



Conference Proceedings
12th Asian Conference on Safety and Education in Laboratory
12th November and 13th November 2025
in conjunction with Higher Education and Research Forum
on 14th November 2025
Ho Bee Auditorium, Singapore Institute of Technology

Hosted By



Notes:

12 Nov 2025: **Optional Pre-Event**

a) Campus / Lab Tour at Singapore Institute of Technology

12 Nov 2025: ACSEL – Day 1 Proceedings

13 Nov 2025: ACSEL – Day 2 Proceedings

14 Nov 2025: WSHC Higher Education & Research Forum



Day 1 Programme – Wednesday, 12 November 2025

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| 12:00 | Registrations & Welcome Coffee |
| 12:45 | Delegates to be seated in Ho Bee Auditorium |
| 13:00 | Safety Briefing |
| 13:15 | Welcome Address by Guest of Honour Professor Chua Kee Chaing President, Singapore Institute of Technology |
| 12 Nov | Plenary #1 – AI for STRATEGIC SAFETY TRANSFORMATION |
| 13:30 | Smart Systems, Safer Workplaces: The Role of AI in Safety & Health Management <i>Dr. Peck Thian Guan</i> Deputy Chief Risk Officer, National University of Singapore |
| 13:50 | Utilization of AI technology for improving safety management efficiency and autonomy <i>Professor Yoshito Oshima</i> Division of Environmental Studies, The University of Tokyo |
| 14:10 | Driving Industry Transformation with AI: Real-World Applications for Safer Operations and Smarter Investigations <i>Associate Professor Wang Zhengkui Daniel</i> Director SIT x Nvidia AI Center Director SIT Data Science & AI Lab |
| 14:30 | NTU experience of using Generative Artificial Intelligence Navigation Systems (GAINS) for safety and health excellence <i>Ms Ann Tey Siow Fong</i> Deputy Director, InfoComm Infrastructure, Centre for IT Services, Nanyang Technological University |
| 14:50 | Panel Q&A Session Moderated by Mr. Watson Teo , Singapore Health Services |
| 15:45 | Refreshment Break & Vendor Exhibition |

Day 1 Programme – Wednesday, 12 November 2025

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| 15:45 | Tea-Break & Vendor Exhibition | |
| 16:00 | Poster Presentation Session 1 (Odd Numbers) | |
| 17:00 | Poster Presentation Session 2 (Even Numbers) | [OPTIONAL] Sponsor’s Technical Presentation by AESCOS <i>State of the Art Storage of Hazardous Materials at Modern Laboratories and Workplaces</i> |
| 17:30 | | [OPTIONAL] Sponsor’s Technical Presentation by WALDNER <i>Data-Driven Ventilation Strategies – More fume hoods – Zero Compromise on Safety</i> |
| 18:00 | Networking Reception & Canapés | |
| 19:30 | End of Day 1 | |

Poster Session – 12 November 2025 (Level 2 Foyer, Ho Bee Auditorium)

| Poster | Abstract ID | Title |
|--------|-------------|---|
| P-01 | 7865 | <p>Enhancing Laboratory Safety and Efficiency: An AI Powered Machine Learning System for Automated Chemical Storage Classifications and Management</p> <p><i>Muhammad Schehan Al Azhar</i> Universitas Indonesia</p> |
| P-02 | 8019 | <p>Bridging the Hierarchy Gap: an AI-Driven VR Platform to Foster Psychological Safety in Southeast Asia's R&D Laboratories</p> <p><i>Aliya Diandra</i> Universitas Indonesia</p> |
| P-03 | 3635 | <p>Integrating Real-Time AI Posture Analysis into Laboratory Safety Management Systems</p> <p><i>Shreyas M, Vinay K B, Ramya B, Ayush P G and Aashish A Shirahatti</i> Vidyavardhaka College of Engineering</p> |
| P-04 | 2877 | <p>AI powered with dashboard and QR codes Centralized Lab Safety Management System for the universities, polytechnics and research facilities with the support of different government agencies in Singapore</p> <p><i>Cezanne Cabulay</i> Nanyang Technological University</p> |
| P-05 | 8124 | <p>Hair mercury levels in relation to rice consumption among residents in Nam Son landfill area, Soc Son, Hanoi</p> <p><i>Nguyen Thi Quynh, Ishibashi Yasuhiro, Jeong Huiho, Ahmed Elwaleed, Phan Dinh Quang, Kobayashi Jun, Agusa Tetsuro and Arizono Koji</i> Prefectural University of Kumamoto</p> |
| P-06 | 6796 | <p>Implementing QR Codes Labels for Chemical Inventories</p> <p><i>Daniel Foong and Jenny Liu</i> Nanyang Technological University</p> |
| P-07 | 0489 | <p>Monetized Learning and Student Motivation: The Role of Payment Models in Personalized EdTech Engagement</p> <p><i>Rimsha Maqsood</i> Jamia Millia Islamia</p> |
| P-08 | 8653 | <p>AI Powered Lab Compliance Monitoring with Digital Display Visualization</p> <p><i>Deric Mayores, Kelly Teo, Muhammad Hanif Bin Shaiful Bhari, Tristan Koi, Edwin Yuen, Johnathan Lim, Abhishek Nalam and Ernest Tan</i> Singapore Institute of Technology</p> |

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| P-09 | 0802 | <p>Safety & Health Management Systems and Performance Award in NTU: A Step Towards Sustainable Safety & Health Culture</p> <p><i>Edward Pariwono and Saravanan Gunaratnam</i> Nanyang Technological University</p> |
| P-10 | 4728 | <p>Using a Digital App to Jumpstart your Campus Automated External Defibrillators (AEDs) Programme</p> <p><i>Christina Rozario Christina Rozario, Gerald Tan and Saravanan Gunaratnam</i> Nanyang Technological University</p> |
| P-11 | 7043 | <p>Insights on safety issues running a multi-national research laboratory</p> <p><i>Torsten Wuestefeld</i> Nanyang Technological University</p> |
| P-12 | 9434 | <p>A Comparison of Interior Design Study Program Curricula at Indonesian Universities to Clarify the Fundamental Concepts of Interior Design Education in the 21st Century</p> <p><i>Nurhayatu Nufut Alimin, Endri Sintiana Murni and Nadhifia Iryadini Rohadatul Aisy</i> Universitas Sebelas Maret</p> |
| P-13 | 3121 | <p>Digitalization of Biosafety Governance: Sharing of Nanyang Technology University Digital Application for Biosafety Protocol Management</p> <p><i>Christine Lim, Sini Mathew and Saravanan Gunaratnam</i> Nanyang Technological University</p> |
| P-14 | 0036 | <p>Physiological Monitoring of Mental Fatigue for Risk Reduction</p> <p><i>Georgios Christopoulos</i> Nanyang Technological University</p> |
| P-15 | 7439 | <p>Building a Future-Ready Biosafety Programme: Innovation, Integration, and Risk Governance</p> <p><i>Sini Mathew, Christine Lim and Saravanan Gunaratnam</i> Nanyang Technological University</p> |
| P-16 | 0840 | <p>Systematic Review and Meta-Analysis of Risk Factors Contributing to Video Conference Fatigue</p> <p><i>Yusuf Zalaya, Doni Hikmat Ramdhan, Indri Hasarai Susilowat and Mega Hasanul Huda</i> Universitas Indonesia</p> |
| P-17 | 2397 | <p>Best practice on Chemical Management System in KMUTT Thailand</p> <p><i>Apaporn Dalunchim, Sarutta Suanrat and Janewit Tippasert</i> King Mongkut's University of Technology Thonburi</p> |

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| P-18 | 4413 | <p>Enhancing Lab Safety with SHARELabs: A QR-Coded Telegram Reporting System</p> <p><i>Roger Lin and Jia Li</i> Singapore Institute of Technology</p> |
| P-19 | 4185 | <p>LN2 Refill and Safety in NCCS</p> <p><i>Wee Jie Chng, Peng Hui Cheng, Wei Peng Gerald Chua and Lai Kian Martin Tan</i> National Cancer Centre Singapore</p> |
| P-20 | 4462 | <p>Environmental Mercury Contamination in Artisanal Gold-Plating Workshops: Implications for Safer and More Sustainable Workspaces</p> <p>Ahmed Elwaleed, Huiho Jeong, Pyae Son Soe, Nguyen Thi Quynh, Emi Morokuma, Tetsuro Agusa, Jun Kobayashi and Yasuhiro Ishibashi Prefectural University of Kumamoto</p> |
| P-21 | 9157 | <p>Psychological Safety: A Collaborative Approach to Student Well-being</p> <p><i>Yin Feng Derek Tan and Gaddafi Bin Mohd Hashim Mohammed</i> Singapore Institute of Technology</p> |
| P-22 | 1280 | <p>Educational and skill training on lab safety standards in KMUTT</p> <p><i>Sarutta Suanrat, Apaporn Dalunchim, Janewit Tippasert and Apichart Thammajarn</i> King Mongkut's University of Technology Thonburi</p> |
| P-23 | 3968 | <p>Real-Time Hazard Detection and Automated Risk Assessment in Chemical Laboratories Using AI Platforms</p> <p><i>Phonsawan Klomkling, Nuengruethai Thianthong and Gitsada Panumonwatee</i> Naresuan University</p> |
| P-24 | 4642 | <p>Intelligent Risk Assessment Tool</p> <p><i>Ryan Jun Wei Tan, Rachele Wen Qi Tan, Regine Li Yin Tan and Shi Quan Marcus Foo</i> Singapore Institute of Technology</p> |
| P-25 | 8586 | <p>Development of a Digital Laboratory Safety Certification Platform: Transforming Chemical Research Work Permit Management in Naresuan University, Thailand</p> <p><i>Nuengruethai Thianthong, Phonsawan Klomkling and Gitsada Panumonwatee</i> Naresuan University</p> |
| P-26 | 0234 | <p>Leveraging Generative AI: Comparative Analysis and Practical Applications for Health and Safety Professionals</p> <p><i>Cheryl Ling and Edward Pariwono</i> Nanyang Technological University</p> |

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| P-27 | 0362 | <p>Investigation of a Simultaneous Analytical Method for PFAS Using a Monolithic Solid-Phase Centrifugal Extraction Column</p> <p><i>Emi Morokuma, Ahmed Elwaleed, Nguyen Thi Quynh, Jun Kobayashi and Yasuhiro Ishibashi</i></p> <p>Prefectural University of Kumamoto</p> |
| P-28 | 0407 | <p>Development of Safety culture under lab safety standards in Laboratory and Workshop at KMUTT Thailand</p> <p><i>Janewit Tippasert, Apaporn Dalunchim, Sarutta Suanrat and Amorntep Khumsuk</i></p> <p>King Mongkut's University of Technology Thonburi</p> |
| P-29 | 0494 | <p>An Analytical Study on Laboratory Safety Conditions According to the ESPReL Standard: A Case Study of Naresuan University</p> <p><i>Wiphada Boonsongthae, Suwadee Meemark and Wisa Supanpriboon</i></p> <p>Naresuan University</p> |
| P-30 | 0907 | <p>AI-Driven Identification of Chemicals Regulated under Singapore Laws</p> <p><i>Watson Teo, Serene Goh, Owen Toh and Cindy Goh</i></p> <p>Singapore Health Services</p> |
| P-31 | 0997 | <p>A Study on the Improvement of the Preliminary Risk Analysis of Hazard Factors</p> <p><i>Jong Hyun Park, Jung Ha Kim and Gee Hun Oh</i></p> <p>Metropolitan Research Safety Center</p> |
| P-32 | 1049 | <p>Safety Practices in the Laboratory: Transitioning from Measures to Culture – A Case Study of the Medical Science Academic Service Centre, Naresuan University</p> <p><i>Chayut Norkaew, Supapan Eakuranpan, Pakpoom Subsoontorn and Wisa Supanpaiboon</i></p> <p>Naresuan University</p> |
| P-33 | 4296 | <p>Numerical Analysis of Ammonia Loss of Containment (LoC) in a Vessel Machinery Space: Implications for Experimental Testing</p> <p><i>Anthony Basuni Hamzah and Ming Liu</i></p> <p>Nanyang Technological University</p> |
| P-34 | 3877 | <p>Efficient Organization and Safety Management of Chemical Laboratory Equipment and Materials During University Relocation</p> <p><i>Somasundaram Devikala, S Prabu Dev, Xi Hong-Wei and Lim Kok Hwa</i></p> <p>Singapore Institute of Technology</p> |
| P-35 | 1496 | <p>A Laboratory Accident Management System at Seoul National University</p> <p><i>Dong-Wook Kim, Kyu-Jin Seo and Ku-Nak Baek</i></p> <p>Seoul National University</p> |

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| P-36 | 2028 | <p>The Use of Ammo Boxes for Safe Storage of Li-Po Batteries - An Overview of Safety, Practicality, and Precautions</p> <p><i>Vincent Siang Huat Chan, Choong Hiang Steven Chua, Jiacong Chen, Roger Shengxuan Lin and Jia Li</i></p> <p>Singapore Institute of Technology</p> |
| P-37 | 2379 | <p>Establishing a Participatory Safety System in the Laboratory: A Case Study of the Medical Science Academic Service Centre, Naresuan University</p> <p><i>Supapan Eakuranpan, Chayut Norkaew, Pakpoom Subsoontorn and Wisa Supanpaiboon</i></p> <p>Naresuan University</p> |
| P-38 | 2592 | <p>Leveraging Microsoft 365 to Enhance Safety, Security and Health Operation</p> <p><i>Foong Yee Choy, Manoor Prakash Hande, Jun Ji Lim, Hwee Ying Lim, Pei Kun Ooi and Adeline Liew</i></p> <p>National University of Singapore</p> |
| P-39 | 2847 | <p>Towards a Paperless Laboratory: Enhancing Sustainability Through Digital Request Systems</p> <p><i>Fathollah Zakee Fatholmoein, Somasundaram Devikala and Lu Shen</i></p> <p>Singapore Institute of Technology</p> |
| P-40 | 3706 | <p>Safety & Health Training Framework in Nanyang Technology University (NTU) – “Cradle to Cradle” system for competency building</p> <p><i>Jenny Liu, Saravanan Gunaratnam and Yoke Yin Poon</i></p> <p>Nanyang Technological University</p> |
| P-41 | 3199 | <p>Smarter and Safer – How AI is Changing Lab Inspections at NUS</p> <p><i>Lionel Yap and Hairulnizam Bin Ishak</i></p> <p>National University of Singapore</p> |
| P-42 | 3356 | <p>Prevention of unintentional non-compliance from a lack of awareness in biosafety research</p> <p><i>Ji Min Lee, Taeyeon Kim, Youngjun Kim, Migang Lee and Sung Won Kwon</i></p> <p>Seoul National University</p> |
| P-43 | 3492 | <p>Safety management and the person visually impaired working with it at the School of Science, Tohoku University, Japan</p> <p><i>Ayumi Sawaguchi</i></p> <p>Tohoku University</p> |
| P-44 | 3498 | <p>Real-Time VOC Anomaly Detection with Sensor Networks and Machine Learning</p> <p><i>Yilun Huang, Yukiko Nezu and Yoshito Oshima</i></p> <p>The University of Tokyo</p> |

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| P-45 | 0928 | Safety and Health Excellence at your Doorstep <i>Vincent Soh Beng Wee</i> Nanyang Technological University |
| P-46 | 3839 | Self-checklist improving laboratory safety – incorporating initiatives from Japanese universities <i>Rumiko Hayashi, Yasunori Mikami, Takaaki Harada and Kengo Tomita</i> Tohoku University |
| P-47 | 4035 | Integrated Management of Unused Chemicals for Sustainability <i>Kamol Maikrang and Wisa Supanpaiboon</i> Naresuan University |
| P-48 | 4939 | Development of self-assessment methods for fume hood operational status using deep learning <i>Ai Shuhara, Daiyu Wang and Yoshito Oshima</i> The University of Tokyo |
| P-49 | 4951 | Quantitative Characterization of Experimenters' Movements in Laboratories Using a Data-Driven Approach <i>Yamiao Chen, Yukiko Nezu and Yoshito Oshima</i> The University of Tokyo |
| P-50 | 5494 | Study on Improving Biosafety Management Compliance: By the Pre-Inspection Results from LMO Research Facilities <i>June Bong Kim, Nam Su Kim, Yong Jin Kim, In Ja Song and Hwang Won Lee</i> Korea Research Institute of Bioscience and Biotechnology (KRIBB) |
| P-51 | 5675 | Engineering Sustainability: Carbon Savings through Rebuilding Heavy-Duty Equipment in the Mining Sector <i>Diah Prabandani, Alifia Herlyana and Ajeng Puspitaning Pramayu</i> BUMA, ITB & BUMA, Universitas Trisakti & BUMA, Universitas Indonesia |
| P-52 | 6453 | Empowering the Gatekeepers of Research Laboratory Safety: Laboratory Safety Coordinator Induction Course <i>Majidah Rezlan, Watson Teo, Chai Lim Ng and Cindy Joo Eng Goh</i> Singapore Health Services |
| P-53 | 6734 | Analysis of Differences in Learning Satisfaction, Learning Engagement, and Learning Outcomes According to the Method of Safety Education in Korean Universities <i>Mu Hwa Song, Hee Jun Jung, Kyeong Min Kang, Mi Ju Park, Chi Hun Won and Han Jin Jo</i> Korea Reseach Institute of Bioscience & BioTechnology |

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| P-54 | 7165 | <p>Characteristics of Korea's Laboratory Safety System from an International Comparative Perspective</p> <p><i>Jooyoung Kim, Young Seo Yoo, Yejin Park, Jeongim Park, Dong Kyu Hwang, Seong Pil Chung, Hwang Won Lee and Sunyoung Bae</i> Seoul Women's University, Soonchunhyang University, National Research Safety Headquarters</p> |
| P-55 | 7841 | <p>Beyond the Spill: Pioneering Risk-Based Emergency Response Training at SingHealth</p> <p><i>June Xiaohui Lin, Chai Lim Ng and Cindy Joo Eng Goh</i> Singapore Health Services</p> |
| P-56 | 8117 | <p>A dual approach in chemical management</p> <p><i>Huiwen Lan, Dandan Bao and Hui Wang</i> National University of Singapore (Suzhou) Research Institute</p> |
| P-57 | 8162 | <p>From Inspection to Impact: Strengthening Laboratory Safety Through Data-Driven Measures</p> <p><i>Yong Hao Wee, Valerie Chong and Cindy Goh</i> Singapore Health Services</p> |
| P-58 | 9054 | <p>Characterization of Tasks and Behavioral Patterns in Measurement Operations through Mathematical Analysis</p> <p><i>Yukiko Nezu and Yoshito Oshima</i> The University of Tokyo</p> |
| P-59 | 9073 | <p>Challenges for managing high-risk research environments</p> <p><i>Jooyoung Kim, Young Seo Yoo, Yejin Park, Jiyoung Suh, Dong Kyu Hwang, Seong Pil Chung, Hwang Won Lee and Sunyoung Bae</i> Seoul Women's University, Science and Technology Policy Institute, National Research Safety Headquarters</p> |
| P-60 | 9661 | <p>Driving Behavioural Change through Green Lab Certification at SIT</p> <p><i>Mei Fong Koh, Komathi Paramasivam and Meifang Koh</i> Singapore Institute of Technology</p> |
| P-61 | 9871 | <p>An Analysis of Safety Attitudes and Behaviors Related to Chemical Handling and Safety Management Among Students and Staff in Laboratory Settings: A Case Study of Naresuan University, Thailand</p> <p><i>Suwadee Meemark, Wiphada Boonsongthae and Wisa Supanpriboon</i> Naresuan University</p> |
| P-62 | 4792 | <p>Cost-Benefit Analysis of Environmental Management System Implementation In An Oil And Gas Company In Indonesia</p> <p><i>Adonis Muzanni and Debby Paramitasari</i> Universitas Indonesia</p> |

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| P-63 | 5189 | <p>AI-Based Crisis Communication: Combating Misinformation and Hoaxes During Emergency and Crisis Situations in Indonesian Workplaces</p> <p><i>Debby Paramitasari and Aliya Diandra</i> Universitas Indonesia</p> |
| P-64 | 1220 | <p>AI-Enhanced Mental Health Monitoring for Sustainable Laboratory Safety: Evaluating Digital Peer Support Systems Based on Mining Industry Evidence”</p> <p><i>Imam Santoso, Debby Paramitasari and Tasya Aulia Tabina</i> Universitas Indonesia</p> |
| P-65 | 3397 | <p>Enhancing Emergency Preparedness in Higher Education: A Case Study of Full-Scale Multi-Building Emergency Drills at Universitas Indonesia in 2025</p> <p><i>Devi Partina Wardani, Nida Hanifah Nasir, Mila Tejamaya and Fatma Lestari</i> Universitas Indonesia</p> |

Day 2 Programme – Thursday, 13 November 2025

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| 13 Nov | PLENARY 2 – SMART SAFETY, SUSTAINABILITY SUCCESS |
| 09:00 | Morning Coffee & Light Refreshments |
| 09:30 | Safety - The Core of Sustainability <i>Associate Professor Pathak ABHAY VIJAY</i> Nanyang Business School, Nanyang Technological University |
| 09:50 | Building a Smart and Sustainable Campus <i>Mr. Gerry Wee</i> Associate Vice President Estates, Singapore Institute of Technology |
| 10:10 | Safe, Smart, and Sustainable: Transforming Academic Laboratories for a Resilient Future <i>Professor Yoshiko Tsuji</i> Environmental Science Center, The University of Tokyo |
| 10:30 | Panel Q&A Session Moderated by Associate Professor Lim Kok Hwa Director, Professional Officers Division, Singapore Institute of Technology |
| 11:15 | Break & Vendor Exhibition |

Day 2 Programme – Thursday, 13 November 2025

| 13 Nov | PARALLEL TRACK – 1 Ho Bee Auditorium | PARALLEL TRACK – 2 Lectorial 8 |
|--------|---|---|
| | AI & TECHNOLOGY | SAFETY EDUCATION |
| 11:30 | <p>PT101: 0872 AI-Know in Action: Generative AI Applications in Safety and Health at NUS</p> <p><i>Keng Beng Goh and Danny Toh</i> National University of Singapore</p> | <p>PT201: 5289 Safety Education and Training for Industrial X-ray Workers-Result of International Status Survey and Future Scope from Viewpoint of Japan</p> <p><i>Takeshi Imoto, Yu Igarashi, Lasa Akahira, Atsushi Enomoto, Keiji Oda and Munehiko Kowatari</i> The University of Tokyo & Electron Science Institute & National Institutes for Quantum Science and Technology</p> |
| 11:50 | <p>PT102: 0376 Immersive Ergonomics and Occupational Safety Education Using AI and Virtual Reality in Higher Education Settings</p> <p><i>Ari Prayogo Pribadi, Hana Kristina, Ardiyanto Ardiyanto, Rifaz Muhammad Sukma and Zilfani Faudyah Haq</i> Universitas Gadjah Mada</p> | <p>PT202: 6512 Bridging Safety Theory and Laboratory Safety Practice</p> <p><i>Pey Rou Chong, Koh Shu Wen, Tiara Carmelia Binte Zuraini, Unis Yeo Yongxin, Chong Oi Khuan, Lim Hong Meng, Zakaria Almsherqi and Prakash Hande</i> National University of Singapore</p> |
| 12:10 | <p>PT103: 0242 Advancing Accident Root Cause Analysis with Human Factors and Large Language Models</p> <p><i>Seng Wee Yap and Angela Tan</i> Singapore University of Social Sciences</p> | <p>PT203: 3244 Embedding Soft Skills in Safety Training to Strengthen Laboratory Safety Culture and Management</p> <p><i>Wisa Supanpaiboon</i> Naresuan University</p> |
| 12:30 | <p>PT104: 2713 Development of fault trees from safety reports to model process risk using CorEx-ARM framework</p> <p><i>Satyajeet Sahoo, Jhareswar Maiti and Virendra Tewari</i> Indian Institute of Technology Kharagpur</p> | <p>PT204: 9601 Safety Foundations in Engineering to excel at Industries</p> <p><i>Balajee Raman and Raymond Lau Wai Man</i> Nanyang Technological University</p> |
| 12:50 | Lunch | |

Day 2 Programme – Thursday, 13 November 2025

| 13 Nov | PARALLEL TRACK 3 Ho Bee Auditorium | PARALLEL TRACK 4 Lectorial 8 | PARALLEL TRACK 5 SR204 |
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| | AI & TECHNOLOGY | SUSTAINABILITY | LABORATORY SAFETY MANAGEMENT |
| 14:00 | <p>PT301: 8635 Occupational Safety & Health Artificial Intelligent & Digital Assistant (OSH AIDA) Innovation for Laboratory Health, Safety, Security & Sustainability in Indonesia</p> <p>Fatma Lestari Universitas Indonesia</p> | <p>PT401: 0444 Chemometrics Guided Selection of Green Solvents for Sustainable Herbicide Synthesis</p> <p>Mahasin Alam S K Singapore Institute of Technology</p> | <p>PT501: 1265 Fire Safety Concerns in Legacy Laboratories: Risks, Realities, and Remediation in University and Research Environments</p> <p>Christopher Eng Kiong Tan Singapore Institute of Technology</p> |
| 14:20 | <p>PT302: 2259 AI-Powered Formative Assessments for Enhanced Learning and Hazard Awareness</p> <p>Kanmani Saminathan, Matthew Roy Foreman and Eric Peng Huat Yap Nanyang Technological University</p> | <p>PT402: 2326 Sustainability and Safety culture in Research Laboratories at KMUTT, Thailand</p> <p>Asst. Professor Suchada Chaisawadi, Sarutta Suanrat and Kittinut Kaewthong King Mongkut's University of Technology Thonburi</p> | <p>PT502: 6108 A Cradle-to-Grave Research Project-Based Safety Management System</p> <p>Samuel Yu Hong Kong University of Science and Technology</p> |
| 14:40 | <p>PT303: 7066 Chemical Resistance Prediction for Rubber Gloves</p> <p>Takaaki Harada, Takamasa Aoki, Shinobu Yamamoto and Kengo Tomita Research Center for Safety Science, Management Headquarters, Kyushu Institute of Technology</p> | <p>PT403: 9158 EHS365: A Comprehensive Online Integrated Platform for Safety & Health Compliance</p> <p>Edward Pariwono and Yoke Yin Poon Nanyang Technological University</p> | <p>PT503: 5504 Retrieving Similar Accident Cases Based on Operator Intention Descriptions</p> <p>Kenji Iino and Yoshiko Tsuji The University of Tokyo</p> |

Day 2 Programme – Thursday, 13 November 2025

| 13 Nov | PARALLEL TRACK 3 Ho Bee Auditorium | PARALLEL TRACK 4 Lectorial 8 | PARALLEL TRACK 5 SR204 |
|--------|--|--|--|
| | AI & TECHNOLOGY | SUSTAINABILITY | LABORATORY SAFETY MANAGEMENT |
| 15:00 | <p>PT304: 2146 Leveraging AI – ChemRisk to Enhance Chemical Lifecycle Safety and Compliance at NUS</p> <p>Andrew Ng and Joel Swee National University of Singapore</p> | <p>PT404: 3020 Data-Driven Process Integration and Optimization for Sustainable Chemical Production: Minimizing Carbon Emissions and Resource Use</p> <p>Nitin Dutt Chaturvedi Indian Institute of Technology, Patna</p> | <p>PT504: 7726 Setting the Gold Standard in Safety and Health Management System in NTU</p> <p>Roger Tan Kay Chia and Vincent Soh Beng Wee Nanyang Technological University</p> |
| 15:20 | <p>PT305: 4334 Research And Development of An Artificial Intelligence-Based Ergonomic Assessment Tool for Computer Workstation Evaluation</p> <p>Ari Prayogo Pribadi, Hana Kristina, Ardiyanto Ardiyanto, Rifaz Muhammad Sukma and Zilfani Faudyah Haq Gadjah Mada University, Jenderal Achmad Yani University</p> | <p>PT405: 9448 Expanding Laboratory Safety Practices to Promote a Sustainable Culture within the Department of Zoology</p> <p>Kamonporn Masawang Kasetsart University</p> | <p>PT505: 6827 Working Safely with Cytotoxic Drugs in Research - The HKU Approach</p> <p>Paul Hunt The University of Hong Kong</p> |
| 15:40 | Tea Break & Networking | | |

Day 2 Programme – Thursday, 13 November 2025

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| 16:00 | SAFETY ROUNDTABLE |
| | Professor Tsai Perng-Jy National Cheng Kung University Professor Samuel Yu Hong Kong University of Science and Technology Professor Fatma Lestari Universitas Indonesia Saravanan Gunaratnam - Moderator Nanyang Technological University |
| 17:00 | Awards Presentation |
| 17:15 | Closing Address Associate Professor Lim Kok Hwa Conference Chair, 12th Asian Conference on Safety and Education in Laboratory |
| 17:30 | Gratitudes & Goodbyes <i>Till we meet again!</i> |

**Workplace Safety & Health
Higher Education & Research FORUM 2025
SAFETY, INNOVATION AND TRANSFORMATION**
14 Nov 2025 – Ho Bee Auditorium, Singapore Institute of Technology

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|--------------|---|
| 09:00 | Registrations & Light Refreshments |
| 09:30 | Delegates to be seated in Ho Bee Auditorium |
| 09:45 | Safety Briefing |
| 10:00 | Welcome Address Mr. Ronnie Tay Deputy President (Administration) & Chief Financial Officer Singapore Institute of Technology |
| 10:15 | Opening Address by Guest of Honour Mr Abu Bakar Mohd Nor Chairman Workplace Safety and Health Council |
| 10:30 | Presentation of WSH RM Training Certificates to Student Assistants |
| 10:40 | Plenary 1: Safety & Health Culture in Higher Education and Research |
| | <p>Overview of Safety & Health Culture – Definition <i>Dr Peck Thian Guan</i> Deputy Chief Risk Officer, National University of Singapore</p> <p>Cultivating a Culture of Safety: Our Holistic Approach to Workforce Readiness <i>Mr Alfred Tan Wee Hiong</i> Director, School of Engineering, Institute of Technical Education</p> <p>Culture Safe Insights Programme – Programme and Attributes <i>Mr Edward Pariwono</i> Environmental, Health and Safety Manager, Nanyang Technological University</p> <p>Safety & Health Culture Survey Insights <i>Ms Poon Yoke Yin</i> Assistant Director, Nanyang Technological University & <i>Dr Lim Cheh Peng</i> Senior Associate Director, National University of Singapore</p> <p>Moderator <i>Saravanan Gunaratnam</i> Director, Nanyang Technological University</p> |
| 12:30 | LUNCH |

| | |
|-------|--|
| 14:00 | <p>Plenary 2: Innovative Systems and Technologies for Safer Workplaces and Learning Environments</p> |
| | <p>Integrating Technology for Efficient and Safe Laboratory Management <i>Dr Subramaniam Gurusamy</i> Senior Specialist (Natural Product Chemistry) & Senior Lecturer, Nanyang Polytechnic</p> <p>Safety Programmes for Outdoor Activities <i>Associate Professor Swarup Mukherjee</i> Nanyang Technological University</p> <p>Total Workplace Safety and Health (TWSH) <i>Dr De Leon Suzette</i> Associate Director, National University of Singapore</p> <p>Moderator <i>Tan Khai Seng</i> Senior Assistant Director, Agency for Science, Technology and Research</p> |
| 15:45 | <p>Closing Address <i>Associate Professor Lim Kok Hwa</i> Chairman, WSH-Higher Education & Research Working Group Director, Professional Officers Division Singapore Institute of Technology</p> |
| 16:00 | <p>End of WSHC Higher Education & Research Forum 2025</p> |

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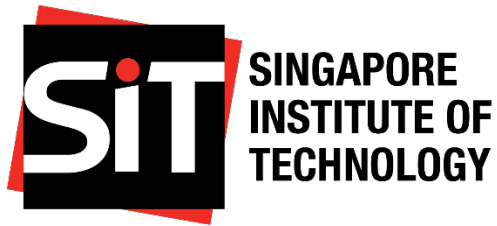
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