

## - Chemical Engineering and the Law Poster Session

Monday, March 25, 2024 5:00 PM - 7:00 PM

Hall B-1, New Orleans Ernest N. Morial Convention Center

BOARD NUMBER	Title	First Name	Last Name
1	Machine Learning Detection of Radioactive Sources Using Maximum Detection Distance for Environmental Remediation	Nancy	Ibrahim
2	Biochemical Kinetics-Informed Ann Modeling for Cyanobacterial Biological Processes	Miriam	Nnadili

## - Environmental Division Poster Session

Monday, March 25, 2024 5:00 PM - 7:00 PM

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BOARD NUMBER	Title	First Name	Last Name
3	Environmental Assessment of Polycyclic Aromatic Hydrocarbons (PAHs) in the Polluted Coastal Cities	Ammar	Bakheet
4	Geochemical and Spatial Distribution of Minerals in the Tailings of Ife/Ijesa Gold Mine Zone, Nigeria	Abiodun	Fatoye
5	Integra 2.0: Bridging the Gap from Global-Scale Contamination to Tissue-Specific Dose Assessment, Integration of a Computational Systems Biology Approach.	Achilleas	Karakoltzidis
6	Análisis De Escenario Natech: Derrame De Hidrocarburo Desencadenado Por EL Impacto De Fenómeno Hidrológico Extremo EN Tanque De Almacenamiento	Julio Alfonso	DEL Vasto Uruña

## - GCPS - Process Safety Poster Session

Monday, March 25, 2024 5:00 PM - 7:00 PM

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BOARD NUMBER	Title	First Name	Last Name
7	Risk Assessment at Samsung Electronics Risk Based Process Safety (RBPS) - Driving	Soyoung	An
8	Operational Efficiency	Steve	Hawkins
9	FSM, FSA-4 SIS Periodic Revalidation (5 years) Green Hydrogen Project Safety Assurance	Ulric	Roy
10	Framework Fortaleciendo Nuestra Cultura De Seguridad De Procesos a Partir De La Investigación De	Nagarajan	Ramachandran
11	Incidentes Securing Owner/Operator Interest in Fast Track	Natalia	Bellesi
12	Project PHAs Review of Changes in Standards and Learnings	Denise	Chastain-Knight
13	from Incidents	Shailesh	Saraykar

14	An Introduction to Incident, Emergency and Crisis Management.	Gareth	Black
15	State of the Art in Modelling Pressure Tanks Under Fire Exposure	Giordano Emrys	Scarponi
16	The Long and Winding Road to Here	Andrew	Laflash
17	Forjando Un Futuro Sostenible y Seguro: Estrategias De Implementación De PSM En La Industria Del Yodo	Cesar	Puma Medina
18	Human Reliability Analysis of Pre-Initiator and Initiator Events - What Methodological Adjustments Must be Adopted in Petro-Hra to Analyze Pre-Accident Operator Actions?	Gilsa	Monteiro
19	Investigating the Influence of 3D Model Completeness on Offshore Explosion Studies	Rafael	Pereira
20	A Digitalized, Cumulative Risk Management Approach to Maintenance Backlog Prioritization on High Hazard Installations	Tayo	Olusanya
21	Quantitative Consequence Analysis on Human Health Due to Accidental Toxic Release Using a Framework of Life Cycle Impact Assessment	Jo	Nakayama
22	Risk Criticality Assessment and Management (RCA&M) of Asphyxiation Hazards of Air Separation Unit	Dongwoon	Kim
23	Lay out Analysis As Part of Facility Sitting Study (FSS) at Vale	Camila Cunha Toledo	Guerald
24	Communicating Effectively: An Essentialist's View	Stephanie	Smith
25	Risk Assessment of Shock Sensitive Byproducts Formed from Chlorosilane Polymers in Semiconductor and Journey Towards Identifying Acceptable Risk Mitigation Measures	Yogesh	Koirala
26	Guidelines for Storage and Handling of Reactive Chemicals	Rahul	Raman
27	Process Safety Management Audit for Maturity Level PSM Deployment across Organization.	Naveen	Kumar
28	Ignoring Building Codes Can Result in Costly Design Rework	Andrew	Porter
29	Identifying and Mitigating Red Flags in MOC Process	Ali	Ayub
30	Practical Application of Mihazop® in a Non-O&G Facility	German	Luna Mejias
31	The Importance of Monitoring NON-Tolerable Scenarios and Its Recommendations	Mauricio	Quelhas

32	Effectively Communicating the Results of PHAs to a Non-Technical Audience	Stephen	Monana
33	Integrated PHAs, Bowties and Barrier Management	Olakunle	Olamilehin
34	Leadership Archetypes and SENSE of Vulnerability - How to Promote Sustainable Cultures Focused on Operational Discipline, through Leadership	Martin	Fernandez
35	How Safety Culture Drives Process Safety Performance	Leila	Sango
36	Enhancing Process Safety: Early Deviation Detection and Root Cause Analysis through AI for Ensuring Resilience in Complex Engineering Assets and Systems	Bjarne Andre	Asheim
37	Simulation of Transient Dispersion Model with Emergency Shutdown Response Time: A Comprehensive Approach	Basil	Fysal
38	Application of Large Language Models for Optimising Collection, Insight and Actions from Process Safety Observations	Angus	Carroll
39	Optimize Flare Design and Mitigate Flare Capacity Issues Using Dynamic Simulations	Shailesh	Saraykar
40	Mechanical Safeguards for Emergency Isolation Valves	Virginia	Vance
41	Human Error Limits Sil Rating		

52	The Important Bridge between Functional Safety and OT Security	Matthias	Kaiser-Pölleritzer
53	Water As an Ignition Source	Shay	Segev
	Fingerprinting Hazardous Gas Leaks – Remote		
54	Sensing for Emissions	René	Braun
	Safety Analysis for Process Intensification		
55	Involving Heat Integration	Brent	Young
	A New Thermal Runaway Calorimeter for		
56	Battery Safety Evaluation	Surendra	Singh
	An Analysis of Case Studies and Current		
	Literature Regarding the Deflagration-to-		
57			

70	A Different Kind of Backup Power - Green Hydrogen Fuel Cells	Lauren	Madden
71	The Flow Method: An Improved Hazop Methodology	Brandon	Morris
72	Tips to Streamline Your PHA (and your investment)	Steven T.	Maher
73	A Simplified Method for the Economical Evaluation of Safety-Related Modifications for a Running Facility	German	Luna Mejias
74	The Critical Role of Accurate Hazmat Classification to Determine Occupancy Classification Required By Model Building & Fire Codes	Bradley	Silva
75	This Contribution Aims to Answer the Question Whether There Are Differences in the Occurrence, Manifestations and Consequences of Major Accidents in the EU.	Luboš	Kotek
76	Projects to PHAs: My Path to Process Safety	Kerissa	Bowen
77	Developing Process Engineers into Effective HAZOP/LOPA Facilitators	Steven T.	Maher
78	Top 10 Hits for Common Misses in Process Safety Systems	Caitlin	Mullan
79	Solving Loading and Unloading Operations Challenges with Knowledge Automation	Christian	McDermott
80	Evaluating the Blast Effects Associated with Deflagration to Detonation Transition		
80	Originating Site Specific Congested Regions Using Lab Test Data to PREVENT DUST	Scott	Davis
81	EXPLOSIONS	Vahid	Ebadat
82	Lessons in Chemistry: Integrating Human Factors into PSM of Aging Facilities	Sarah	Acton
83	Process Safety Management Implementation in Outsourced Operations & Maintenance		
83	Vendors	Naveen	Kumar
84	Engineering Framework to Assess Equipment Reliability of Air Fin Coolers in Process Plant Industries	Dheerajkumar	Narang

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	Real-Time Design Modeling for Control Valve Size and Type Using Machine Learning and Big 87 Data Streaming System	AReum	Lee
	AI-Enabled Dynamic Risk Register: A Novel 88 Approach to Risk Management	Bao Lin	Tan

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89	Learning from Incident (LFI) Effects of Alumina Films on N-Doped Carbon Nanotubes/Graphene Composites As Anode	Wayne	Mohan
90	Materials of Lithium-Ion Batteries Purification of S-1-Phenylethanol from the Enantiomer Mixture By Three-Phase	Chuen-Chang	Lin
91	Crystallization Chevron Richmond Refinery Fire Incident	Lie-Ding	Shiau
92	Investigation Temperature-Dependent V-Type Isotherm Models: Applied to Water Vapor Adsorption on	Celesta	Cox
93			

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BOARD NUMBER	Title	First Name	Last Name
104	A Quantum Chemical Study on the CO <sub>2</sub> -Amine Reaction Pathway	Nahoko	Kuroki
105	A Systematic Study on the Influence of Oriented Nanoparticles in Polymer Nanocomposite	Abayomi	Adeleke
106	Design of Heat-Integrated Pressure Swing Distillation Process Using a Graphical Pinch Analysis	Donggun	Kim
107	Prediction of Main Transition Velocities and Gas Holdups in a Bubble Column Operated with Aqueous Alcoholic Solutions	Stoyan	Nedeltchev
108	A Novel Helical Descending Liquid-Bridge for Continuous Demulsification	Liang	Yuan

- Poster Session: Fuels and Petrochemicals Division

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BOARD NUMBER	Title	First Name	Last Name
109	Implementation of a Process Safety Management System and Inherently Safer Design Strategies for a Rehabilitated Bioethanol Facility in Trinidad & Tobago	Safiyah	Wahid
110	From Hydrogen Economy to Ccus and Beyond: Unleashing the Power of Digital Solutions in Sustainability	Ana	Khanlari, PhD
111	Displacement Efficiency and Production Characteristics of in-House Developed Surfactants for Enhanced Oil Recovery	Syed Muhammad Shakil	Hussain
112	Insecticidal Efficiency of Copper Nanoparticles for Control of Khapra Beetle Trogoderma Granarium	Bruce	Adkins
113	Development of Nonionic Demulsifiers for Produced Water Treatment	Muhammad Shahzad	Kamal
114	Synthesis and Characterization of Magnetite Nps Decorated Onto ACF, Heat-Treated g-C <sub>3</sub> N <sub>4</sub> , Pure CS and OSCS Nps for the Efficient Removal of MB and CV Dyes from Aqueous Solution	Ashish	Bhagat
115	Synthesis of Magnetic Nanoparticles Anchored on Carbon Nano-Matrix for the Efficient Adsorptive Removal of Crystal Violet from Aqueous Solution	Ashish	Bhagat

- Poster Session: Emerging Technologies in Clean Energy

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116	Development of a Flat-Sheet Composite Membrane for Alkaline Water Electrolysis: A Statistical Study Using Response Surface Methodology	Ruchika	Gupta
117	Engineering the Cyanobacterial Photosynthetic Electron Transport Chain to Improve Photosynthetic Efficiency.	Sumant	Brahmankar
118	Conversion of Coal Tar into Needle Coke for Utilization in Graphite Electrode & Li-Ion Battery	Naveen	Kumar
119	Fire and Explosion Hazards Associated with Transfer of Powders into Flammable Solvents	Emmanuel	Addai