Conference programme

Wednesday 22 May 2019

11:30–12:30	**Registration**		
12:30–14:30	**Workshops**		
	Chemical Plant – Inherently Safer Design	Explores one of the ISC's interactive case studies, which are based on real life incidents. You will be introduced to the basic concepts of inherently safer design and challenge you to think about how it is applied in your organisation, as well as showing how changing design intent can impact safety.	Hall 1
	Implementing Human and Organisational Factors on Bowties	Takes a further look at the practicalities of implementing human factors to a bow tie, covering an overview of the bow tie guidance from the Centre of Chemical Process Safety (CCPS) and the Energy Institute (EI); where to include human factors in bow tie diagrams; and options for visualising human factors, with discussion on the practical benefits and difficulties encountered in real-life applications.	Hall 11a
	Leadership and Collaboration in Process Safety	Explores each of the principles of process safety leadership and how they can be successfully integrated in to all aspects of the plant lifecycle, through facilitated discussions and case studies.	Hall 11b
15:00–17:00	**Workshops**		
	Lift Off–Leadership, Culture and Ethical Decision Making	Explores one of the ISC's interactive case studies, which are based on real life incidents. This one will challenge you to think about how safety is managed in your organisation and how your overall culture impacts safety outcomes.	Media Suite
	Managing the Hazards of Creeping Change	Explores how creeping changes have contributed to major accidents and provides guidance on how to plan and apply an audit to identify and manage creeping change within your own organisation.	Hall 11a
	Human Factors in Health and Safety	Provides a broad overview of the human factors issues relevant to major accidents in the process industries, and then discusses human behaviour, errors and non-compliances in more detail.	Hall 11b
17:30–19:30	**Plenary session**	Welcome presentations *Applying Safety to Unconventional Risks* — Trevor Kletz Hazards lecture Mike Bell, Walt Disney Parks & Resorts, US Introduction to the poster presentations	Hall 1
19:30–21:00	Welcome drinks with poster and exhibition viewing		Hall 3

Conference programme

Note: the programme may be subject to alteration

Thursday 23 May 2019

09:00–09:40	Plenary session	*It's About the 'AND'* Tracy Whipple, BP, US	Hall 1
09:40–10:20	Plenary session	*Applying Process Safety and Systems Thinking to a Wider World–How Do We Break Down the Silos and Share Our Knowledge?* Dame Judith Hackitt DBE, EEF, UK	
10:20–10:50	Refreshment break with poster and exhibition viewing		Hall 3

AM	Human Factors Hall 1 Session chair: Trish Kerin	Hazard Assessment Hall 11a Session chair: Andy Crerand	Design Engineering Hall 11b Session chair: Andy Mackiewicz	Environment Media Suite Session chair: Tony Clayton
10:55–11:20	*Developing Human Factors Maturity®* Janette Edmonds, The Keil Centre, UK	*Assessment of Toxic Risks from Warehouse Fires* Graham Atkinson & Brian Briggs, Health and Safety Executive, UK	*Comparison of Building Design: Design Accidental Loads vs. Risk-Based* Rafael Callejas-Tovar & Joshua Bruce-Black, BakerRisk Europe, UK	*What Is the Value of the Environment?* Carolyn Nicholls, Robert Ritchie & Aimee Russell, RAS Ltd, UK
11:25–11:50	*Organisational Change: Learning from Experience* Lorraine Braben, LBC, UK & Nick Morris, Cristal Pigments, UK	*Failure of Above-Ground Storage Tanks (AST): a New Methodology for Assessing Consequences* Chris Robinson, Euan Stoddart, Kunle Fajuyitan & Tristan Vye, MMI Thornton Tomasetti, UK; Mark Scanlon, Energy Institute, UK	*Control Room Design–Guidance Document EEMUA 201 3rd Edition Updated 2018* Andy Brazier, Wilde Analysis, UK	*Environmental Protection in Anaerobic Digestion: How Implementation of a Renewable Technology Can Lead to Greater Risk of Environmental Harm* Euan A Munro, SLR Consulting, UK
11:55–12:20	*Breaking with Tradition: Business-Wide Human Factors Integration on a Global Scale* Peter Webb, LyondellBasell, UK & Richard Scaife, The Keil Centre, UK	*Application of Bayesian Belief Networks to Assess Hydrogen Gas Retention Hazards and Equipment Reliability in Nuclear Chemical Plants* Fayaz Ahmed, Sellafield Ltd, UK	*Emergency Depressurisation–Why 6.9 Barg in 15 Minutes Is Not Always the Answer* Cameron Milne, MMI Thornton Tomasetti, UK	*ALARPing Risk Reduction Measures: Better Quantification for Better Results* Jack Davy & David Craig, Wood, UK; Stuart Turner, EDF Energy, UK
12:25–12:50	*The Treatment of Generic Task Elements in Human Factors Critical Task Reviews, Competence Management, and Procedures* Jamie Henderson, Human Reliability Associates, UK; Martin Burrows & Steve Potts, National Grid, UK	*Experimental Investigation of Potential Confined Ignition Sources for Vapour Cloud Explosions* Jason Gill, Graham Atkinson & Edmund Cowpe, Health and Safety Executive, UK; Herodotus Phylaktou & Gordon Andrews, University of Leeds, UK	*Working Together for a Good Working Environment* David W. Edwards, Granherne / KBR, UK & Mette Mathiesen, Equinor, Norway	*Using Risk Assessment to Support Investment Decision-Making* John Barker & John Cronin, ioMosaic Corporation, UK; Gemma Dunjó, ioMosaic Corporation, US
12:50–13:50	Lunch break with poster and exhibition viewing			Hall 3

@hazardsUK #hazards29

PM	Case Studies	Safety Culture	Cyber Security	Dispersion Modelling
	Hall 1 Session chair: Jonathan Carter	**Hall 11a** Session chair: James Birch	**Hall 11b** Session chair: Lee Allford	**Media Suite** Session chair: Andy Crerand
13:55–14:20	*Caribbean Petroleum VCE Case History* Q.A. Baker, J.K. Thomas, D.R. Malik & M.T. Edel, Baker Engineering and Risk Consultants, Inc., US	*Practical Leadership for Process Safety Management* Ian Travers, Ian Travers Ltd, UK	*CHASE–Visualising Cyber Security Vulnerabilities and Risk* Andy Geddes, PX Group, UK & David Hatch, Process Safety Integrity, UK	*Computational Fluid Dynamics or Gaussian–Is There a Right Way to Model Gas Dispersion?* Andy Stanley & Naomi Warrilow, RAS Ltd, UK; Amita Tripathi & Claude Souprayen, Fluidyn, France
14:25–14:50	*Creeping Change: Liquid Accumulation in a Flare System at a Gas Terminal* Roger Berriman, Centrica Storage Limited (CSL), UK	*Safety Performance Improvement Using Cultural Change–Lessons Learned* Brad Eccles & Mark Manton, ABS Group, UK	*If It Is Not (Cyber) Secure, It Is Not Safe* Mike StJohn-Green, Method Cyber Security, UK & Dil Wetherill, Method Functional Safety, UK	*CFD Modelling of Underexpanded Hydrogen Jets Exiting Rectangular Shaped Openings* J.R Stewart, Health and Safety Executive, UK
14:55–15:20	*Chemical Incident Investigation, Millennium Inorganic Chemicals (MIC), Stallingborough UK, 2010* Stephen Graham, Jonathan Buston, Brian Fotheringham & Stephen Hargreaves, Health and Safety Executive, UK	*Simplifying COSHH and Improving Chemical Safety* Stuart Morgan, Mark Stewart & Tasha Bennett, Heineken, UK	*Developing a Combined Lifecycle Management Approach for Both Functional Safety and Security for SIS* John Walkington & Suresh Sugavanam, ABB Limited, UK	*Elevated LNG Dispersion–Effects of Topography and Phase Change* Felicia Tan & Chris Savvides, BP, UK; Vincent Tam, University of Warwick, UK
15:20–15:50	Refreshment break with poster and exhibition viewing		**Hall 3**	

PM	Process Safety Management	Incident Investigation	Education & Training	Systems & Audits
	Hall 1 Session chair: Craig Williams	**Hall 11a** Session chair: James Birch	**Hall 11b** Session chair: Chris Tighe	**Media Suite** Session chair: Felicia Tan
15:55–16:20	*Managing Process Safety in a Decommissioning Project* Michael Green, Paul Franklin & Jennifer Pearce, Atkins Limited – SNC Lavalin, UK; Lee Allford, Energy Institute, UK	*Avoiding Engineering Catastrophe: New Insights from Data* Matt Clay, Tim Boardman, Jim Murphy, Tony Wynn, Steven Naylor & Jo Ellwood, Health and Safety Executive, UK; Moray Kidd, The University of Manchester, UK	*What Went Right* Paul Amyotte, Dalhousie University, Canada	*Safety Instrumented System Functional Safety Assessment Experiences* Jon Keswick, eFunctionalSafety, UK
16:25–16:50	*HAZOP Revalidation and Focus on Major Accident Hazards* Paul Kenny, ExxonMobil Chemical Limited, UK	*CCPS Incident Investigation Book, Third Edition* R.C. Stokes, BakerRisk Europe, UK; Q.A. Baker, M.P. Broadribb, T.V. Rodante & C.A. Grounds, Baker Engineering and Risk Consultants, US	*New NEBOSH/HSE Qualification in Process Safety Management* Justin Holroyd, Richard Goff & Jill De Nardo, Health and Safety Executive, UK; Matthew Powell-Howard, NEBOSH, UK	*Variability: Threat or Asset?* Ben Ale, Technical University Delft, The Netherlands; Des Hartford, BC Hydro, Canada; David Slater, Cardiff University
16:55–17:20	*Effective Implementation of Process Hazard Analysis in Challenging Working Environments* Arafat Aloqaily & Mohaned Faisal, Saudi Aramco, Saudi Arabia	*Review of Recent Incidents Involving Flammable Mists* Philip Lees, Simon Gant & Richard Bettis, Health and Safety Executive, UK; Alexis Vignes & Jean-Marc Lacome, INERIS, France; Olivier Dufaud, Université de Lorraine, France	*Spreading the Word–The Use and Future of IChemE's Fundamentals of Process Safety Course* Phil Eames, Andrew Hudson & Ken Patterson, UK	*Use of Photographic Surveys to Enhance Safety Studies and Inspection* Ian Herbert, MMI Thornton Tomasetti, UK

PM	Hall 1	Hall 11a	Hall 11b	Media Suite
17:30–18:00		Information session *How a Digital Twin Can Be Used to Reduce Hazards in Operating Assets* AVEVA	Information session *Best Practice Management of Change and Process Safety* VisiumKMS · Rolls-Royce A Rolls-Royce solution	Information session Professional Process Safety Engineer registration IChemE ADVANCING CHEMICAL ENGINEERING WORLDWIDE
18:00–18:30		Information session *How a Digital Twin Can Be Used to Reduce Hazards in Operating Assets* AVEVA	Information session *Best Practice Management of Change and Process Safety* VisiumKMS · Rolls-Royce A Rolls-Royce solution	
19:00–22:00	Social event (pre-registration required)		**Hall 4**	

@hazardsUK #hazards29

Friday 24 May 2019

09:00–09:40	Plenary session	*Unified Command–a Comprehensive Approach to Hazard Response* Mark Neate, Sellafield Ltd, UK	Hall 1
09:40–10:20	Plenary session	Panel discussion *How Do We Achieve, Maintain and Demonstrate Competencies for Process Safety?*	Hall 1
10:20–10:50	Refreshment break with poster and exhibition viewing		Hall 3

AM	Risk Assessment Hall 1 Session chair: Arvinder Saimbi	Integration of Process Safety Data Hall 11a Session chair: Diego Lisbona	Pipelines & Transport Hall 11b Session chair: Rob Magraw	Safety Cases Media Suite Session chair: Azzam Younes
10:55–11:20	*Constructing a Legally Sound Demonstration of ALARP* Keith Miller, IMechE Safety & Reliability Working Group, UK	*Bridging the Gap Between Data and Decision-Making Through Digital Transformation* Abhilash Menon, Sphera Solutions, UK	*Frequencies of Oil Spills During Transfer Between Ship and Shore* John Spouge, DNV GL, UK	*Safety Case Process in Cuba: Transition from Theory to Practice* Fidel Ilizástigui Pérez, Todus Advisors, Cuba & Hani Salem Morales, Risquest Safety Consultants, Cuba
11:25–11:50	*Hazard Analysis of Battery Energy Storage Systems* Piero Maggio, EDF Renewables, UK; Damien Guy, EDF Store & Forecast, France; David Hatch, Process Safety Integrity, UK	*Use of Design Operating Window (DOW) Violation Monitoring Tool to Reduce Equipment Design Violations in a Crude Oil Refinery* Karunya Nair, SAPREF, South Africa	*Keeping Our Pipelines Safe: a Review of French Regulations and GRTgaz Methodology for Natural Gas Pipeline Safety Studies* Gilles Chatelet, GRTgaz, France	*The e-SafetyCase–Electronic or Effortless?* Gareth Ellor, Risktec Solutions, UK
11:55–12:20	*Process Approach to Drinking Water Quality Risk Assessment Using Bowtie Analysis* Hew Cameron Merrett, Jao-Jia Horng & Wei-Tong Chen, National Yunlin University of Science and Technology, Taiwan	*Automated Review of Offshore Maintenance Records* Matthew Celnik & Chris Bell, DNV GL, UK	*Pipeline Overpressure Protection Using Layer of Protection Analysis* S. Shahidi, T. Little & N. Amott, Fluor, UK	*Moving from Tenant to Nuclear Licence Holder on a GB Nuclear Licensed Site* Denise Cárdenas Lopez, Tradebe Inutec, UK
12:25–12:50	*Assessing Combinations of Hazards in a Probabilistic Safety Analysis* Halbert Taekema & Hans Brinkman, NRG, The Netherlands	*BowTies for the Digital Transformation of Safety Management Systems* Coen van Gulijk, University of Huddersfield, UK; Paul McCulloch, CGE Risk, The Netherlands	*The Safety Assessment of LNG Marine Bunkering* Ann Halford & Clive Robinson, DNV GL, UK; David Haynes, Society for Gas as a Marine Fuel, UK	*Challenges in Process Safety Assurance of a Hazardous Epoxidation* Stephen Rowe & Keith Middle, DEKRA Process Safety, UK

12:50–13:50	Lunch break with poster and exhibition viewing	Hall 3

PM	Lessons Learned Hall 1 Session chair: Craig Williams	Process Safety Futures Hall 11a Session chair: Jonathan Carter	Offshore Safety Hall 11b Session chair: Rob Magraw	Hazard Management Media Suite Session chair: Diego Lisbona
13:55–14:20	*Experiences with Fires and Explosions* Graham Morrison, Gexcon, UK	*Process Safety and the Hyperloop* Ian Sutton, Sutton Technical Books, US	*Offshore Release Data–Trends in Underlying Causes* Maria Koutsoudaki, Nijs Jan Duijm & Igor Kozine, Technical University of Denmark DTU, Denmark; Brian Bain, DNV GL Oil & Gas, UK	*Tending Towards Operational Excellence in Oil Terminals–Using Process Safety as a Key Tool* Ramesh Ramalingam K, Nagarajan R & Venkata Sainath G, Cholamandalam MS Risk Services, India
14:25–14:50	*Maintenance-Related Major Accidents in the Metal Industry: the Combustible Dust Challenge* Peter Okoh, Norwegian University of Science and Technology, Norway	*Swiss Cheese Challenge: Creating Dialogue on Process Safety Dilemmas* Stephen Liew, Chuang Bing Lau, Norman Ingka, Anthony Kang, Sarawak Shell Berhad, Malaysia	*Uncertainty in Explosion Risk Assessment* Chris Coffey, Richard Gibson & Marios Christou, Offshore Consulting Group, UK	*SPiGA, Integrated Digital System for Process Safety and Asset Management in Ecopetrol S.A.* Guillermo Eduardo Pinto Amaya, Ecopetrol S.A., Colombia
14:55–15:20	*Learning from Incidents–a Personal Journey over Decades of Manufacturing Hazardous Substances* Roderick Prior, SHExellence cc, South Africa	*Taming the Wild River Rapids–How Process Safety Can Apply Outside the Process Industries* Trish Kerin, IChemE Safety Centre, Australia	*A Comprehensive TR Gas Ingress Study Over Multiple Facilities–Summary and Conclusions* Richard Emery, MMI Thornton Tomasetti, UK	*Lightning as a Source of Ignition* Robin Earl, DEHN UK Limited, UK
15:25–15:40	Plenary session	Closing session to include the poster prize presentation		

@hazardsUK #hazards29