

32 - GCPS - Process Safety Poster Session

Monday, April 07, 2025 5:00 PM - 7:00 PM

Trinity Exhibit Hall, Hilton Anatole

BOARD NUMBER	Title	First Name	Last Name
1	Case Study - Analyzing Dust Explosion Risks in Powder Coating Operations with Low Mie Powder Paints through Root Cause Analysis and Safeguard Evaluation	Timothy	Heneks
2	Dust Explosion Hazards in Animal Feed Production: A Process Safety Review	Laura	Rocca Ribeiro
3	Deviance Normalization and Low Risk Perception, the Challenges in Human Factor Investigation and Safeguards Design.	Salvador	Avila Filho
4	Human Factors Elements Missing from Most Process Safety Management Systems	Revonda	Tew
5	Taming the Temporary MOC Dragon	Michelle	Brown
6	Solving the "Rubik's Cube" of the Dreaded RAGAGEP Review	Michelle	Brown
7	Research on quantitative method of failure probability of crude oil pipeline based on Database	Qian	Lu
8	Enhancing Process Safety through implementation of Integrity Operating Window during conduct of operations in refinery & petrochemical plants	Pankaj	Pant
9	Continuous Improvement and Safety Culture in Process Safety Management	Ghayth	Rigane
10	Building a Safe Industrial Environment through Process Safety Management	Ridha	Ben Salem
11	Review of Changes in API Standards and Learnings from Incidents	Shailesh	Saraykar
12	Process Safety Management Audit for Maturity Level PSM Deployment across Organization.	Abhineet	Raj
13	Root Cause Diagnosis and Analysis Method for Abnormal Conditions in Chemical Processes Based on Mechanism and Real-Time Data Correlation Analysis	Shangzhi	Liu
14	Building a Strong Process Safety Culture: A Multifaceted Approach	Mineshbhai	Prajapati
15	Causal Discovery and Hybrid Deep Learning for Process Fault Detection and Diagnosis	Louis	Allen
16	Gas Dispersion from Cargo Tank Inerting Systems into Accommodation Air Intakes on Offshore Production Units: A CFD Study	Eduardo	Sousa Santos

17	"Triângulo Da Culturalização: Como a Técnica Que Transformou o Uso Do Cinto De Segurança No Brasil Pode Revolucionar a Cultura De Segurança De Processos Na Indústria."	Cleiton	Dos Santos
18	Dynamic Barrier Management: Methodology Proposal for Implementation in a Business Unit	Andre Luiz Castilho	Cruz
19	Centros Integrados De Operaciones (CIO): Optimizando La Eficacia En La Gestión De Seguridad De Procesos	Jaime Alberto	Garrido Ruiz
20	<i>Marketing</i> , for Effectiveness of HSE Management System	Baldeo	Pandey
21	A Holistic Process Sustainability Metric	Mitchell	Huffman
22	Human Factors in the Process Safety Management of Oil and Gas Industry: Materiality, Integration and Management.	Flavia	Costa
23	Evaluating Safety of Atmospheric Venting for Low-Pressure Tanks: A Semi-Quantitative Screening Approach	Thuc	Ngo
24	Non-Metallic Piping Implementation in Offshore Platform Drainage Systems: Addressing Challenges and Risk Mitigation.	Heitor	De Souza Lichotti
25	From Standard to Practice: Developing a Compliance Framework for Process Safety Management (PSM) in the Philippines	Reyson Dave	Dela Cruz
26	Comparison of Technology-Driven Approaches for Pre-Causing in Process Hazard Analysis (PHA): Pre-Causing Parser Vs. NLP and Chatbot Integration	Kaylee	Miranda
27	Cost-Benefit Analysis of Early Technical Safety Studies for Novel Technology (Startup) in the Chemical Processing Industry	Michael	Saura
28	Gen AI Application in Event Categorization	Camila	Koehler
29	The Process Safety Professional	Ian	Sutton
30	Operational Resilience Discussion	Salvador	Avila Filho
31	Application of KSP Holistic Training Solution for Front-Line Employees in Chemical Companies	Jun	Hao
32	Methods to Identify Hazards in Sustainable Process Systems	Mitchell	Huffman
33	The Impact of PSM on Mining, Ports, and Railways: A Pssr Experience.	Joao	Meneses
34	Customized Tool Development for Event Priorization in Mining Industry	Americo Diniz Carvalho	Neto

35	Continuous Conversation System with an Operational Excellence Approach for Proactive Risk Identification and Management in Process Safety	Javier	Acevedo Sandoval
36	Optimizing Fixed Deluge Fire Systems: Maintaining Reliability and Availability without Increased Costs in Extended-Life and Decommissioned Units.	Heitor	De Souza Lichotti
37	Replacement of HDS Reactor Due to Cracking Identification	Gustavo	Dian
38	Using Gamification for Promoting Process Safety Management in Mining Projects	Vanessa	Ferreira
39	Decarbonization Projects in the Mining Industry – Process Safety Perspective and PHA Application	Gustavo	Peron
40	Ragagep Emphasis	Neil	Prophet
41	Thermal Decomposition of Dimethylacetamide (DMAc)	Elsa	Koninckx
42	Process Safety Hazard Analysis: Didion Milling Inc. Combustible Dust Explosion	Bram	Sueppel
43	Formosa Plastics Vinyl Chloride Explosion	Liam	Horan
44	Dust Hazard Analysis	Jessie	Warren
45	“Pay Now or Pay Later: 3 Steps to Building a Profitable Process Safety Strategy”	Ranessa	Davis
46	Santos Method: How Bowtie, in Conjunction with the "Brainstorming", "6M", and "5 Whys" Tools, Can Provide Agility and Precision in Investigating Unwanted Events.	Cleiton	Dos Santos
47	Proactive Strategies for Preventing Process Safety Incidents in the 2020s	Bahman	Abdolhamidzadeh
48	Optimización De Evaluaciones De Riesgo Cualitativas Para Maximizar El Brainstorming	Matias	Massello
49	Steam Explosion: The Case for Process Safety in Molten Metal Processes	Emily	Schroeder
50	Connected PSM for Operational Excellence	Mike	Bearrow
51	Enhancing Process Safety Knowledge Management Using AI Tools	Tekin	Kunt
52	How Do You Use Storytelling to Reinforce Process Safety Culture?	Ozge	Ozgun Cimen
53	Effortless Process Hazard Analyses: A Guide to Make It Easier	Stephanie	Smith
54	Hazardous Chemical Management Noncompliance Observations Based on Audit Experiences	Seckin	Gokce
55	Optimizing Process Safety for Operational Excellence	Iqbal	Qasim

56	The Sea Triangle: 3 Steps to Do Routine Tasks Safely in Daily Life	Faisal	Saleem
57	Training the Next Shift - Preserving Safety in the Face of Experience Loss	John	Binion
58	Increasing Human Reliability with Walk the Line By Electronic Checklist	Lueci	do Vale
59	Establishing Safe Operating Limits: A Case Study in Operational Discipline and Process Safety at an Ammonia Synthesis Plant	Joel	Hanson
60	Incorporating the Human Reliability Technique (Petro-HRA) into the Real-Time Dynamic Risk Management Tool	Alexandre	Bonavita
61	Key to a Good Hazard Analysis – Do Your Homework!	Aakash	Kulshreshtha
62	Learning Smarter Lessons from Incidents with Bowtie and Consupmap Analyses	Maureen	Hassall
63	Automated System Deviation Detector (ASDD) Dashboard	Mohammed	Alnemer
64	Blockchain Technology for Secure and Transparent Data Sharing in Building a Robust Ssbd Toolbox for Industrial Applications	Achilleas	Karakoltzidis
65	Bowtie Methodology: Importance and Cases of Its Applicability for Hazard Identification and Control Measures	Roberto	Ruiz Vásquez
66	Defining Assumptions for HAZOP Studies	Rafaela	Vaz Pereira Da Silva
67	Enhancing Virtual PHA Communication: Applying Motivational Interviewing Techniques to Improve Hazard Identification in Remote HAZOP Sessions	Brandon	Morris
68	Agent-Based Modelling for Evacuation in Industrial Settings: A Stochastic Approach for Critical Scenarios	Achilleas	Karakoltzidis
69	Quality: The Hidden Link between ISO 9001 and Process Safety	Cleiton	Dos Santos
70	Activity-Based Inhalation Model for Assessing Occupational Exposure and Daily Intake in Industrial Environments	Spyros	Karakitsios
71	Global PSM Implementation of a User-Friendly, Powerful Interface for PHAST Dispersion Modeling	Michael	James
72	Barrier Management in Preventing Process Safety Incident	Ahmad	H. Alfardan
73	SIF Testing Hybrid Dashboard	Dinu	Caragheorghe
74	Enhancing the Reliability of Interlock in HF CCSS Acqc through Safety Integrity Level Study	Soyoung	An

75	Applying Inherently Safer Design Techniques to Cybersecurity	Patrick	O'Brien
76	Applying ASME Section VIII Ug 140 (Code Case 2211-1) Reasoning to Exclude a Vessel from the Need for a Fire Case Relief Valve	William	Bridges
77	CSB Process Safety Analysis of the Watson Grinding and Manufacturing Co. Explosion and Fire in Houston, Texas	Riley	Coulter
78	Use of Tabletop Exercise for Emergency Scenarios	Abhineet	Raj
79	Analysis of the Main Factors Contributing to Process Safety Accidents in an Oil and Gas Major Company	Josue	Franca
80	From Static to Spark: Navigating Flammable Liquid Risks with Plastic Containers	Michael	Snyder
81	Process Safety for Tank Farms	Neil	Prophet
82	Caso Exito: Remediacion De Condicion De Integridad De Un Pozo De Hidrocarburos Categorizado Inicialmente Con Riesgo Alto	Jose Tomas	Mejia Payares
83	Restoring Efficiency and Mitigating Environmental Impact in Ammonia Refrigeration Systems: A Case Study on Condenser Blockage and Maintenance Solutions	hafiz Hamid	Hassan
84	Catastrophic Warning Signs and Symptoms in Engineering Projects – be Aware & Beware!	Denver	Roopchand
85	Process Safety Management for Success: Implementing Management Strategies and "Magic Words" for Regulatory Compliance and Facility Buy-in	Gayle	Nicoll
86	Using Wind Tunnel Modeling based on Field Scale Experiments as a Validation Tool for Atmospheric Dispersion Models.	Thomas	Spicer
87	Dynamic Barrier Management for the Functional Integration of Safety and Security Domains in Critical Infrastructures: A Management Framework Based on Technical References	Juan	Angarita C.
88	<i>Understanding Depressurization of CO₂ Vessels Using Computational Modeling and Data-Driven Techniques for Safety in Carbon Storage and Transport.</i>	Sanket	Kadulkar
89	Development of "Gasdispersion Sim" Software to Simulate Gas Dispersion and Its Scope.	Geraldo	da Silva
90	Marketing, for Effective Buy-in of HSE Management System By Employees	Baldeo	Pandey

91	Chemical Safety in Tunisian Laboratories	Houcine	AMMAR
92	The Hazards Next Door: Streamlining PHAs in Utilities and Ancillaries	James	Memcott
93	Rethinking the Accident Pyramid: A Shift Towards Proactive Integrated Safety Indicators for High-Hazard Chemical Industries	Anshulkumar	Tiwari
94	Union Industrial Estate -High Pressure Gas Event	Jerson	Wattie
95	Influence of Inert Dust Dilution on the Ignition Sensitivity of Combustible Dust	Emmanuel	Addai
96	Process Safety Management Elements (PSM) Network	Shailesh	Saraykar
97	What Is Your Fire Protection Philosophy? <i>Developing a Documented Approach for Evaluating Risk to Protect People, Assets, and Profit from the Effects of Fire.</i>	Ryan	Bennett
98	Fast-Tracking Success: Ensuring Process Safety in Expedited Oil Production Projects	Hisham	Hattali

31 - Environmental Division Poster Session

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BOARD NUMBER	Title	First Name	Last Name
99	Electrocatalytic Degradation of 4-Chlorophenol Using Combustion Synthesized Magnesium Ferrite Catalyst	Aromal	Ashok
100	Dry Reforming (CO ₂) of Propane and Higher Hydrocarbons for Sustainable Hydrogen Production	Umer	Aizaz
101	An Environmental Impact Assessment of Ammonia Co-Combustion in Coal-Fired Power Plants Utilizing Life Cycle Assessment (LCA) Methodology	See Hoon	Lee
102	Electrospun Copper-Based Electrostatic-Catalytic (EC) Nanofiber for Ultrahigh Flow Catalytic Air Sterilizer and Purifier	Zixuan	Xiong
103	Degradation of per- and Poly-Fluoroalkyl Substances (PFAS): Preliminary Review	Claire	Myers
104	Removal of Thiosulfate from Wastewater By Advance Oxidation Process	Naveed	Ahmad
105	Advancements in Sustainable Catalysts for Biodiesel Production: Environmental Impact and Reusability Analysis of MgO and KOH	Aboulbaba	Eladeb
106	Effective Cationic and Anionic Dye Removal from Wastewater Using Multi-Functional Adsorbent	Salem	Bahadi

107	Chlorella for Heavy Metal Removal from Wastewater Via Biosorption Followed By Hydrothermal Conversion for Waste Reutilization	Kilee	Lasiter
108	Climate Change-Induced Thermodynamic Alterations in Surface Seawater: A Novel Investigation of CO ₂ Solubility Dynamics	Nishaben	Dholakiya
109	Chemical Industry Disaster, Outside or inside Causation and Consequences	Salvador	Avila Filho
110	The Concept of Carbon Minimization in Oil and Gas. It Has Gradually Been Noticed in Various Industries.	Iman	Kazemi
111	Solvent-Free Cycloaddition of Carbon Dioxide to Epoxide Using Zn/Zr-Based Metal Organic Frameworks (MOF)	Zaheer	Aslam
112	Climate Change Impacts on Surface Seawater in Contest to CO ₂ Solubility: A Comprehensive Thermodynamic Investigation	Nishaben	Dholakiya
113	Mitigating Amazon Rainforest Fires: Prevention and Sustainable Management Strategies	Majed	Moosa
114	Development and Implementation of Sustainability Lesson Modules for Sophomore-Level Chemical Engineering Courses	Madeline	Mondebello
115	Influence of Surfactant Ion Types on Chelating Agent Performance in Enhanced Oil Recovery	Muhammad Shahzad	Kamal

34 - Poster Session: Process Development Division

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BOARD NUMBER	Title	First Name	Last Name
116	Effective Mitigation of Cavitation-Induced Vibrations in Stg Condenser Return Lines Using CFD Analysis	Minkyu	Han
117	Assessing Thermochemical Routes for Hydrogen Production from Heavy Fuel Oil: Technical and Economic Perspectives	Usama	Ahmed
118	Implementation of a Risk Analysis-Based Business Continuity Plan to Ensure Continuous Operation of Equipment in a Cosmetics Industry Quality Control Laboratory	Cristiano Francisco	Azevedo Junior
119	Economics of Hydrogen Transportation in Liquid Organic Hydrogen Carrier	Umer	Zahid

35 - Poster Session: Separations Division

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BOARD NUMBER	Title	First Name	Last Name
120	Efficient Nanofiltration Separation of CO ₂ -Derived Fructose and HEPES: An Exploratory Analysis of Parameter Optimization and Pore Properties	Jianmin	Xing
121	Ultrasound-Assisted Dewatering System for Microalgae Dewatering and Harvesting	Atulkumar	Raut
122	Tailored Integration of Water Processable Charged Covalent Organic Framework into Polyamide Membranes for Efficient Clean Water Production <i>Via</i> Desalination	Umar Hussaini	Nuhu

36 - Poster Session: Fuels and Petrochemicals Division

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BOARD NUMBER	Title	First Name	Last Name
123	Mitigation of Hot Air Leakage from the Secondary Reformer Inlet Flange: Design and Implementation of a Temporary Solution	Hamid	Butt
124	Optimal Design and Strategic Planning of Hydrogen Production, Transport, and Storage Infrastructure	Dauda	Ibrahim
125	Utilizing Piston Reactor for Chemical Energy Storage from Renewable Energy	Aya	Abousrafa
126	Model-Based Optimization of Novel Non-Thermal Dewatering Pulverizer for Processing Solid Wastes	Bruce	Adkins
127	Development of Novel Zwitterionic Surfactants for Enhanced Oil Recovery Under Harsh Conditions	Syed Muhammad Shakil	Hussain
128	Radioactive Particle Tracking (RPT) based hydrodynamics investigation in slurry phase reactor for residue hydrocracking	Ashutosh	Yadav
129	Post Combustion Carbon Dioxide Capture Using Hollow Fiber Membrane Contactor	Abdullah	Khan
130	Goldilocks & the Three Fuels	Brian	Royo
131	Interfacial Oxygen Vacancy Designed in Ni@CeO ₂ Surrounded Catalyst Enables Highly Safety Chemo-Selective Transfer Hydrogenation of Nitroarenes	Xuan	Wang
132	"Enhanced Bio-Oil and Biochar Properties from Microalgae through Torrefaction Pretreatment Followed By Fast Pyrolysis"	Minahil	Khan

133	Oxidative Dehydrogenation of n-Butane to 1,3-Butadiene over Fibrous Silica Supported Ni-Bi Oxide Catalysts	Tatinaidu	Kella
134	Crude Oil conversion to Gas Boiler and its impact on Company Sustainability and Energy Performance	Abdulaziz	A.Y Yahya

97 - Poster Session: Process Intensification

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BOARD NUMBER	Title	First Name	Last Name
135	Compositional Simulation Gas Injection to Unlock the Potential of Tight Carbonate Reservoir of Middle East	Adel	Elsharkawy
136	Process Simulation and Comparative Analysis of a Novel 2-Reacto Chemical Looping System for Hydrogen Production Using Biogas	Qiaochu	Zhang

127 - Hydrogen Safety Poster Session

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BOARD NUMBER	Title	First Name	Last Name
137	Enhancing the Safety and Efficiency of Liquid Hydrogen Operations through Advanced Simulations	Yeong-Yan	Perng
138	Risk Assessment of Hydrogen for Use in Hazardous Process	Abhineet	Raj
139	Maintaining Safe and Sustainable Operations in Hydrogen Services Using Integrated Data Management Systems	Payam	Jamshidi
140	Leakage Hydrogen Gas Can be Removed By a Passive Eliminator to Prevent It Accumulate in a Confine Space. It Can Significantly Reduce the Risk of Explosion.	Ming-Yu	Yen
141	Safety on Green Hydrogen Logistic	Salvador	Avila Filho
142	Inherent Safety Assessment Method for Hydrogen Energy Supply Chain Based on Energy Risk and Equipment Reliability	Jingjing	Wang
143	Opportunities in Hydrogen Safety	Nathan	Lott

128 - Energy Transition Poster Session

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BOARD NUMBER	Title	First Name	Last Name
144	Methanol As FUEL for Energy Transition: India's Approach	Divesh	Kumar

145	Investigation of the Effects of Alkali Metal Cations and Cathode Wettability on the Selectivity and Stability of CO Electroreduction through Membrane Modifications	Abir	Mahmud
146	A New Three-Dimensional Network Structured Polymeric Binder for Silicon-Based High-Capacity Lithium Ion Anodes.	Bolormaa	Gendensuren
147	Synergistic Effect of Mxene and Copolymeric Binders for Advanced Silicon Anodes in Lithium-Ion Batteries	Bolormaa	Gendensuren
148	Battery Energy Storage System (BESS)-for Energy Transition and Decarbonization	Divesh	Kumar

33 - Poster Session: Industry 4.0/Analytics & AI

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BOARD NUMBER	Title	First Name	Last Name
149	Strategic Framework for Establishing Industrial Safety Technology and Management Methodologies from Dual Perspectives of the Internet and Big Data	Yuyang	Xie
150	On-the-Fly Root Cause Analysis in Multi-Unit Processes: A Machine Learning Approach with Granger Causality and Fault Trees (Application: Heat Recovery Network)	Mohamed	EL Koujok
151	Real Time Design Modeling for Hook-up Pattern Drawing on Process Datasets Using Machine Learning and Big Data Streaming System	AREUM	Lee
152	Closed Loop AI Optimization - the Next Evolution of APC and Online Optimization Technology	Scott	Karasik
153	<i>Autonomous PID Tuning for Industrial Process Control: A Surrogate Model and Agent-Based Approach</i>	Kyle	Territo
154	Optimal Machine Learning Approach for Anion Conductivity Prediction in Anion Exchange Membranes (AEMs)	Pegah	Naghshnejad
155	Cybersecurity in the Manufacturing Industry: Challenges, Strategies, and Future Directions	Seerat	Bilal
156	Fortifying the Petrochemical Industry: Advanced Cybersecurity Strategies for the Petrochemical Industry	Bez	Hoxha
157	Digital Olefin Plant Performance Improvement (EthylLink)	Renaud	Galeazzi
158	Risk Warning in Real Time Based on HIRA Studies	Tatiana	Morais

159	Temporary By-Pass of Protection Layers: Risk Assessment and Management	Tatiana	Morais
160	Smart Manufacturing and Industry 4.0 Technologies' Applications in Four Industries	Joel	Matias
161	Driving Operational Excellence with Real-Time Dynamic Digital Twins: A Case Study in VCM Production Poster	Jay	Yun
162	A New Hybrid Approach to Designing of New Multiphase Contactors for the Circular Economy -	Grégory	Bana
163	Guiding the Experimental Design for Empirical Modeling of the Reverse Water Gas Shift Reaction-	Byanne	Malluhi