

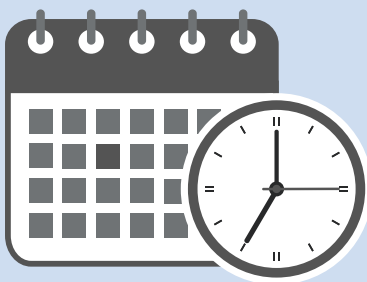
PHYSICAL POWER TALK INCONJUNCTION WITH ENGINEERS 2025 CONCRETE FORENSIC FOR ENGINEERS

Organised by :
Civil and Structural technical Division, IEM



FREE

DETAILS



**9TH SEPTEMBER 2025
(TUESDAY)**

2.00pm - 3.30PM



SPACE 5, HALL 5, KLCC



Speaker: Dr. Yeo Shih Horng

BEM Approved CPD Hours : 1.5
Ref No. : IEM25/HQ/364/T

Synopsis

This technical talk provides engineers with an essential understanding of concrete forensic investigation, focusing on the root causes of concrete failures and the techniques used to diagnose them.

Participants will gain insight into typical material, workmanship, structural, and durability-related failures, supported by real project experiences. Emphasis is placed on hands-on field investigation methods using visual inspection, non-destructive testing (NDT), and destructive testing techniques. The talk concludes with practical advice and discussion on local challenges, preventative measures, and good forensic practice.

Speaker's Biodata

Dr. Yeo Shih Horng is a distinguished expert in high-performance concrete and forensic analysis, with a strong track record in innovative concrete mix design and troubleshooting. As the founder of YSH Concrete Technology Sdn. Bhd., he has contributed significantly to the development of specialized concrete solutions for complex construction projects. His expertise spans a variety of applications, including fast-track construction in harsh environments. Notably, he played a pivotal role in designing a concrete mix for a FAB project in Dalian, China, where the mix achieved over 25 MPa within 24 hours despite freezing temperatures without conventional heat curing. His involvement in the Changi Airport expansion project demonstrates his ability to consult on large-scale projects, advising on mix design, site quality control, and troubleshooting. Dr. Yeo has successfully developed high-performance concrete mixes tailored to specific needs, including low-heat, high-strength C60/75 concrete for data centers in Singapore and ultra-high early strength concrete capable of reaching 20 MPa within just 8 hours for specialized repair applications. Beyond mix design, he is deeply involved in concrete forensics, investigating structural integrity issues, cracking in concrete sleepers, delayed ettringite formation, tunnel lining defects, and other critical problems in construction. His forensic expertise has helped resolve complex concrete failures across various industries.

Dr. Yeo's contributions extend to professional associations, having served as a committee member for the American Concrete Institute (ACI) – Malaysia Chapter and The Institution of Engineers, Malaysia (IEM). His dedication to advancing concrete technology continues to impact the industry, shaping innovative solutions for construction challenges worldwide.