HSE, UK

**Equipment Design in an Unregulated Environment—Welcome to the Wild West**
Faye Litherland, Flur, UK

**Lifting the Veil—Honest Talk and Leadership Challenges from the Sharp End**
Rachid Crow, Legitimate Leadership, UK

**Process Safety Incidents Prevention Through Gas Monitoring Enhancement in Confined Spaces**
Muhammad Huzain bin Taib, Petronas, Malaysia

**11:00-11:30**

**A Methodology for Hydrogen Vent Overpressure Assessments**
Ivan Melgiz, Carlsberg, Shell, Netherlands

**Building Design and Selection for Protection of Critical Assets**
Karen Vlas, FORBRISS Protective Buildings, USA

**Corporate Governance for Safety**
Nick Shaw, Office for Nuclear Regulation, UK

**What in the Impact of Dynamic Flow System Design on Civil, Safety, and Environment?**
Hugo Manuel Dias Rodrigues, Siemens, Portugal

**11:30-12:00**

**Reexamining Pressure Equipment for Hydrogen Service**
Philip Garner, Ascot, UK

**Protecting Against Runaway Reactions in Semi-Batch Alkoxylation Processes**
Stephen Austin, EXXEL, UK

**The Platypus Philosophy and Long Term Hazard Management**
Neil Blundell, Office for Nuclear Regulation, UK

**Lagging Fires, Their Implications for the Process Industry, Test Methods, and Mitigative Actions**
Satan Dalheln, Research Institutes of Sweden, Sweden

**12:00-12:30**

**A Methodology for Hydrogen Vents Overpressure Assessments**
Josue Melguizo Gavilanes, Shell, Netherlands

**Building Design and Selection for Protection of Critical Assets**
Karen Vlas, FORBRISS Protective Buildings, USA

**Corporate Governance for Safety**
Nick Shaw, Office for Nuclear Regulation, UK

**What is the Impact of Dynamic Flow System Design on Civil, Safety, and Environment?**
Hugo Manuel Dias Rodrigues, Siemens, Portugal

**12:30-13:30**

**Lunch break with poster and exhibition viewing**

**13:30-14:00**

**A Large Scale Experimental Programme to Improve Understanding of Liquid Hydrogen Operations**
Steven Beddedge, Shell, UK

**OSEM—it’s Not All Glamour**
Steve Sherwen, RPS Consulting, UK

**Measuring Process Safety Culture Through PSM Element Focused Interviews**
Mohammad Karmi, Aramco, Saudi Arabia

**Safety Investment Methods in High Hazard Industries for Projects with Declining Profitability and Finite Lifespan—the Case of Oil and Gas Upstream**
Tiago Iaconci, ANP, Brazil

**14:00-14:30**

**Thermal Heat Flux Measurements During a Hydrogen Flaring Operation**
Kevin Gaul, CRIGER, France

**Innovative Retooling of Crude Oil Storage Tanks with Aluminum Goodwill Dome and vapour Recovery System**
Bropy Iove Verheghe, ADNOC, UAE

**Using Cultural ‘Warning Flags’ Within the Office for Nuclear Regulation**
Caroline Sugden, Office for Nuclear Regulation, UK

**The Alternatives to Revive Safety and Integrity Of Aging Oil & Gas Wells**
Muhammad Abou Amad, ADNOC, UAE

**14:30-15:00**

**Comparison of the Heat Load from Hydrogen Jet Fires Impacting on a Target Using Different Computational Fluid Dynamics Modelling Techniques**
John Evans, Thornton Tomasetti, UK

Dave Green, RPS Group, UK

**Rescuing Emergency Planning and Preparedness from the ‘Tick Box’**
Nigel Cairn, Arup, Australia

**A New Approach to PHA and SIL Revalidation: Lessons from Ageing Oil and Gas Facilities**
Tom Ridout, ERM, UK

**15:00-15:30**

**Advancing Hydrogen Safety: Integrating Computational Fluid Dynamics for Risk Assessment in Hydrogen Production via Water Electrolysis**
Alexandre Lebas, MES International, UK

**Facilitated discussion**

**Facilitated discussion**

**Managing Chloride Stress Corrosion Cracking in LNG Fractionation Columns**
Birinengi Harry, LNG, Nigeria

This is a draft programme and is subject to change.

www.icheme.org/hazards34