The Institution of Engineers, Malaysia

WEBINAR TALK ON

PREDICTING AND MITIGATING OF CRUDE OIL FOULING FOR OPTIMAL PERFORMANCE

BEM APPROVED CPD: 2
REF NO: IEM25/HQ/117/T (w)

ORGANISED BY:
ENGINEERING EDUCATION TECHNICAL DIVISION, IEM

SPEAKER:

DR. UMESH BASANAGOUDA DESHANNAVAR

14 APRIL 2025 (MONDAY)

2.30PM - 4.30PM

ZOOM WEBINAR

FEES FOR TALK

IEM Members
Registration Fee : FOC
Administrative Fee:
Online: RM15
Walk-in: RM20

Non IEM Member
Registration Fee : RM50
Administrative Fee: RM20

SYNOPSIS

Deposit formation on heat transfer surfaces can have severe consequences for process industries like petroleum, chemical, and food industries. The problem is particularly prevalent during the processing of crude oil, where multiple factors such as surface and bulk temperatures, flow velocity, crude type, and crude blending contribute to fouling. Effective management and control of fouling require a deep understanding of these mechanisms. Numerous models for crude oil fouling have been developed and documented in the literature. There has been significant interest in the concept of threshold fouling conditions for crude oils, explored using semi-empirical or empirical models. The presentation will cover consequential effects of crude oil fouling, the factors influencing crude oil fouling, fouling mechanisms, the steps involved in fouling, and threshold fouling models and their applications.

SPEAKER'S PROFILE

Dr. Umesh Basanagouda Deshannavar is a distinguished academic with over 22 years of experience in teaching, research, and administration. He currently serves as the Director of Innovation, Research, and Partnership at Warana University and is a Professor in the Department of Chemical Engineering at TKIET. Dr. Deshannavar holds a PhD from the PETRONAS Institute of Technology, Malaysia, where he specialized in petroleum research, particularly crude oil fouling. He has mentored five PhD scholars and is supervising two more, contributing significantly to the academic community with over 50 publications in peer-reviewed journals, achieving a cumulative impact factor exceeding 80. His expertise is recognized through invitations to review for over 50 journals. Additionally, he has published a book on advanced adsorption techniques in chemical engineering. Dr. Deshannavar has also guided multiple PhD candidates and has a strong academic background with degrees in Chemical Engineering and Energy Systems Engineering. His commitment to research and education is evident in his extensive publication record and active involvement in academic supervision.