The Institution of Engineers, Malaysia

BEM APPROVED CPD: 2
REF NO: IEM26/HQ/030/T (w)

WEBINAR TALK ON
THERMOPLASTIC COMPOSITE PIPES (TCP) FOR OIL AND GAS: MATERIALS, DESIGN, AND LOW-CARBON PERFORMANCE

Date : 22 April 2026 (Wednesday)
Time : 4.00 pm - 6.00 pm
Platform : Zoom Webinar

Registration Fees:

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

Synopsis:

This talk provides an introduction to Thermoplastic Composite Pipes (TCP), a cutting edge flexible pipe solution that eliminates corrosion and simultaneously reduces the carbon footprint of pipelines, both for renewable energy and conventional oil and gas applications.

The talk will focus on the material technology upon which TCP is based on and its unique top-to-bottom design strategy. Underlining its unique qualification and verification approach as well as its comparative performance.

By the end of this talk, attendees will have a clearer understanding of:
- The material science that provides TCP its capabilities
- The design and qualification approach for TCP
- The technical benefits of TCP for the carbon challenges in the future

This session is designed for students, young engineers, and professionals seeking to gain an insight into state of the art solutions to the energy challenges of today and tomorrow.

Speaker: Harshavardhan Vijaya Kumar

Harshavardhan Vijaya Kumar is a Composite Engineer at Strohm B.V. (Netherlands), specializing in the design and analysis of TCP for energy applications. He holds a Master of Science degree in Aerospace Engineering with a concentration in Aerospace Structures and Materials. As an early–career Engineer ,Harsha blends his training in aerospace materials and passion for engineering into design of subsea solutions. His work spans custom design development through to detailed engineering based on project requirements. He has presented to clients, engineering firms, and industry stakeholders on TCP technology for onshore and offshore applications. He continues to advocate for uniting the benefits of aerospace-origin composite materials with the demanding operating conditions of subsea environments, a convergence made possible by TCP.