WEBINAR

"Smart Material for Sustained Drug Delivery"

📅 **23 AUGUST 2022, TUESDAY**
🕐 **10.00AM - 12.00PM**
📍 **ONLINE PLATFORM**

CPD : 2.0 | REF. NO.: IEM22/HQ/201/T (w)

IEM Students: FOC
IEM Members: RM15
Non-IEM Members: RM70

Presented by
Ir. Dr. Teow Yeit Haan

JOINTLY ORGANISED BY MATERIAL ENGINEERING TECHNICAL DIVISION (MATD)
& CHEMICAL ENGINEERING TECHNICAL DIVISION (CETD)

SYNOPSIS

Drug delivery is a difficult task in the field of dermal therapeutics mainly in the treatment of burns, wounds, and skin diseases. Conventional drug delivery mediumshave some limitations, including poor retention on skin or wound, inconvenience inadministration, and uncontrolled drug release profile. Our research team invented a novel thermo-responsive cellulose hydrogel extracted from palm oil biomass which gives prolonged sustained drug released compared to commercially available drug delivery medium. The developed hydrogel has thermo-responsive properties with sol–gel transition characteristic as it could pour onto the skin to fill the wound/burn surfaces in sol-phase and form non-free flow solid hydrogel at body temperature. It offers attractive advantages to overcome the limitations of conventional drug delivery mediums, including poor retention on skin/wound, inconvenience in administration, and uncontrolled drug release.

ABOUT SPEAKER

Ir. Dr. Teow Yeit Haan is currently an Associate Professor at Universiti Kebangsaan Malaysia (UKM) and Coordinator of Water Solutions and Water Technology research area at the Research Centre for Sustainable Process Technology, UKM. She has published more than 60 journal papers, 29 conference proceedings, 4 books, and 4 book chapters. She is a registered Professional Engineer (PEng) in Malaysia, an Associate Member of Institute of Chemical Engineers (IChemE), a member of Young Scientist Network-Academy of Sciences Malaysia (YSN-ASM), Deputy Chairman of Chemical Engineering Technical Division in The Institution of Engineers Malaysia (IEM), and a member of Malaysia Membrane Society (MyMembrane).