2023 GLOBAL CONFERENCE ON PROCESS SAFETY & BIG DATA
CCPS EPSC

October 24, 2023	
8:30 AM – 8:40 AM	WELCOME ADDRESS: Pol Hoorelbeke, TotalEnergies Fellow Process Safety & EPSC Board Member
8:40 AM – 9:40 AM **Keynotes Session Chair: Shakeel Kadri**	**KEYNOTE 1: Future operation of an industrial system** **Juergen Mielke**, Head of Product Portfolio Management – Automation and Digital, Siemens Energy
	KEYNOTE 2: Covestro's digitalization journey in manufacturing **Martin Wolf**, Head of Digital Process Technology & Knowledge Management, Covestro
9:40 AM – 10:40 AM **Panel Session Chair: Daniel Mottaghi**	**PANEL DISCUSSION:** Operationalising Big Data to Improve Process Safety Performance **Panelists:** **Abdulrahman Alamer**, Saudi Aramco **Dirk Roosendans**, TotalEnergies **Martin Wolf**, Covestro
10:40 AM – 11:00 AM	**Coffee Break**
11:00 AM – 12:40 PM	**SESSION 1: Big Data Analytics for Process Safety**
Chair: Tijs Koerts Co-Chair: Willi Meier	Geometric Process Control Models for Abnormal Process Event Detection and Warning **Alan Mahoney**, PPCL
	Big Data Analytics Potential in Unifying Digital Safety Solutions **Lama Aldosary**, Saudi Aramco
	Contribution of Data Collection to Prevent Dust Explosion on Chemical and Pharmaceutical Industry **Elsa Gonçalves**, Hovione
	Development of an AI-Based Safety Stethoscope for Identification of Unsafe Situations at Industrial Plants **Sadegh Shahmohammadi**, TNO
12:40 PM – 1:30 PM	**Lunch**
1:30 PM – 2:45 PM	**SESSION 2: Business Cases and Standards & Methods for Digitalisation**
Chair: Arthur Groot Co-Chair: Daniel Mottaghi	Transforming Gas Business Through Data Contextualisation Capability **Mohd Safwan Muhamad Diah**, Petronas
	Dynamic Risk Registers: a new era in using PHA risk information **Arturo Trujillo**, Dekra
	A Modest Proposal for Linkages to Enable Process Safety Digitalization **Tony Downes**, Downes Process Safety LLC
2:45 PM – 3:05 PM	**Coffee Break**
3:05 PM – 3:20 PM	**The Impacts of Artificial Intelligence and Machine Learning on Cybersecurity and Process Safety, AcuTech Consulting Group Inc. Sponsored Technologies Talk**
3:20 PM – 4:10 PM	**SESSION 3: Maintenance Optimization and Robotic Support of Safety**
Chair: Anthony Downes Co-Chair: Abdul Aldeeb	Implementing Risk Assessment Tools and Safety Regulations Into a Framework for Maintenance Optimization **Martha Scattergood**, **Louis Allen**, University of Sheffield
	Robots Can Minimize Confined Space Entries of Pressurized Vessels / Reactors **Marcel Swalen**, Covestro
4:10 PM – 5:50 PM	**SESSION 4: Practical Examples and Case Studies**
Chair: Michael Snyder Co-Chair: Abdulrahman Alamer	A Data-Led Approach to Improving Manufacturing Performance **Paul Kenny**, ExxonMobil
	Application of Large Language Models for Optimising Insight from HSE Observations **Morgan Walter**, Empirisys
	Data Migration to Cloud for Quality/Consistent PHA **Edward Marszal**, Kenexis
5:50 PM	**RECEPTION & POSTER SESSION**

Note: Posters will be displayed during all breaks, Lunches, and at Reception

October 25, 2023	
8:30 AM – 8:40 AM	**WELCOME ADDRESS:** Shakeel Kadri. Executive Director & CEO, CCPS
8:40 AM – 9:15 AM Keynote Session Chair: **Pol Hoorelbeke**	**KEYNOTE 3: The role of process safety leadership is digital transformation** **Gus Carroll**, CEO and co-founder, Empirisys, Chair – UK Major Accident Hazards Strategic Forum
9:15 AM – 10:30 AM **Panel Session Chair: Abdul Aldeeb**	**PANEL DISCUSSION:** Current Technology Developments for Digital Solutions in Process Safety Applications **Panelists:** • **Benjamin Lee**, Siemens Energy • **Gus Carroll**, Empirisys • **Arturo Trujillo**, Dekra
10:30 AM – 10:50 AM	**Coffee Break**
10:50 AM – 10:55 AM	**Wolters Kluwer Enablon Sponsored Technologies Talk**
10:55 AM – 12:35 PM	**SESSION 5: Predictive Models and Tools for Maintenance and Asset Integrity**
Chair: Tony Downes Co-Chair: Kiran Krishna	Exploratory Approach to Develop a Mathematical Model Using Neural Nets (Artificial Intelligence) to estimate potential damages after process safety events in oil and gas facilities **Oscar Mauricio Barajas Pinzon**, Saudi Aramco
	Leveraging Ex-Equipment Inspections and Data Analysis for Sustainable Process Safety **Yusuf Mert Sonmez**, Proscon
	How Enhanced Reality Technology Reduces Human Errors Through Increased Operator Competency **Susanna Voges**, Voovio
	Spatiotemporal Fault Detection and Diagnosis to Enhance Process Safety **Louis Allen**, University of Sheffield
12:35 PM – 1:25 PM	**Lunch**
1:25 PM – 2:35 PM **Panel Session Chair: Christian Demski**	**PANEL DISCUSSION: Health monitoring of safety systems or protection layers** **Panelists:** • **Fred Stay**, HIMA • **Arthur Groo**t, Covestro • **Martijn Kramer**, Yokogawa • **Paul Tours**, Wolters Kluwer Enablon • **Franz Handermann**, Siemens AG
2:35 PM – 3:50 PM	**SESSION 6: Barrier Health Monitoring/Dynamic Risk**
Chair: Abdulrahman Alamer . **Co-Chair: Willi Meier**	Advanced Barrier Health Monitoring with the BowTie Method **Jerson Wattie**, The National Gas Company of Trinidad & Tobago
	Harnessing the Power of Digitalization to Better Manage Process Safety Health **Andy Bartlett**, Sphera
	Knowledge Graph and Language Models for Incident Analysis **Giorgio De Paola**, Repsol
3:50 PM – 4:10 PM	**Coffee Break**
4:10 PM – 5:00 PM	**SESSION 7: Tools to Avoid Human Errors**
Chair: Kiran Krishna Co-Chair: Arthur Groot	Embedding Human Factors into Digital Process Safety Management Systems **Chukwuemeka Ihesiulo**, Saudi Aramco
	Attack operator performance issues from all directions **David Strobhar**, Beville/Center for Operator Performance
5:00 PM	**Close of Conference & Plan for 2024 - Tijs Koerts & Willi Meier**

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