

# The Institution of Engineers, Malaysia

(Southern Branch)

24-B, Jalan Abiad, Taman Tebrau Jaya, 80400 Johor Bahru
Tel: 07- 331 9705 Fax: 07-336 3406
E-mail: <a href="mailto:iemsouthern@gmail.com">iemsouthern@gmail.com</a>; Website: www.iemsb.org.my

# Half Day Talk on Geotechnical Engineering

Date : Saturday, 3 August 2024 Time : 9:00 a.m. – 1:00 p.m.

Venue : IEM (Southern Branch) Training Centre, 24B, Jalan Abiad, Taman Tebrau Jaya, 80400 Johor Bahru, Johor.

Speaker : (1) Ir. Ts. Dr. Diana Binti Che Lat, Universiti Teknologi MARA
(2) Dr. Roslizayati Binti Razali, Universiti Teknologi MARA

#### **Synopsis**

Geotechnical engineering is the branch of civil engineering concerned with the behavior of earth materials. It involves analyzing the properties of soil, rock, and groundwater to assess how they will interact with proposed structures and construction projects. Geotechnical engineers play a crucial role in ensuring the stability, safety, and longevity of infrastructure such as buildings, bridges, dams, and highways. Geotechnical engineering is essential for mitigating risks associated with natural hazards such as landslides, earthquakes, and flooding. By understanding the underlying geological conditions and their potential impact on structures, geotechnical engineers help to minimize the likelihood of failure and ensure the resilience of infrastructure in the face of environmental challenges.

This talk aims to provide a meaningful session for sharing of experience and knowledge by geotechnical engineering lecturers from Universiti Teknologi MARA Pasir Gudang Campus, on their field of expertise as well as insights into interesting geotechnical challenges encountered.

Time	Tentative Programme	
8:30 a.m. – 9:00 a.m.	Registration	
9:00 a.m. – 9:10 a.m.	Welcome Speech by IEM (SB) Organising Committee	
9:10 a.m. – 10:30 a.m.	Session 1 – Consolidation Integrated Buoyancy Equation for Soft Ground Improved with Lightweight Polyurethane Foam by Ir. Ts. Dr. Diana Binti Che Lat	
10:30 a.m. – 10:45 a.m.	Coffee Break	
10:45 a.m. – 12:30 p.m.	Session 2 – Shear Strength of Lime-Treated Soil for Low Volume Road Subgrade Under Saturated and Unsaturated Conditions by Dr. Roslizayati Binti Razali	
12:30 p.m. – 1:00 p.m.	- Discussion/Case study - Question & Answer Session	
1:00 p.m.	Closing & End of Talk	

#### **About the Speaker:**

Ir. Ts. Dr. Diana Che Lat graduated from Universiti Teknologi Malaysia (UTM) in 2020 with a PhD in Geotechnical Engineering. She received her Bachelor's degree in Civil Engineering from Universiti Malaya (UM) and her MSc in Civil Engineering (Geotechnique) from Universiti Teknologi MARA (UiTM). Before joining the Faculty of Civil Engineering at Universiti Teknologi MARA (UiTM) Pasir Gudang, Johor in 2013, she gained 5 years of experience working in a geotechnical consultancy firm at G&P Geotechnics Sdn. Bhd., KL (4 years) and R&A Geotechnics Sdn. Bhd. (1 year), Subang Jaya. Currently, she is a Senior Lecturer in the Faculty of Civil Engineering, UiTM, teaching Diploma, Degree, and Masters students in subjects such as Soil Mechanics, Soil Engineering, Foundation Engineering, Surveying, and Geology. She actively participates in research, writing, and reviewing journal papers and books. Her research interests include soft ground improvement, slope stability, and geotechnical numerical analysis.





**Dr. Roslizayati Razali** completed her PhD in Geotechnical Engineering at Universiti Teknologi Malaysia (UTM) in 2024. She earned her Bachelor's and MSc in Civil Engineering from Universiti Teknologi Malaysia MARA (UiTM). Prior to joining the Faculty of Civil Engineering at Universiti Teknologi MARA (UiTM) Pasir Gudang, Johor in 2014, she worked for 1 year at DNP Consult Sdn. Bhd., Shah Alam, Selangor. Dr. Roslizayati is currently a Lecturer in the Faculty of Civil Engineering at UiTM, teaching subjects such as Soil Mechanics, Soil Engineering, Highway, Surveying, and Geology. She is actively involved in research, writing, and reviewing journal articles and books, focusing on saturated and unsaturated soil conditions.

#### **Participant Fees:**

Grade	Fee	
IEM Members	RM 80.00	
Non-IEM Member	RM 150.00	

Closing Date: 30 July 2024

The seminar is strictly limited to <u>30 participants</u> only. Registration will be on a first-come-first-serve basis. Kindly return the reply slip to the IEM (SB) office before <u>30 July 2024</u> together with a non-refundable cheque for the participant fees made payable to <u>The Institution of Engineers, Malaysia (Southern Branch)</u>. Alternatively, you could bank-in the participant fees into the Institution's Maybank Current Account (No. 5-013920-15708), and to facsimile both the Bank-in and Reply Slips to the Institution. The Institution requests all members co-operation in ensuring fees are paid in advance to the seminar. Please also be reminded that fees will not be refunded to absent participants who have paid, and to also note that all reservations must be paid despite participant cancellations. Thank you for your continuous support of the Institution.

Chairman, Sub-Committee on Seminar and Technical Talk, IEM (SB)

BEM Approved CPD/PDP Hours: 4.0 Ref. No: IEM24/SB/252/T

#### **REPLY SLIP**

To: Hon. Secretary, The Institution of Engineers, Malaysia (Southern Branch) Fax: 07 - 3363406

## Half Day Talk on Geotechnical Engineering

Saturday, 3 August 2024, 9:00 a.m. – 1:00 p.m.

at IEM (Southern Branch) Training Centre, 24-B, Jalan Abiad, Taman Tebrau Jaya, 80400 Johor Bahru, Johor.

RMas payment for the participant fee.	n a cneque no	for the amount of
Name of Member:	Membership No:	I/C No:
Address:	Tel(O):	(Fax)
	Tel (H/P):	
	E-mail:	
Company's Name:		
Signature:	Date:	

**Note**: Kindly **email the Reply Slip together with the payment slip to iemsouthern@gmail.com** for confirmation.

: Attendance by representative will not be issued with the Certificate of Attendance.

### PERSONAL DATA PROTECTION ACT

I have read and understood IEM's Personal Data Protection Notice published on IEM's website at www.myiem.org.my and I agree to IEM's use and processing of my personal data