2024 MARY KAY O'CONNOR PROCESS SAFETY & RISK CONFERENCE, OCTOBER 22-24, 2024

Day 0 – 21-October-2024	6:00 PM – 8:45 PM	Pre-Registration & Networking (Hilton Roof Top, All are Welcome)

Day 1 - 22-October-2024

7.30 – 8.15	Breakfast				
8.15 – 9.15	Plenary Speaker – Dr. Michael Hamblin (Woodside)				
9:15– 9:25	Booth Exhibitors Presentation				
9:30-9:45	Regroup to Breakout Rooms - Coffee Break				
Room	Mockingbird	Amphitheater	Unique1	North/South	Oakwood Ballroom
9.45 – 11.45	**Managing Process Safety**	**Hydrogen Safety**	**Consequence Analysis, Flammability, Combustion, Explosion**	**Ocean Safety Day**	**Data Technology**
9.45 – 10:15	**Keynote Address – Dr. Ray Mentzer**	**Keynote Address – Dr. Md Modarres**	**Keynote Address – Dr. Paolo Gardoni**	**Keynote Address -Dr. Steven Wong**	**152, Azizli, AI Technology**
10:15 – 10:45	**51**-Advancing Pipeline Safety: Leveraging Machine Learning and Data Analytics for Leak Failure Prediction-**Hadiseh Ebrahimi**	**159** - Insights for hydrogen safety from Quantitative risk assessment (QRA): implications for fueling stations, forklifts, pipelines, and electrolyzers – **Katrina Groth**	**33-**Modified Williams' Mist Model to Include Shape Effects-**Henry Foust**	**73-** Machine Learning for Deepwater Drilling Operations: Case studies for Rig State Classification, Early Gas Kick Detection, and Downhole Quantitative Evaluation of Gas Kicks- **Mayank Tyagi**	**123, Malone, Cybersecurity**
10:45 – 11:15	**139**-The Situation in the Field of Safety Culture in the Czech Republic with Regard to the Prevention of Major Accidents-**Ivana Slovackova**	NFPA 2: A Working Overview of Hydrogen Facility Fire Codes **– 52- Joshua Ruiz**	**55-**Fire of plant protection products - hazard identification-**Jan Przybysz**	**96**- Innovations in the Integrity Management of Offshore Grating- **Ioannis Kalpakidis**	**30, Chow (E), Digital Transformation**
11:15 – 11.45	**88-**Risk and Supply Chain Issues in Optimizing Hazardous Materials Transportation Schemes-**Vasiliki Kazantzi**	Investigating the Formation of H2/O2 Explosive Mixtures in Low/High Pressure PEM Water Electrolyzers: A Fault Tree Analysis Approach **– 23 – Luc Vechot**	**7**-Assessment of the Vaporization Rate of Sulfur Dust and Its Application in the Prediction of the Associated Dust Explosion Properties-**Asma Abousrafa**	**216**- Around Monopiles and Its Implications for Safety-**Nadim Zgheib**	**112, Antosh, Connected Workforce**
11.45-1.00	Lunch - Plenary Speaker – Dr. Scott Davis, Exhibitors Presentation				
1.00 – 3.00	**Functional Safety, Control Systems, ASM, SIS/SIL/LOPA, Alarms**	**Learning from Incidents, Investigations, Case Histories, Incident Data**	**Operational Risk Management**	**Ocean Safety Day**	**Instrumentation**
1:00 - 1:30	**42-**Impact of Device Mission Time on Safety Instrumented System Lifecycle Cost-Rajeev Limaye	**Keynote Address – Trish Kerin**	150 - Risk based approach to establish on site health centers in the Oil and Gas Sector – **150- Diara Malick**	**Keynote Address - Cai Ferguson**	**64, McMillan, pH**
1:30 - 2:00	29-BPCS IPLs: Not all BPCS loops are created equal.-**Aracely Acevedo Arteche**	**188**-Safety Culture: Almost 40 years of Experience-**Mark Griffon**	**135** -Enhancing Risk Management by ensuring effective Emergency Response Plan for Hydrogen and Ammonia-SEC Success Story – **Surendra Mahakalkar**	**170**- Use of digital twin and machine learning for real-time estimation of wave/current and riser/mooring dynamics with fewest sensors- **MooHyun Kim**	**13, Hoover, In-Situ Verification of Mass, Density, and Volume**
2:00 - 2:30	**37**-Improving Integration between Process Safety and Functional Safety-**Jenny Wilson**	141-Thirty Year Review and Analysis of Reactive Incidents. Real Cost and Prevention of Future Incidents-Irene Uriarte Villanueva	**32**-Captive Key Systems as an Effective Process Control Method-**Virginia Holland**	**85**- BSEE Renewables – A Different Approach to Oversight- **Jonathan Fraser**	**47, Machuca (E) PRV monitoring**
2:30 - 3:00	**77-**Fault-prognostic Explicit Control of Safety-Critical Reaction Processes with Bayesian State Estimation-**Austin Braniff**	**154-**When Knowledge Transfers: Connecting Lessons Learned to Organizational Memory-**Kristin Robbins**	**62**-Aligning Process Safety Competency with Confidence to Improve Risk-Based Process Safety Decision-Making in the Process Industry: Enhancing Engineering with Psychology-**Luc VECHOT**	**194**- Offshore Crane Safety Related to Human Errors: A Review- **Weihang Zhu**	**43, Braun, Temperature Excursion Interlock**
3.00 – 3.30	Break - Exhibitors Presentation				
3.30 – 5.30	**Asset Integrity Management**	**Accident Modelling and Investigation**	**Risk Assessment**	**Ocean Safety Day**	**Process Control Systems**
3.30 – 4:00	**204**-Internal Corrosion Management and Failure Analysis Framework-**Susmitha Kotu**	**99**-Consequence Modelling for Ammonia Safety: A Comparative Analysis for Assessing Toxicity Risks in Industrial Applications-**Khama Matiti**	**66**-Using an Enhanced Onshore QRA Tool and PowerBI to Analyze and Manage Risk Effectively-**Ganesh Mohan**	**107-** SMART-SEA: Ship Collision Avoidance of Stationary Structures through Integrated Machine Learning Radar Image Detection and High-Fidelity Maneuvering Models-**Mirjam Furth**	**Panel** **15, Mozisek, Control Migration Challenges**
4:00 – 4.30	**116**-Risk Based Inspection and Maintenance Procedure for Chemical Supply Piping in Semiconductor Facilities-**Kee Bong Yoon**	**147-**A physics-informed data-driven model applied for gas dispersion modelling of complex geometry-**Savio Vianna**	**163-**Hierarchy of Process Control is Just a Corporate Philosophy or Implemented Effectively-**Rajender Dahiya**	**120**- Understand the Cognitive Science that Underpins Reliable Safety Designs- **Tom Shephard**	
4:30 – 5:00	**211**-Application of Machine Learning Concepts in Inspection Data Management System at Process Plant Facilities-**Dheerajkumar R Narang**	**129-**Natech accidents caused by wildfires and Interfaces fires: an emerging threat for the chemical and process industries-**Valerio Cozzani**	**78**-An Operability Case Study of a Proton Exchange Membrane Water Electrolyzer System-**Beatriz Dantas**	**213**- Metahuman Models for Reducing Human Exposure to Hazardous Conditions During Offshore Wind Turbine Operations and Maintenance- **Jian Tao**	**Workshop** **45**, Beall, Control Valve Performance
5:00 – 5:30	**215**-Small Bore Tubing – Guidelines for Mitigating Static & Dynamic Loads-**Damien Hurley**	**160-**Re-Thinking Root Cause Analysis: How Common Problem-Solving Tools Contradict the Fundamentals of Science and Engineering-**Mark Galley**	**101-**Our Approach to review and improve quality in Process Hazard Analysis (PHAs)-**Karthick Deivasagayam**	**49-** Beyond Technical Barriers: Enhancing Onboard Safety through Human-Machine Interaction Management in Ammonia-Powered Ships- **Rustam Abubakirov**	
5:45 – 8:00	Awards Banquet – Free for all registrants				

2024 MARY KAY O'CONNOR PROCESS SAFETY & RISK CONFERENCE, OCTOBER 22-24, 2024

Day 2 - 23-October-2024

7.30 – 8.15	Breakfast					
8.15 – 9.15	Plenary Speaker Dr. Steven Horsch					
9.15 – 9.25	Exhibitors Presentation					
9:30-9:45	Regroup to Breakout Rooms - Coffee Break					
Room	Mockingbird	Amphitheater	Unique1	North	South	Oakwood Ballroom
9:45 – 11.45	Cyberphysical System and Big Data	Managing Process Safety	Accident Modelling	Learning from Incidents, Investigations, Case Histories, Incident Data	Ocean Safety Day	Safe Automation Practices 1
9:45 – 10:15	**46**-Navigating the Convergence of Safety and Security Risks-**Kok Hwa Lim**	**31**-Alternatives to Car Seal Management Programs-**Virginia Holland**	**Keynote Address – Dr. Nancy Currie Gregg**	**84-**Identification of reference scenarios from incident datasets using Bayesian Network-**Matteo Iaiani**	**174**- Enhancing Ocean Surface Current and Wave Estimation Through Real-Time Inverse Modeling Using TABS Buoy Data and Artificial Neural Networks- **Dosoo Kwon**	**95, Aguilar, Organization Culture**
10:15 – 10:45	**183-**Exploring Control and Safety System Architectures: Assessing Cybersecurity Pros and Cons'-**Marco Ayala**	**76**-Facility Siting Tolerance Criteria - Do's and Don'ts-**Annette Ashiofu**	**205-**Chlorine and Ammonia Removal by Dry Deposition during an Accidental Release-**Tom Spicer**	**169**-Imagining the Future – Disaster Prevention Is A Verb, 35+ Years Post Piper Alpha-**Robert Wittkower**	**187-** System Risk: a hybrid methodology for exploring the risk propagation of wave energy system- **Nima Golestani**	**16, Zhong, PHA to SIS**
10:45 – 11:15	**58**-Zero Trust Network Architecture for Operational Technology-**Alexandre Peixoto**	**164-**Open Actions Means Unmitigated Risk: Are You in Control of your Actions-**Rajender Dahiya**	**184**-Enhancing Safety Assessments for Cryogenic Hydrogen: Cost-Effective Simulation with Dimensionality Reduction Techniques-**Javad Mohammadpour**	**56**-Troubleshooting BGCAPP MPT Startup Temperature Indicator Installation Error with Process Knowledge, Calculation and Modeling-**Joseph Wall**	**190-** Exploring Uncertainties in Multi-Purpose Offshore Platforms: A System Dynamics Approach to Marine Energy and Aquaculture Integration- **Minghan Bao**	**54 Reilly, Alarm Management**
11:15 – 11.45	**167**-Development of a risk assessment matrix for Canadian renewable energy projects-**Uyen Dao**	**38**-Improving Safety Performance: Compliance versus Competence - How will the Process Industries transcend from the former and achieve the latter?-**Michael Taube**	**61**-Investigating the regimes following underground gas releases: from Gas Migration to Crater Formation-**Ola Srour**	**178**-A Common Approach to Toxic Risk Safeguards-**Rance Ford**	**201-** Insights over the Enzymatic Conversion of Carbon Dioxide Utilization for Onboard Carbon Transportation- **Mohammad Elkady**	**119, Hall, Application Software**
11.45-1.00	Lunch/ Exhibitor's Presentation					
1.00 – 3.00	Data Analytics and Big Data	Consequence Analysis, Flammability, Combustion, Explosion	Managing Process Safety	Hydrogen Safety	Ocean Safety Day	Safe Automation Practices 2
1:00 - 1:30	**198**-Barrier management as a basis for the functional integration of safety and security domains in critical infrastructures - an analysis of the existing technical framework-**Juan Angarita**	**21**-Experimental study of sulfur vaporization rate in the context of sulfur dust explosion-**Luc VECHOT**	**75**-Assessing Safety Culture Across Five Oil and Gas Refineries: A Comprehensive Study-**Reza Sanij**	**125**-DNS MODELLING OF FLAME DYNAMICS IN LEAN HYDROGEN MIXTURE AT DIFFERENT PRESSURES-**Savio Vianna**	**40**- Human Factors Considerations – Ammonia Fuel in the Maritime Industry- **Toby Garner**	**103, Klein, ISA 84.91.03**
1:30 - 2:00	**208**-Teaching Cyber Security to Chemical Engineering Students- **Helen lou**	**60-**Analysis of Flammability and Smoke Emission of Wood-Based Materials-**Kamila Mizera**	**87**-Using online risk tools (CloudQRA) to consider risk mitigation for atypical large open domains such as FLNG and deepwater facilities- **Zoe Wattis**	**102**-Unlocking the Power of Safety: Innovative Strategies for Explosive Protection in Hydrogen Applications-**Andreas Brandl**	**41**- Application of Safety Critical Task Analysis (SCTA) method in the offshore industry- **Toby Garner**	
2:00 - 2:30	**79**-A cyber-attack detection based on time-delay mutual information analysis-**Fangyuan Ma**	**127-**Are empirical explosion models enough to evaluate far-field explosion pressures with complex topography?-**Jesse Brumbaugh**	**158-**Multilevel Flow Modeling for Improving Safety of Hydrogen Refueling Stations-**Ruixue Li**	**197-**A Global Mapping of Best Practice Design Standards for Hydrogen Project Developers-**Bryce Levett**	**191-** On the Design of Ports and Vessels for Safe and Efficient Installation of Offshore Wind Farms- **Shintaro Sobashima**	**118, Muthu, SIS Digitalization**
2:30 - 3:00	**171**-Applying Advanced Data Analytics to Predict (and Prevent) Process Safety Incidents-**Meor Ahmad Qadri Mohd Zahari**	**86**-Evaluation of a multi-phase dispersion model for the simulation of CCUS scenarios-**Andreas Mack**	**185**-Crediting Fired Equipment Protection Systems in Process Hazard Analysis-**Karen Morton**	**182-**Selecting Hydrogen Storage in Saudi Arabia: A Multi-Criteria Framework Integrating FAHP for Uncertainty and Safety-**YooJeong Oh**	**97-** Mooring Analysis of Floating Offshore Wind Turbines in Shallow to Intermediate Water Depths- **Haidong Lu**	**132, Cheyna, Guidelines for IPS and SIS**
3.00 – 3.30	Coffee Break/ Exhibitor's Presentation					
3.30 – 5.30	Operational Excellence, Best Practices, Worker Involvement	Risk Assessment	Process Safety Automation	Accident Modelling	Ocean Safety Day	Test Considerations
3.30 – 4:00	**161**-Elevating Process Safety through Incident-Driven Insights and KPI Optimization; The SASREF Model.-**Saeed Alzahrani**	**67-**How PowerBI and an Improved Offshore QRA Tool Enable Faster and Better Risk Decisions-**Ganesh Mohan**	**3**-Fundamentals of AI - Creation of a HAZOP Automation and Augmentation Tool-**Edward Marszal**	**44-**COMMON PSM GAPS REVEALED IN WORLDWIDE FATAL PROCESS SAFETY INCIDENTS-**Sheraz Syed**	**189-** Reliability Assessment of Floating Offshore Wind Platforms Susceptible to the Pitch Motion in Random Loads- **Weishan Lyu**	**Workshop** **93, Skweres, Thibodaux, and Garcia, Proof Testing**
4:00 – 4.30	**106**-Optimizing Process Safety for Operational Excellence-**Muhammad Iqbal Qasim**	**17**-Project Safety Analysis (PSA): A Tool For Reducing Risk by Participative Developent of a Project-Specific Hazard Control and Safety Plan-**David Breeding**	**26-**Process Control and Safety Operation-**Hans Sauer**	**65-**Lifting the Veil: A Decade of Research Reveals New Thinking and Industry Trends in Human Factors and Operational Resilience-**David Wilbur**	**192-** Multi-fidelity Digital Twins for Prognostics Safety Management of Offshore Wind Plants- D. **Todd Griffith**	
4:30 – 5:00	**9**-The Role of Process Safety Knowledge Management in Operational Excellence-**Tekin Kunt**	**36-**How to get data for your risk assessment and how to use its results? The marvels of expert elicitation and the decision-making process.-**Hans Pasman**	**71**-The SIS certification numbers - how hard can it be?-**Martin McDonough**	206-A comparison between genetic algorithm and integer optimisation for gas detector optimisation based on computational fluid dynamics-Savio Vianna	**148-** Remote Smart Monitoring of Offshore Wind Plant Components- **Mario Rotea**	**166, Summers and Bukowski, Using Maintenance Records to Support API 754 Tiers 3 and 4 Metrics**
5:00 – 5:30	**14**-Improving Operations Leaders PSM Decision Making-**Dave Drerup**	**68-**Phast CFD: A Novel Extension to Onshore QRA Applications-**Ganesh Mohan**	**53**-Remote Operations – Plant Design & Safe Operations Strategy-**Javeed Mohammed**	**202-**Hybrid CFD/analytical approach to assure safe blanketing of storage tanks-**Bjorn Nilberg**	**181**- Hydrate Formation with the Memory Effect Using Classical Nucleation Theory- **Emre Arslan**	**104, Elton, Logic Solver Testing**
6.30 - 9.00	BBQ Networking Session (Brazos Center)					

2024 MARY KAY O'CONNOR PROCESS SAFETY & RISK CONFERENCE, OCTOBER 22-24, 2024

Day 3 - 24-October-2024

7.30 – 8.15	**Breakfast**					
8.15 – 9.15	**Plenary Speaker Stacy Noem**					
9.15 – 9.25	**Booth Exhibitors Presentation**					
9:30-9:45	**Regroup to Breakout Rooms - Coffee Break**					
Room	**Mockingbird**	**Amphitheater**	**Unique1**	**North**	**South**	**Oakwood Ballroom**
9.45 – 11.45	**Operational Excellence**	**Accident Modelling**	**Consequence Analysis, Flammability, Combustion, Explosion**	**Managing Process Safety:**	**Functional Safety / Corrosion & Material Failure**	**Optimizing Reliability**
9.45 – 10:15	**224-**Preventive Risk Engineering: Revolutionizing Insurance Inspections-**Rajender Dahiya**	**39-**Counterfactual and rethinking of accident causality: Why inspections cannot prevent all accidents? – **He Wen**	**176-**How Important Is the Correct Wind Direction in Your Simulation?-**Vinicius Simoes**	**72-**Examining the Feasibility of Common Coverage Targets for Hazard Mapping-**William Pittman**	**59-**Reduce Loss of Containment Safety Risk with Continuous Real-Time Corrosion Monitoring-**Michael Machuca**	**Panel** **207, Propst, Instrumentation Reliability**
10:15 – 10:45	**124-**The Institute for Operational Excellence and Learning-**Stewart Behie**	**210-**Fire and Explosion Hazards Associated with the Transfer of Powders into Flammable Solvents-**Emmanuel Addai**	**137-**Evaluation protocol for BLEVE models-**Logan Vogelsong**	**222-**Hazard Identification at Laboratories & Pilot Plants-**Ibrahim Al-Jamaan**	**18-**Is ISA 84.91.03 in agreement with NAMUR NE 165?-**Luis Manuel Fernando Garcia Garcia**	
10:45 – 11:15	**117-**Enterprise Loss Prevention: The Path to Achieve Operational Excellence-**Dave Drerup**	**74-**How Modeling the Mixing Condition Enable us to Prevent Detonation-**Reza Sanij**	**138-**Validation of KFX against dispersion data sets-**Logan Vogelsong**	**8-**Enhancing the Implementation Strategy of "Simultaneous Operations (SIMOPS)" for the Major Turnaround at Pertamina Plaju Refinery-**Daniswara Krisna Prabatha**	**1-**Process Safety - Protecting People and The Environment-**Stefan Mizera**	**Workshop** **122, Shephard, Cognitive Ergonomics**
11:15 – 11.45	**5-**A human-factors-oriented framework for dynamic risk assessments in aviation operations-**Nazmul Rahmani**	**200-**Application of Dynamic Simulation for Accurate Relief Rate Estimation and Dispersion Modeling: A Case Study in Process Safety-**Reza Sanij**	**168-**Leveraging CFD to Effectively Evaluate Sensitivity to Ignition Locations when Designing for Explosion Loads-**Drew Botwinick**	**48-** An Overview of Safety Aspects and Risk Analysis of Critical Events in Offshore Oil Well Drilling Operations- **Anilett Benny**	**195-**The Value in Applying Process Safety Management to Enhance Safety in Non-Mandatory Compliance Facilities-**Domingo Elias**	
11.45-1.00	Lunch					Ethics Training
1.00 – 3.00	**Managing Process Safety**	**Hydrogen Safety**	**Process Safety Automation and Resilience**	**Consequence Analysis, Flammability, Combustion, Explosion**	**Cyberphysical Systems**	**Upgrading Existing Automation**
1:00 - 1:30	**179-**Integrating Climate Change Impact on Process Safety Management in the Oil and Gas Industry-**Nabila Farhana Binti Jamaludin**	**193-**Quantitative Risk Assessment of Hydrogen Powered Passenger Car in Road Accidents-**Mahasin Alam Sk**	**173-**Safety and Productivity Benefits Using Electro-Hydraulic Actuators for Liquid Chemical Feed Control-**Mark Ferra**	**100-**Development of a Practical Guidance Document for Determination of Fire Scenarios and Passive Fire Protection Requirements at Oil & Gas Facilities-**Onder Akinci**	**212-**Feature Selection Methodology for Developing a Supervised Machine Learning Model for Risk Based Inspection Study on Process Plant Assets-**Dheerajkumar R Narang**	**111, Barton, Grandfather's SIS**
1:30 - 2:00	**217-**Identification and Performance Analysis of Eco Friendly Fire Retardant on Wood Surface Testing Surfaces with Solved based Paint-**Jayandran Mohan**	**50-**Detonation cell sizes for hydrogen-methane mixtures-**Milin Martin**	**140-**Model-based fault diagnosis for safety-critical chemical reactors: An experimental study-**Pu Du**	**70-**Pyrophoric Material Safe Handling & Risk Management Control-**Omar Marghalani**	**89-**IT/OT/ICS & IoT Asset Disposition (ITAD): Review of Methods, Standards, and Certifications for Managing Cybersecurity-**Kris Hardwick**	**57, Green, Increase Furnace Capacity**
2:00 - 2:30	**109-**On the use of sufficiency of measure for optimization of safety critical elements register-**Darmawan Ahmad Mukharror**	**80-**Domino Effect Analysis of Hydrogen Production and Storage Systems in a diversified facility.-**Himesh**	**98-**Magnetic Nanoparticles as Draw Solute in Forward Osmosis Treatment of Produced Water-**Sunith Madduri**	**126-**Multi-BESS Flame Propagation Analysis: A Comparative CFD Study between Open Source and Commercial Software Solutions-**Savio Vianna**	**223-**Towards Automating Process Decomposition and Interdependencies Modeling in Heterogeneous Systems-**Eman Hammad**	**131, Fatima, Upgrade Project for Urea Plant**
2:30 - 3:00			**203-**Chemical Weapons Convention and its relevance to the safety and sustainability of the chemical industry-**Sultana Syeda**	**22-**Modeling of the behavior of a gas generating chemical system under runaway conditions during venting-**Luc VECHOT**		**165, Ulaganathan, PSSR as Safeguard**
3.00 – 3.30	**Break**					
3.30 – 5.30	**Learning from Incidents, Investigations, Case Histories, Incident Data**	**Asset Integrity Management**	**Risk Assessment**	**Accident Modeling**	**Risk Assessment**	
3.30 – 4:00	**130-**Numerical Modelling of hydrogen jet fire of storage facilities-**Advaith Sunil**	**196-**Impact of Impurities in Onboard CO2 Transportation and Storage: A Review-**Md Saiful Islam**	**108-**Key performance indicator for assessing quality of qualitative risk assessment – case studies in Indonesia-**Darmawan Ahmad Mukharror**	**199-**Enhancing Process Safety in Specialty Chemical Industry through Accurate Estimation of Physical Properties-**Reza Sanij**	**12-**Quantitative Risk assessment of an underground methanol pipeline crossing a city (case study of a 6km methanol pipeline crossing Chabahar city)-**Mahmood Akbari**	
4:00 – 4.30	**92-**Existence of a mitigative measure under more than one element of hierarchy of control measures simultaneously-**KRISHNAMOORTHI G**	**115-**Machine Learning based approach to support Dynamic Risk Assessment in chemical process industries in Kochi, Kerala, India.-**KARTHIK RAJEEV**	**172-**Development of Integrated Inherently Safer Design Assessment Framework using Phenomena Identification and Ranking Table (PIRT).-**Mardhati Zainal Abidin**	**39-**Counterfactual and rethinking of accident causality: Why inspections cannot prevent all accidents? - **He Wen**	**153-**DYNAMIC FAILURE PROBABILITY ANALYSIS OF URBAN GAS PIPELINE NETWORK-**Ahammed Sahal**	
4:30 – 5:00	**134-**Enhancing Safety Integrity level determination in batch reactor: A comparative study of fuzzy logic augmented layer of protection analysis-**Vaishnav Vinod**	**209-**INTEGRATION OF PROCESS HAZARD ANALYSIS IN DIGITALTWIN-**Arun Shourie Angaluri**	**114-**Stay low-key, unlock the key result indicator for quality metrics of the quantitative risk assessment – case study on eight wellhead platforms in Indonesia-**Darmawan Ahmad Mukharror**	**177-**Process Safety in LNG terminals: Challenges and Opportunities-**Renjith Ravindran**	**133-**Fuzzy Based Failure Mode ,Effect and Criticality Analysis (FMECA) on Tower Crane-**Nivedh Renjith Nambiar**	
5:00 – 5:30		**144-**Comprehensive tool for calculating ROSI-**Abdul Razak P S**	**175-**Accuracy And Reliability of LOPC Calculations: A Validation Study-**Syaza Izyanni Ahmad**	**143-**Dynamic risk analysis of hydrogen storage facility.-**E S NAVEEN KRISHNA**	**149-**Dynamic Risk Assessment of LPG storage sphere in a Process Industry using Failure Assessment and Bayesian Theory-**VIGNESH P NAIR**	