



The Institution of Engineers, Malaysia

Bangunan Ingenieur, Lots 60/62, Jalan 52/4, Peti Surat 223, 46720 Petaling Jaya, Selangor Darul Ehsan
Tel: 03-79684001/2 Fax: 03-79577678 E-mail: sec@iem.org.my IEM Homepage: <http://www.myiem.org.my>

Pre-AGM Talk on Rock Mechanics for Underground Storage Cavern and Tunnel

Organised by the Geotechnical Engineering Technical Division, IEM

BEM Approved CPD/PDP Hours: 2

Ref No: IEM15/HQ/136/T

Day/Date : **Saturday, 30 May 2015**
Time : **9.00 am – 11.00 am**
Venue : **Tan Sri Ir. Prof. Chin Fung Kee Auditorium, 3rd Floor,
Wisma IEM, Petaling Jaya**
Registration: **2nd Floor, Wisma IEM, Petaling Jaya**
Speaker : **Dr. Song Myung-Kyu**

SYNOPSIS

This talk attempts to present the rock mechanics and hydrogeology related to construction of the underground oil storage caverns and tunnels. The principle of hydrodynamic containment for storage of hydrocarbon product in cavern will be discussed. The talk also discusses the general method of layout design criteria for caverns and tunnels, stability of large underground caverns, site investigation, and instrumentation monitoring for geotechnical and hydrogeological behaviour of rock mass around construction site. With regard to stability analyses, some cases of continuum and discontinuum analyses will be presented, together with potential hazards and some lessons learnt on stability analyses.

PROFILE OF SPEAKER



Dr. Song Myung-Kyu is a registered technical specialist in Korean Construction Engineers Association since 1999. He graduated with a first class honours degree in the Department of Geosystem Engineering from the University of Hanyang, Seoul, Korea in 1992. He then continued postgraduate master degree in 1994 and obtained PhD in 2001 from the same institution. From 1999, he worked as a design engineer and design manager in consulting firms for about 10 years in Korea. Then, he joined the Hyundai E&C as a site design manager for about 4 years for Jurong Rock Cavern Construction Project and Singapore Cable Tunnel Construction Project North-South Line Lot No. 3. For 16 years, he has been involved in tunnel design for various fast track turn-key based design projects and construction projects. He is currently a lecturer in the University of Nottingham Malaysia Campus, responsible for teaching the tunnel infrastructure, geology for civil engineers, geotechnics and environmental geotechnics.

Ir. Yee Thien Seng
Chairman
Geotechnical Engineering Technical Division, IEM

ANNOUNCEMENTS 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 need to pay a registration fee of **RM 50** and an administrative fee of **RM 15**. GST is inclusive.
3. For members of affiliated organisations, there will be no registration fee payable. However, they are requested to produce their membership card as proof of membership. For the list of affiliated organisations, please refer to IEM website at www.myiem.org.my under International / MoU.
4. Limited seats are available on a "first come first served" basis (maximum 100 participants).
5. IEM members are required to produce membership cards for confirmation of attendance (CPD purpose).
6. Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD.
7. **IEM members who fail to produce their membership cards will be charged a fee of RM 25. GST is inclusive.**

ADMINISTRATIVE FEE

1. Kindly be informed that an administrative fee of RM 15 is payable for talks organized by IEM.
2. The fee would be used to cover overhead costs, building maintenance expenses as well as to contribute to Wisma IEM Building Fund.
3. All contributions will be deeply appreciated by IEM.
4. Student Members are however exempted.

CPD/PDP HOURS CONFIRMATION

Name:

Membership No/Grade:

Signature: