

**IEM YES & IEM GETD**  
presents

# “Site Investigation, Analysis & Design, Code Standards of Pile Foundation”

BY IR. LIEW SHAW SHONG

**4 Jun 2022**  
**Saturday**  
**9:00am to 12:30pm**

Ref No: IEM22/HQ/139/T(w) CPD: 3.5

 **IEM VIRTUAL PLATFORM**

Commitment Fees (Subject to 6% SST & Non-Refundable)

ONLINE	
IEM Student Member	RM 40.00
IEM Graduate Member	RM 70.00
IEM Corporate Member	RM 125.00
Non-IEM Member	RM 220.00

The talk will primarily focus on Site Investigation Approaches, Analyses for Actions onto Piles and the Design Intent, Design Detailing, Installation Impacts and Special Design Considerations in Pile Designs. Interesting case histories are used to illustrate the common reality in piling projects.

1. Introduction to Piling Design
2. Overview of Site Investigation for Pile Foundation
3. Analyses & Detailing in Pile Designs
  - Axial Compressive/Tension Actions on Piles
  - Lateral Actions on Piles
  - Combined Actions on Piles
  - Single Pile and Group Piles
  - Pile Head Connection
4. Common Pile Types & Installation Methods in Malaysia
  - Timber/Wood Piles
  - Concrete Piles – Reinforced Concrete Pile/Prestressed Pile
  - Steel Piles
  - Cast-In-Situ Piles – Micropiles, Bored Piles
  - Installation Impacts to Pile Capacity
5. Special Design Considerations
  - Negative Skin Friction
  - Piles for Ground Retaining Function
6. Case Histories
7. Concluding Summary.



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### About Speaker

Ir. Liew Shaw Shong obtained his Bachelor of Science Degree in Civil Engineering with First Class Honours from National Taiwan University at Taipei in 1991 and worked as a geotechnical engineer in Sino Geotechnology Inc. at Taipei for a year. In 1992, he continued his post-graduate study in University of New South Wales in Sydney, Australia and obtained his Master of Engineering Science in 1993. He then returned to Malaysia to work as geotechnical engineer in a multi-discipline engineering consultant firm. During the six years of working, he has exposed himself to numbers of major infrastructure projects, likes Lebuhraya Damansara Puchong, Tanjung Pelepas Port, Kuala Lumpur International Airport, etc. In 1999, he jointly established a geotechnical specialist consulting firm with another two partners to continue the consultancy practice till now. He is the senior director/founder of G&P Geotechnics Sdn Bhd. In the past twenty-nine years of his professional career, he has involved in numbers of forensic investigations of landslide problems at mountainous roads and is one of the project team members in the National Slope Master Plan Study commissioned by JKR. He also conducted numbers of short courses and delivered lectures on subjects covering subsurface investigation, instrumentation, dam engineering, slope engineering, soft ground engineering, pile and retaining wall designs, geotechnical case histories and forensic engineering. On the peaty soil formation, he involved in platform treatment and foundation system for a palm oil mill project over the peat soils in flood plain alluvial deposits in Sumatra, Indonesia and a forensic investigation on peat soils flow failure with strengthening solution for an open coal mining at Mukah, Sarawak. He also involves in numbers of basement construction projects in Peninsular and Sabah.

Ir. Liew was the past chairman of Geotechnical Engineering Technical Division of the Institution of Engineers, Malaysia (IEM) for Session 2010 to 2013 and is also the retired advisor of Geotechnical Engineering Technical Division of the Institution of Engineers, Malaysia (IEM) for Session 2014 to 2016. He was the President of Malaysian Geotechnical Society (MGS) for Session 2019 to 2021 and Immediate Past President for Session 2021 to 2022. He is Nominated Member of TC221- Tailing and Mine Wastes of International Society for Soil Mechanic and Geotechnical Engineering (ISSMGE) for Session 2021 and Committee Member of Malaysian National Committee On Large Dam (MYCOLD). He is now also the member of Professional Fellow Member, Engineers Australia (EA).

He has published more than 70 technical papers on geotechnical engineering in local and overseas conferences and seminars. In 2005 & 2022, he won twice the Ir. Tan Sri Hj. Yusoff Prize for the best IEM Technical Paper Award.