

TECHNICAL PROGRAMME BOOK

INTERNATIONAL CONFERENCE & EXHIBITION

L  **LOSS**
PREVENTION
ASIA 2019
25-26 November 2019 | Kuala Lumpur

Technical Session 1

Date: 25th November 2019 (Monday)

Time: 2:00 pm – 3:30 pm

| Company | Title/Author(s) |
|-----------------------------|--|
| VESTIGO | Embrace Living Safety Concept to Raise Proactiveness Within Company's Safety Performance and Culture <i>Taram Satiraksa Abdullahwan and Mohd Kamarudin Abdul Hamid</i> |
| PETRONAS | Avoidance of Loss of Product Containment (LOPC) Through Effective Implementation of Digital Pipeline Integrity Management System (PIMS) <i>Ahmad Sirwan Mat Tuselim</i> |
| ARKEMA THIOCHEMICAL SDN BHD | Occupational Safety Contribution to Process Safety <i>Zamri Wagiman</i> |
| UTP | Classification of Faults in Oil and Gas Pipelines Using Support Vector Machines <i>Nagoor Basha, Srinivasa Rao Pedapati, Shazaib Ahsan and Faizul Dzubir</i> |

Technical Session 2

Date: 25th November 2019 (Monday)

Time: 2:00 pm – 3:30 pm

| Company | Title/Author(s) |
|----------|---|
| UMP | Management of Change System with Integrated Risk Analysis for Temporary and Emergency Cases <i>Kar Kei Pang and Hanida Abdul Aziz</i> |
| UNITEN | Intelligent Risk-Based Maintenance Approach for Steam Boilers: Real Case <i>Firas Basim Ismail Alnaimi, Noor Fazreen Ahmad Fuzi and Mohammad Shakir Nasif</i> |
| PETRONAS | Managing Heat Recovery Steam Generator (HRSG) Integrity and Inspection by Risk Based Inspection (RBI) Approach. <i>Mohd Zaini Mohd Zakaria, Hashim Othman and Hambali Chik</i> |
| UPM | Investigation of The Causes for Fatal Accidents Due to Falls from Heights in Malaysia and USA <i>Abderrahim Zermane, Mohd Zahirasri Mohd Tohir, Hamdan Mohamed Yusoff and Mohd Rafee Baharudin</i> |
| PETRONAS | Composite Repairs Integrity Assessment: An Overview of Inspection Techniques <i>Siti Haslina Mohd Ramli and Rosman Ariffin</i> |

Technical Session 3

Date: 25th November 2019 (Monday)

Time: 2:00 pm – 3:30 pm

| Company | Title/Author(s) |
|------------------------|--|
| Qatar Petroleum | Risk Based approach to manage Process Safety aspects of an old NGL facility <i>Prakash Naidu and Dinesh Govind</i> |
| Universitas Indonesia | Risk Assessment on The Impact of Port Development to Wellhead Platform by SQRA Method <i>Heri Hermansyah, Anggraini Ratih Kumaraningrum, Andy Noorsaman Sommeng, Anondho Wijanarko, Muhamad Sahlan and Azmi Mohd Sharif</i> |
| UNIVERSITY OF CALCUTTA | Thermodynamic Availability Analysis for Quantification of Resilience of Gas Sweetening Unit: Optimization of Energy Usage & Reduction in Equipment Cost <i>Dr Sirshendu Guha and Dr Sudip Kumar Das</i> |
| UTM/UiTM | Main Geometrical Features of Horizontal Buoyant Jet Fire and Associated Radiative Fraction <i>Nur Shahidah Ab Aziz, Rafiziana Md Kasmani and Mohd Dinie Muhaimin Samsudin</i> |

Technical Session 4

Date: 25th November 2019 (Monday)

Time: 3:45 pm – 5:00 pm

| Company | Title/Author(s) |
|---------|--|
| UPM | Evaluation of Plated vs Grated Process Deck in Typical FPSO from Explosion Perspective <i>Umamaheswari Porselvam, Nik Nor Liyana Nik Ibrahim and Hamdan Bin Mohamed Yusof</i> |
| UMP | Assessment of Explosibility and Explosion Severity of Rice Flour at Different Concentration and Ignition Time <i>Wan Zaiton Wan Sulaiman, Pm Dr Mohd Fadzil Mohd Idris, Pm Dr Jolius Gimfun and Ir.Ts.Dr Siti Zubaidah Sulaiman</i> |
| Risktec | Electronic Safety Case (e-SafetyCase) <i>Mike Bates</i> |
| UTP | Design Optimization of Base-Frame Structure of Portable Cabin Using Structural Analysis <i>Shazaib Ahsan, Muhammad Fahad, Ali Akbar and Farooq I Azam</i> |

Technical Session 5

Date: 25th November 2019 (Monday)

Time: 3:45 pm – 5:00 pm

| Company | Title/Author(s) |
|--|--|
| China University of Petroleum-Beijing | Advanced Inspection, Monitoring and Repair Methods for Integrity Management of Subsea Production Systems <i>Yulong Zhang, Frank Lim, Menglan Duan and Chen An</i> |
| INPEX Corporation | ALARP Demonstration Case Study - Firewater Curtain Application for LPG Sphere <i>Sivaneswaran Kamala Kannan, Tetsushi Matsui, Florian Guinchard, Yuya Takahashi, Tetsuo Yonezawa and Yoshihito Takada</i> |
| PETRONAS | Establish and Operationalize Safe Operating Limits <i>Mohd Ashraf Mohd Ibrahim</i> |
| China University of Petroleum (East China) | A Reliable Processing Method of Data Detected by Magnetic Eddy Current of a Defect Cluster Based on Data Fitting and Genetic Algorithm <i>Jingyi Xiong, Wei Liang, Xiaobin Liang and Meng Zhang</i> |

Technical Session 6

Date: 25th November 2019 (Monday)

Time: 3:45 pm – 5:00 pm

| Company | Title/Author(s) |
|---|---|
| Honeywell Performance Materials & Technologies | Validating HAZOP/LOPA Assumptions Using Your Own Historian Data <i>Anthony Downes</i> |
| Sekolah Tinggi Teknologi Industri Bontang (STTIB/Industrial Technology College) | Complacency or Lack of Awareness: Concerns on Permit to Work Application and Ways to Enhance the Implemented Practices <i>Nugrahanto Widagdo</i> |
| Teradata | Data Driven Safety and the Swiss Cheese <i>Ananth Nochur</i> |
| Australian Maritime College (UTAS) | Combatting Scavenge Fires and Crankcase Explosions On Merchant Ships <i>Mohan Anantharaman, Rabiul Islam, Faisal Khan and Vikram Garaniya</i> |

Technical Session 7

Date: 26th November 2019 (Tuesday)

Time: 1:30 pm – 3:00 pm

| Company | Title/Author(s) |
|---------------------------|---|
| UTP | Remaining Useful Life Prediction of Crude Oil Pipeline by Means of Deterioration Curves <i>Nagoor Basha, Srinivasa Rao Pedapati and Faizul Dzubir</i> |
| UPM | Statistical Analysis of Malaysian Timber's Combustion data from the Cone Calorimeter Test <i>Sulaiha Ali, Siti Aslina Hussain and Mohd. Zahirasri Mohd. Tohir</i> |
| Advisian Malaysia Sdn Bhd | A Maturity Model Assessment of QRA in the Malaysia Offshore Oil and Gas Industry. <i>Krishna Moorthy</i> |
| Advisian Malaysia Sdn Bhd | Safety and cost aspects of pressurized vs. non-pressurised electrical room designs for offshore facilities. <i>Girish Jose and Krishna Moorthy</i> |
| UTP | Prediction of thermocline thickness based on temperature distribution of stratified thermal energy storage tank using artificial neural network. <i>Afzal Ahmed Soomro, Mohd Amin B Abd Majid, Ainul Akmar Binti Mokhtar and Aijaz Abbas</i> |

Technical Session 8

Date: 26th November 2019 (Tuesday)

Time: 1:30 pm – 3:00 pm

| Company | Title/Author(s) |
|---|--|
| UNITEN | Investigation on The Suitability of Natural Gas Hydrate Formation Prediction Simulation Packages and its Implementation Conditions <i>Firas Basim Ismail Alnaimi, Chee Liang Lim Henry, Amar Sahed, Hikmat S Al Salim and Mohammad Shakir Nasif</i> |
| PETRONAS | Piping Integrity Improvement Towards Plant OEE Improvement <i>Wei Lee Choo, Hua Jiu Sia and Zainal M Arif</i> |
| UTM | The challenges of performing basic offshore survival and emergency training for platforms in tropical water <i>Norafneeza Norazahar</i> |
| China University of Petroleum (Beijing) | A Novel Denoising Method of Defect Signals Based On Ensemble Empirical Mode Decomposition and Energy-Based Adaptive Thresholding <i>Xiaobin Liang, Wei Liang, Jingyi Xiong and Meng Zhang</i> |
| Universitas Indonesia | Analysis of Fuel Truck Accident Data in One Fuel Distribution Company in Indonesia <i>Lisda Dwi Rahayu and Mila Tejamaya</i> |

Technical Session 9

Date: 26th November 2019 (Tuesday)

Time: 1:30 pm – 3:00 pm

| Company | Title/Author(s) |
|--------------------|---|
| UTP | Breakeven Analysis of Thermal Energy Storage System under Uncertain Operating Conditions <i>Ali Akbar, Mohd Amin Bin Abd Majid and Ainul Akmar Binti Mokhtar</i> |
| UITM/UTM | Design of Household Products Ingredients with Minimum Safety and Health Risk <i>Rafeqah Raslan, Mimi Haryani Hassim, Nishanth G. Chemmangattuvalappil and Denny K. S. Ng</i> |
| Versatec/Radial SG | Search & Connect Your Safety Critical “Big Data” <i>Joep Coenen and Mark van 'T Zet</i> |
| UTP | Conceptual Framework – Risk Assessment of Nanomaterials Using Bayesian Network <i>Mardhati Zainal Abidin and Risza Rusli</i> |

Technical Session 10

Date: 26th November 2019 (Tuesday)

Time: 3:15 pm – 4:30 pm

| Company | Title/Author(s) |
|--|--|
| Badan Tenaga Nuklir Nasional | An Overview of Integrated Management System in National Nuclear Energy Agency, Indonesia. <i>Widjanarko Widjanarko, Anggraini Ratih Kumaraningrum and Hanna Yasmine</i> |
| Badan Tenaga Nuklir Nasional | Preliminary Study of General Safety Requirements-3 Part 2 as a Scope for BATAN Integrated Management System. <i>Rusbani Kurniawan, Iswanto Iswanto, Sunarto Sunarto and Yuliana Esti Prabandari</i> |
| CUSAT, India (Cochin University of Science and Technology) | Applications of Intuitionistic Fuzzy Analytic Hierarchy Process: An Overview <i>V.R. Renjith and Suresh G</i> |
| Memorial University | A Variable Mosquito Flying Optimization Based Hybrid ANN Model for The Alarm Tuning of Process Fault Detection Systems <i>Md Alauddin, Faisal Khan, Syed Imtiaz and Salim Ahmed</i> |

Technical Session 11

Date: 26th November 2019 (Tuesday)

Time: 3:15 pm – 4:30 pm

| Company | Title/Author(s) |
|---|--|
| UTP | Assessment of Human Reliability in Chemical Engineering Lab Using Bayesian Network <i>Abdul Mukhriz Nur Iman Abdul Manan and Risza Rusli</i> |
| Australian Maritime College (UTAS) | A Hybrid Human Reliability Assessment Technique for Maintenance of Marine and Offshore Operations <i>Rabiul Islam, Mohan Anantharaman, Faisal Khan, Rouzbeh Abbassi and Vikram Garaniya</i> |
| Cochin University of Science and Technology | A Study On Inherent Safer Design Practices and Enhancement Methods in Process Industries <i>Baiju Karun and Dr.V.R.Renjith</i> |
| PETRONAS | Pipeline Integrity Management and The Invent of Analytics <i>Mohd Nazmi Mohd Ali Napiah</i> |

Technical Session 12

Date: 26th November 2019 (Tuesday)

Time: 3:15 pm – 4:30 pm

| Company | Title/Author(s) |
|---------|---|
| UTP | Simulation of Erosion Rate in Standalone Sand Screen Due to Sand Production <i>Ahmed Alghurabi, Mysara Eissa Mohyaldinn, Shiferaw Regassa Jufar and Obai Younis Taha</i> |
| UTP | Artificial Intelligence (AI) Based Fault Detection and Diagnostics (FDD) in Gas Mixture Pipelines <i>Syed Muhammad Mujtaba and Tamiru Alemu Lemma</i> |
| UTP | Equipment Based Route Index of Inherent Safety <i>Muhammad Athar, Azmi Mohd Shariff, Azizul Buang and Heri Hermansyah</i> |
| UMP | Probability Analysis of Damages to Subsea Pipeline <i>Nurul Sa'Aadah Sulaiman and Henry Tan</i> |

Poster Session

Date: TBA

Time: TBA

| Company | Title/Author(s) |
|---------|--|
| UTP | A technique of Data-driven Bayesian Network and Application to A Distillation Unit <i>Amr Tphoon, Risza Rusli and Faisal Khan</i> |
| UTP | Effect of Wind Conditions on Human Injury and Fatality Risk in an Offshore Platform <i>Usama Muhammad Niazi, Mohammad Shakir Nasif and Masdi Muhammad</i> |
| UTP | Reliability Analysis of Gas Turbine by means of Bathtub-Shaped Failure Rate Distribution <i>Shazaib Ahsan, Tamiru Alemu Lemma, Masdi Muhammad and Mebrahitom Asmelash Gebremariam</i> |
| UTP | Incident Investigation Work-Aid Tool for Process Safety Management Compliance in Process Industries <i>Noor Diana Abdul Majid and Azmi Mohd Shariff</i> |
| UTP | Toxicity Assessment of Imidazolium-Based Ionic Liquids Family Using Microtox <i>Dzulkarnain Zaini and Mohammad Ashraf Hamid Ali</i> |
| UTP | Acute Toxicity Assessment of Heavy Metals Combination by Using Microtox <i>Dzulkarnain Zaini and Amirul Ashraf Abdul Razak</i> |
| UTP | Stakeholder Outreach on Process Safety for Process Industry using Risk Based Approaches <i>Siti Nur Balqis Fauzi Rahman, Azmi Mohd Shariff and Dzulkarnain Zaini</i> |
| UTP | Optimum Plant Design for Relief Safety System <i>Aini Aliah Yusoff, Zulfan Adi Putra, Risza Rusli, M Roil Bilad, Nik Abdul Hadi Md Nordin and M Dzul Hakim Wirzal</i> |