

WEBINAR TALK ON FUTURE-PROOFING PETROLEUM: AI, INNOVATION & SUSTAINABILITY IN ENERGY ENGINEERING

- Date : 2 August 2025 (Saturday)
- Time : 9.00 am 11.00 am
- **Platform** : Zoom Webinar

Registration Fees:

- Student Member : FOC
- IEM Member : RM 15.00
- Non-Member : **RM 70.00**

Synopsis:

This talk explores how universities can future-proof petroleum engineering education by integrating Artificial Intelligence, innovation, and sustainability into the curriculum and research. As the energy sector undergoes rapid transformation, academia must evolve to equip future engineers with the skills to drive digitalization, optimize operations, and contribute to sustainable energy solutions. The session highlights how AI tools, interdisciplinary projects, and green technologies are reshaping teaching, learning, and research in petroleum engineering. It emphasizes the critical role of educators in preparing graduates who are not only industry-ready but also capable of leading the energy transition with responsibility and innovation.

Speaker: Ir. Ts. Dr. Harvin Kaur Gurchran Singh



Ir. Ts. Dr. Harvin Kaur Gurchran Singh is an accomplished Assistant Professor and Programme Leader for Petroleum Engineering at Asia Pacific University of Technology & Innovation (APU). A Professional Engineer (Ir.), Chartered Engineer (CEng), and European Engineer (Eur Ing), she holds a double PhD in Petroleum Engineering and Business Administration, alongside certifications in Lean Six Sigma (Master Black Belt), ESG, and Project Management. With over a decade of diverse experience in academia and the oil & gas industry, Dr. Harvin blends technical expertise in flow assurance with a passion for education. At APU, she leads digital transformation in petroleum education, manages interdisciplinary research projects, and has secured significant grants and industry partnerships. She is also a leading voice for gender equity in STEM through her involvement in the DIGITGAL taskforce and serves as the Energy Education Chairperson for the Society of Petroleum Engineers (SPE) Kuala Lumpur Section. Her work continues to empower future engineers through innovative, inclusive, and industry-aligned learning experiences.