

# THE INSTITUTION OF ENGINEERS, MALAYSIA

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| TUSTD AGM Talk on:<br>Ground Performance and Pile Responses due to Tunneling<br>Organized by the Tunneling & Underground Space Technical Division, IEM |   |   |
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| Date<br>Time<br>Venue<br>Speaker   | : 23 May 2015 (Saturday)<br>: 9.00 am to 11.00 am (Refreshment will be served at 8.30 am)<br>: Tan Sri Prof. Chin Fung Kee Auditorium, 3rd Floor Wisma IEM, Petaling Jaya<br>: Ir. Er. Dr. ONG Chee Wee, Victor | BEM Approved<br>CPD/PDP Hours: 2<br>Ref No:<br>IEM15/HQ/120/T |
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## YNOPSIS

It is increasingly economically viable to build underground tunnels as precious urban lands can then be utilized for the development of buildings. However, during tunneling, the ground around the tunnel often moves towards the tunnel opening. The resulting ground movements induce additional settlement, axial force, deflection and bending moment on adjacent pile foundations. As a result, the foundations may not be able to resist the loads induced by tunneling nearby. Tunnel-Soil-Pile Interaction sought to give an insight into the behavior and interaction of these three elements during tunneling works. As more and more underground tunnels are being constructed in densely populated area an appreciation and understanding of the behaviour of the existing piles during tunneling is important. This presentation aims to give an overview on design, construction and effective instrumentation & monitoring of tunneling and adjacent building.

# **BIODATA OF SPEAKER**



Ir. Er. Dr. ONG Chee Wee, Victor is Managing Director of ONE SMART Engineering in Malaysia & Singapore. Dr Ong graduated in Civil Engineering University Putra Malaysia in 1999 and joined Zaidun Leeng as an engineer working on general civil engineering. In 2004 he obtained his MSc in Civil Engineering. He obtained his PhD in Geotechnical Engineering from the National University of Singapore (NUS) in 2010. His research was on Tunnel-soil-pile Interaction using physical modelling in a centrifuge. He is PE (Civil) registered with the Board of Engineers Malaysia and ASEAN Chartered Professional Engineer. He is also a Specialist PE (Geotech) as well as PE (Civil) registered with the Professional Engineers Board (PEB), Singapore. Dr. Ong is currently serving on two International Technical Committees in the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) - Technical Committees TC 207 on Soil-

Structure Interaction and Retaining Walls and TC 212 on Deep Foundations. He has recently been elected as SPRING Singapore Technical Committee (15th & 16th Term) for The Standards Council (Civil & Geotechnical Works), 2011-2017. Dr. Ong is a recipient of The Young Consulting Engineer of the Year 2014 by Association of Consulting Engineers of Singapore (ACES), Best Contribution Award in Asian Young Geotechnical Engineers Conference and The Hulme's Prize Award by Tunnelling & Underground Construction Society of Singapore (TUCSS). He is a Qualified Person (Supervision) for Singapore MRT Downtown Line 3 C933 for which the project is a recipient of Singapore Concrete Institute Excellence Award 2013 for the use of SFRC tunnel segments. He is also a registered Qualified Earth Control Professional (QECP) in which his project was selected by Public Utilities Board (PUB) Singapore as ECM Model Site in 2012. He is currently involved in KVMRT (UG1), Singapore MRT Downtown Line and Thomson Line.

## Andrew Yeow Pow Kwei

Chairman Tunneling and Underground Space Technical Division, IEM

#### Announcement to note:

- 1. Preferential admission to talk shall be accorded to IEM members (pre-registration and online registration are NOT required). (Telephone\_and/or fax reservation will NOT be entertained) 2.
  - Non members may also attend the talk but will be charged a registration fee of RM50 and an administrative fee of RM15.
- 3. For affiliate members, there will be no registration fee. However, they are requested to produce their membership card as proof of membership. For the list of affiliates, please refer www.myiem.org.my/content/memorandum\_of\_understanding-469.aspx.
- Limited seats are available on a "first come first served" basis (maximum 110 participants). 4.
- 5. IEM members are required to produce your membership cards for confirmation of attendance (CPD purpose).
- Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD. 6.
- 7. IEM members who fail to produce their membership cards will be charged a fee of RM25.00.

### FUNDS FOR IEM BUILDING FUND (WISMA IEM)

Kindly be informed that IEM will be charging participants RM15 as administrative fee for talks organized by IEM.

The fee would be used to cover overhead costs, building maintenance expenses as well as to support the purchase of the new building.

All contributions will be deeply appreciated by IEM

Students are however exempted. Your understanding is greatly appreciated.

#### **CPD HOURS CONFIRMATION**

Name:

Membership number:

Date:

Signature