

REGISTRATION FORM

ONE DAY SEMINAR ON RESPONSE OF BUILDINGS TO EXCAVATION INDUCED MOVEMENTS

Tuesday, 22nd August 2017

Fax: 03-7957 7678 Email: nurul@iem.org.my Website: www.myiem.org.my

Name of Organisation: _____

Mailing Address: _____

E-mail: _____

Mobile: _____ Tel(O): _____ Fax: _____

Contact Person: _____ Designation: _____

Signature: _____ Date: _____

I / We* wish to enrol the following person(s) for the above-mentioned Seminar. Details are as follows:

Name(s)	Membership No. & Grade	Fees (RM)
Sub Total:		
Add GST @ 6%:		
Total Amount Payable:		

PAYMENT DETAILS

Enclosed herewith:

Cash (RM _____)

Cheque no. _____ for the amount of RM _____
(non-refundable) and made payable to "THE INSTITUTION OF ENGINEERS, MALAYSIA"
account and crossed 'A/C Payee Only'.

I/We* understand that the fee is not refundable if I/We withdraw after my/our* application is/are* accepted by the Organising Committee but substitution of participant will be allowed. If I/We* fail to attend the Course, I/We will still pay the registration.

Terms & Conditions

- ✓ For ONLINE REGISTRATIONS, only ONLINE PAYMENT is applicable [via RHB and Maybank2u-Personal Saving & Personal Current; Credit Card – Visa/Master]
- ✓ Payment via CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK -IN will be considered as NORMAL REGISTRATION
- ✓ For online registrations, please note that **payment MUST be made on registration.**
- ✓ **FULL PAYMENT** must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non-refundable. Registration fee includes lecture notes, refreshment and lunches.
- ✓ The Organising Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.

Cancellation Policy

- ✓ IEM reserves the right to postpone, reschedule, allocate or cancel the Course. No cancellation of registration will be accepted 1 day prior to the date of the event or during the event day. Replacement or substitute



Organised by:
Geotechnical Engineering Technical Division,
The Institution of Engineers, Malaysia

ONE DAY SEMINAR ON RESPONSE OF BUILDINGS TO EXCAVATION INDUCED MOVEMENTS

Date/Day:
22nd August 2017, Tuesday

Time: 8.30am – 6.30pm

BEM Approved
CPD/PDP: 7.5 Hours
Ref. No.: IEM17/HQ/136/S

Presenters:

Er. Dr. Oskar Sigl (Geoconsult Asia Singapore)

&

Er. Dr. Goh Kok Hun (Land Transport Authority of Singapore)

Venue:

Hilton Petaling Jaya, Kristal Ballroom 1, Level 1, West Wing, No. 2, Jalan Barat,
46200 Petaling Jaya, Selangor Darul Ehsan

REGISTRATION FEE (GST NOT INCLUDED):

Grade	Normal Fee (by fax & email) Payment by cash, credit card and bank-in	Online IEM Registration with Payment Fee (Log-in for registration & payment: www.myiem.org.my/member/login.aspx)
IEM Student Member	RM 250.00	RM 200.00
IEM Member	RM 400.00	RM 350.00
Non-IEM Member	RM 800.00	RM 700.00

(Closing Date: 15th August 2017)

1 Light Refreshment, 2 Coffee Breaks
and 1 Buffet Lunch will be served in a 5-
Star Hotel!

SYNOPSIS

Activities associated with underground construction will inevitably cause ground movements that may affect buildings within their zone of influence. One of the biggest issues for underground construction in a densely built-up urban environment, is the potentially adverse impact on buildings due to underground construction. The seminar discusses about key considerations with regards to the response of buildings to excavation-induced movements which includes the following topics:

Evaluating the impact of underground construction on buildings

- Evaluating the influence of urban tunnels on existing structures and determining whether impact is acceptable or whether additional mitigation and protective measures need to be implemented: How is the risk of damage evaluated using a three-staged impact assessment approach.
- Incorporating existing condition of buildings into the impact assessment framework, through a guidance on objectively classifying the existing condition of buildings and a risk-based approach to incorporate the existing condition, structural sensitivity and heritage significance into the framework.

Analysis of ground movements – Simplified approaches for difficult situations

- Principles of available approaches of analysing ground movement in underground construction will be discussed. Focus will be laid on input assumptions and on how the respective results should be treated. The simplified analysis approaches are presented and explained in more details.
- Practical examples of application are provided.

Influence of building stiffness and case studies of building response to underground construction

- The influence of building stiffness illustrated using case studies, and how this may be incorporated into the impact assessment approach.
- Case summaries of tunnelling directly below buildings in the recently completed Downtown Line project in Singapore.

Analysis and assessment of impact of underground construction on existing rail infrastructure

- Principles with respect to the assessment approach of existing rail infrastructure, when subjected to ground movements due to adjacent underground developments will be discussed.
- Available state-of-the-art approaches are explained in detail. Examples of practical application on real projects are provided.

BIODATA OF SPEAKERS



Er. Dr. Oskar Sigl graduated as Diploma Engineer (MSc) 1985 from Technical University of Graz (Austria), in Civil Engineering specialising in geotechnics and soil mechanics. In 1991, after working for five years as Teaching Assistant at the Institute for Geomechanics and Tunnelling, he achieved with distinction the PhD in mining engineering at the Mining University of Leoben (Austria). In addition to the registration as an ordinary Professional Engineer (PE-Civil), Er. Dr. Sigl is also registered with the Professional Engineer Board of Singapore as specialised Professional Engineer (PE-Geo) and specialised Accredited Checker (AC-Geo).

Er. Dr. Sigl was involved in the design of major underground structures in a great number of projects, and more than 30 years of experience, these projects cover a large variety such as subways, railways, roads, power transmission cables, sewerage mains, underground storage schemes and caverns.

Since 1998, Er. Dr. Sigl is the Managing Director of GEOCONSULT Asia Singapore. In Singapore, Er. Dr. Sigl has been involved in the detailed design of almost all major infra structure projects including the North East Line, Circle Line and Downtown Line MRTs, the SPPA high voltage transmission cable tunnel project, the Kallang Paya Lebar and Marine Coastal Expressways, the DTSS Project, and many more. Outside of Singapore, Er. Dr. Sigl was involved in a leading role in the design of underground subway systems in Dubai, Perth, Hong Kong, Kuala Lumpur as well as the design of underground oil and fuel storage cavern schemes in Saudi Arabia and India.



Er. Dr. Goh Kok Hun obtained his Bachelor of Engineering and Masters of Engineering from the National University of Singapore, and received his doctorate from the University of Cambridge, UK. He has more than 15 years of geotechnical engineering experience, and has been involved in the design aspects of several road and rail infrastructure projects in Singapore, including the Fort Canning and the Woodville road tunnels and more recently the Downtown Line and Thomson-East Coast Line rail projects.

He is currently a deputy director looking after the Geotechnical & Tunnels Division in the Land Transport Authority of Singapore. He is registered as a Professional Engineer in Civil Engineering as well as a Specialist Professional Engineer in Geotechnical Engineering in Singapore, and a Chartered Professional Engineer. His doctoral study was on the “Response of ground and buildings to deep excavations and tunnelling” and he has also conducted specific studies in other aspects of geotechnical engineering design.

PROGRAMME

8.30am	-	8.50am	Registration
8.50am	-	9.00am	Opening Address
9.00am	-	10.30am	Session 1: Evaluating the impact of underground construction on buildings
10.30am	-	10.50am	Coffee/Tea Break
10.50am	-	12.30pm	Session 2: Analysis of ground movements – Simplified approaches for difficult situations
12.30pm	-	2.00pm	Lunch
2.00pm	-	3.30pm	Session 3: Influence of building stiffness and case studies of building response to underground construction
3.30pm	-	3.50pm	Coffee/Tea Break
3.50pm	-	5.30pm	Session 4: Analysis and assessment of impact of underground construction on existing rail infrastructure
5.30pm	-	6.30pm	Questions & Discussions
6.30pm	-		Closure

Data Protection Act

✓ I have read and understand the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.