Short Course on Rock Mass Classification and Site Application in Tunnelling

Registration Form

Chairman
Tunnelling & Underground Space Technical Division
The Institution of Engineers, Malaysia
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Name of Organisation:

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Mailing Address:

.....

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Email: ..... Hand Phone: .....

Tel (Office): ..... Fax: .....

Contact Person: ..... Designation: .....

I/We wish to enrol the following person(s) for the above-mentioned Seminar:

Name	M/ship No.	Reg. Fee (RM)
	SUB TOTAL	
	Add GST @ 6%	
	Total Payable	

Enclosed herewith a crossed cheque No. ..... for the sum of RM ..... issued in favour of "The Institution of Engineers, Malaysia" 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 Organizing Committee but substitution of participant will be allowed. If I/we fail to attend the workshop, I/we will still pay the registration fee in full.

Signature: ..... Date: .....

Registration Fee

Grade	Online	Normal (offline)
IEM Student Member	RM 80.00	RM 100.00
IEM Graduate Member	RM 150.00	RM 200.00
IEM Corporate Member	RM 250.00	RM 300.00
Non-IEM Member	RM 500.00	RM 600.00

CANCELLATION POLICY

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund less 30% if cancellation is received in writing more than 7 days before start date of the event. No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with prior notification and substitute will be charged according to membership status.

Short Course on Rock Mass Classification and Site Application in Tunnelling

Date : 21 September 2016 (Wednesday)

Time : 8.30am – 1.00pm

Venue : TUS and C&S Lecture Room,
2nd Floor Wisma IEM,
Petaling Jaya, Selangor

BEM Approved CPD/PDP hours: 3.5

Ref. No.: IEM16/HQ/248/C

Registration Fee (GST Not Included – 6% GST will be implemented Effective 1st April 2015)

Grade	Online (RM)	Normal (RM)
IEM Student Member	**80.00**	**100.00**
IEM Graduate Member	**150.00**	**180.00**
IEM Corporate Member	**250.00**	**300.00**
Non IEM Member	**500.00**	**600.00**

IMPORTANT NOTES

Closing Date: 16 September 2016

- For **ONLINE REGISTRATION, payment MUST BE MADE ON REGISTRATION [via RHB Now and Maybank2u - Personal Saving & Personal Current; Any Credit Card - Visa/Master**.
- Payment via **CASH/CHEQUE/BANK-IN TRANSMISSION/BANK DRAFT/MONEY ORDER/ POSTAL ORDER/LOU/LOG/WALK –IN will be considered as NORMAL REGISTRATION**
- **FULL PAYMENT** must be settled before commencement of the event, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails 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.

IEM reserve the right to reject any LOU/LOG not in accordance with these instructions.
The Organizing Committee reserves the right to alter or change the programme due to unforeseen circumstances.

Organized by:
Tunnelling & Underground Space Technical Division, The Institution of Engineers, Malaysia

An event endorsed by :

Synopsis

This half-day short course will cover some key elements of the rock mass for underground construction. It aims to provide a link between the knowledge of geology and its engineering applications in underground construction. It will present and discuss systematically the fundamentals of engineering geology, also covers the engineering uses of both soil and rocks, the theory and practice in site investigations for underground construction and rock mass classification methods. The course will discuss on the Rock Mass Rating (RMR), Q-system and rock joint characterization techniques for site investigation. Mapping techniques, core logging interpretation, and so- called 'histogram-logging' will be explained.

The lecture will provide a case history of the use of rock mass rating for the determination of tunnel primary support in the construction of two drill & blast tunnels near Taiping, namely Bukit Berapit Tunnel and Larut Tunnel. The railway tunnels were completed in 2014 and are now in operation. The lecture will cover a brief description of the tunnel project and the method use in the determination of tunnel primary support from tunnel face mapping, determination of rock Geological Strength Index (GSI) using RMR method and correlation of GSI to the tunnel support class. The range of support class from umbrella arch with steel ribs for soil section to rock bolting/shotcrete for rock will also be discussed.

Biodata of Speaker

Rini Asnida Abdullah is Senior Lecturer and Post-Graduate Coordinator Programme (Geotechnics) of Faculty of Civil Engineering, Universiti Teknologi Malaysia (UTM). She obtained her Bachelor and Master degree in Geotechnics from UTM in year 2001 and 2006. And she received her Ph.D degree in Rock Mechanics from University of Leeds, United Kingdom in 2012. Before joining the UTM as the academic staff in 2003, she has 3 years working experience with the Minconsult Sdn. Bhd. and Public Work Department. She has been supervising 2 Ph.D. and 14 Master students, while published in the peer-reviewed domestic and international journal articles, including the conference presentations. Her research interests include rock mass classification, rock slope modelling, rock fractures and fragmentation, underground excavation and blasting. Her contribution in the rock mechanics field has been recognized twice in the Asian Rock Mechanics Symposium as one of the award recipients, from the International Society of Rock Mechanics (ISRM). She served as an editor board member of Journal of Geotechnical Engineering and Jurnal Teknologi (Special Issue). She is currently a Secretary-General of the ISRM Malaysia National Group and Technical Committee of Tunneling and Underground Space Technical Division (TUSTD) of Institute of Engineers Malaysia (IEM).

Mr. Roziahisham bin Ab Wahid was graduated on 1999 with BSc. in Applied Geology from UniMalaya KL. Normal member of IGM and GSM, he is currently with the Underground Tunnel Department of MRTCorp KL, looking after the geotechnical and engineering geological aspect of tunneling and related structures throughout Line 1 SBK tunnel, which were drilled through TBMs and D&B methods. He is currently busy with the KL MRT Line 2 SSP (Sg. Buloh-Serdang-Putrajaya) on planning, study and investigation works on the tunnel alignment and surface excavation, with construction works scheduled for commencement by 2017. Previously he was involved in hydroelectric power dam and water transfer tunnels i.e Ulu Jelai HEP under SMEC in Cameron Highland, Pahang Selangor Raw Water Transfer under SMHB in Karak- Ulu Langat, Ulu Balleh HEP Feasibility Study under GHD in Sarawak & Triang Water Transfer Tunnel with Ultra C&E of South Korea in Negeri Sembilan. Earlier, he spent couple of years as mudlogger in the O&G upstream exploration and development sector after a long stint with Kumpulan Ikram at the Geotechnical Forensic Investigation Unit. He was one of the key members for the National Slope Master Plan for PWD from IKRAM, as he also involved with slope mitigation and geotechnical forensic investigations, as well as excavatability assessments on the in-dispute earth materials throughout the country.

Ir. Andrew Yeow graduated from Universiti Putra Malaysia (UPM) with Bachelor of Civil Engineering in 1990. He is currently the Head of Geotechnical in MMC Gamuda KVMRT Sdn Bhd for the Sg Buloh-Serdang-Putrajaya (SSP) Line Project. He has over the years gained wide experience in design, construction supervision and design management in a wide range of large scale infrastructure projects, especially in geotechnical and tunneling works. Some of the projects he had been involved are KESAS Expressway, LDP Highway, Penchala Tunnel, Sg Selangor Dam and diversion tunnel, the SMART tunnel, Electrified Double Track Project between Ipoh and Padang Besar and KVMRT SBK Line.

Tentative Programme

08:30	Registration
09.00	Presentation 1 - Introduction to Rock Mass Classification
10.00	Refreshment Break
10.30	Presentation 2 - Site investigations for underground construction
11.30	Presentation 3 - Bukit Berapit, Perak: Case Study
12:45	Q & A
13:00	Lunch
14.00	Adjournment for the Day

PERSONAL DATA PROTECTION ACT

I have read and understood 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.