

Panel Session on "Women in Engineering:"

When Engineering Decisions Become Safety Decisions

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ONLINE PLATFORM

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Moderator
rof. Ir. Dr. Zuhaina Zakaria



Moderator
Ir. Chia Ying Sim



Ir. Ts. Bibi Sabrena Sakandar Khan
MALAYSIA AIRPORTS



Ir. Dr. Jegalakshimi Jewaratnam
SESIG Deputy Chairman



Hj Muhammad Bashir Ngah
Head HSE, Downstream Business Excellence

Synopsis

Engineering decisions shape the world around us – from infrastructure and transportation systems to industrial processes and the built environment. Every technical choice carries a direct impact on safety, sustainability, and public well-being.

This forum discuss on how critical women leaders in engineering to share insights on how critical engineering decisions influence safety outcomes across different industries. Through real-world experiences and professional perspectives, the session will explore accountability, risk management, innovation, and ethical responsibility in engineering practice. The discussion aims to highlight the vital role women engineers play in driving safer, smarter, and more resilient solutions for society.

Moderators



Prof. Ir. Dr. Zuhaina Zakaria is a professor at Faculty of Electrical Engineering, UiTM with over 30 years of experience in academia. She is currently the Chair for IEM Women Engineer Section. She specializes in energy efficiency, power quality, load profiling, and power system analysis. An active member of IEEE and IET, she also served as the Honorary Secretary of IEM for session 2022/2023, 2023/2024. She has held key roles in the Board of Engineers Malaysia and the Engineering Technology Accreditation Council.



Ir. Chia Ying Sim is a Senior Engineer at Arup Jururunding Sdn. Bhd., specialising in civil and structural engineering within the built environment. She has contributed across all key stages of project delivery, from preliminary design through to project handover. Her portfolio ranges from bespoke residential developments to large-scale housing schemes and mixed-use developments. She is currently leading commercial projects that will contribute to shaping Malaysia's future urban skyline.

Speaker's Biodata



Ir. Ts. Bibi Sabrena Sakandar Khan is the Project Director at Malaysia Airports (Sepang) Sdn. Bhd., specializing in Civil Engineering. With a career at KLIA since 2006, she has progressively advanced through roles in maintenance, engineering business intelligence, operations, and project management. She holds certifications as a Project Management Professional (PMP)[®], and an ASEAN Chartered Professional Engineer.

Currently, she leads the KLIA Asset Replacement Plan for the Automated People Mover and is also spearheading the strategic framework for the Baggage Handling System replacement.



Ir. Dr. Jegalakshimi Jewaratnam is a senior lecturer in Chemical Engineering Department, University Malaya. At present, she is also the coordinator for Masters of Safety, Health and Environment Engineering. She received her BEng (Chemical) and MEngSc (Chemical) from University Malaya in year 2003 and 2007 respectively. She completed her PhD (Chemical Engineering) in Newcastle University, United Kingdom in year 2013. She is a Professional Engineer registered in Board of Engineers Malaysia (2019) and a Chartered Engineer registered in Engineering Council, UK (2018). She is a Member of Institution of Engineers Malaysia (MIEM) (2019) and Institute of Chemical Engineering Malaysia (MIChemE) (2018). Prior to academic position, she has worked in the water industry as a technical and project engineer. In her academic career span, she has published academic journals and conference papers, engaged in industrial consultations and presented invited talks. Her research interests are advanced process control and optimization in bioprocesses, waste recovery and management; environment health and quantitative risk assessment.



Muhammad Bashir Ngah is a senior HSE leader at PETRONAS with over 20 years of experience in process safety, risk management, and operational excellence. Currently serving as General Manager, HSE (Downstream Business), he shapes and steers safety management strategies across the PETRONAS group to enhance safety performance and prevent incident recurrence. He has held various leadership roles in Process Safety Management, Assurance & Risk, Corporate Strategy, and Operations. He is also an Advisory Board Member for the Center for Chemical Process Safety (CCPS), AIChE (US) and the IChemE Safety Centre (UK). He holds a Bachelor of Engineering in Chemical & Process Engineering from the University of Sheffield, UK.