Chairman, Geotechnical Engineering Technical Division, The Institution of Engineers Malaysia, Lots 60 & 62, Jalan 52/4, P.O. Box 223 (Jalan Sultan), 46720 PetalingJaya, Selangor Darul Ehsan Tel: 03-7968 4001/2 Fax to 03-7957 7678 (Email : geess2022@iem.org.my / sitialsyah@iem.org.my )

# **REGISTRATION FORM**

One-Day Short Course on Recent Development in Soft Soil Improvement Methods Date : 17 October 2022 (Monday)

| No |               | 1 | Name(s) | M'ship No. | Grade | Fee (RM)* |
|----|---------------|---|---------|------------|-------|-----------|
|    |               | 1 |         |            |       |           |
|    |               |   |         |            |       |           |
|    | SUB TOTAL     |   |         |            |       |           |
|    | ADD SST @6%   |   |         |            |       |           |
|    | Total Payable |   |         |            |       |           |

\*Fees MUST be fully paid BEFORE the CLOSING DATE. Seats could only be confirmed upon payment. Enclosed herewith a crossed cheque No: \_\_\_\_\_\_\_for the sum of RM \_\_\_\_\_\_ issued in favour of "<u>The Institution of Engineers, Malaysia</u>" and crossed 'A/C payee only'. I/We understand that the fee is not refundable if I/We withdraw after my/our application is accepted by the Organising Committee as stated in the cancellation term. If I/We fail to attend the seminar, the paid registration fee will not be refunded.

|               |                   | Designation:          | Designation: |  |  |
|---------------|-------------------|-----------------------|--------------|--|--|
| lame of Organ | ization:          |                       |              |  |  |
| ddress:       |                   |                       |              |  |  |
|               |                   |                       |              |  |  |
| elephone No.  |                   | (O)                   | (Fax)        |  |  |
|               |                   | (H)                   | (HP)         |  |  |
| mail:         |                   |                       |              |  |  |
| -             | Signature & Stamp | Date Date             |              |  |  |
|               | CLOSING           | DATE: 12 OCTOBER 2022 |              |  |  |



# One-Day Short Course on Recent Development in Soft Soil Improvement Methods

In conjunction with GEESS2022

JOINTLY ORGANISED BY: GEOTECHNICAL ENGINEERING TECHNICAL DIVISION, THE INSTITUTION OF ENGINEERS, MALAYSIA (IEM GETD) & IEM TRAINING ACADEMY SDN BHD

Speaker: Prof. Chu Jian 17<sup>th</sup> October 2022 (Monday) 9.00 am – 5.30 pm Malakoff Auditorium Ground Floor, Wisma IEM, Petaling Jaya

### BEM/IEM Approved CPD:6 Ref. No.: IEM22/HQ/088/C

| COMMITMENT FEES (S | COMMITMENT FEES (SUBJECT TO 6% SST & NON REFUNDABLE) |            |  |  |  |
|--------------------|--|------------|--|--|--|
|                    | ONLINE   | NORMAL     |  |  |  |
| IEM Student Member | RM200.00   | RM250.00   |  |  |  |
| IEM Member         | RM350.00   | RM400.00   |  |  |  |
| Non-IEM Member     | RM 700.00  | RM800.00   |  |  |  |
|                    | KIVI 700.00  | KIVI800.00 |  |  |  |

#### CANCELLATION POLICY

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund 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.

# **SYNOPSIS**

This course will cover the following topics:

- 1) A brief update on the recent development in various soft soil improvement methods will be given. These include different preloading methods, deep cement mixing methods and the use of geosynthetics and columns.
- 2) Latest methods with the design and use of prefabricated vertical drains (PVDs) and fill surcharge will be presented. Specific issues and considerations related to the selection of PVDs, design methods, design parameters, construction methods, smear effect and quality control tests for PVDs will be discussed. Other topics such as instrumentations, consolidation settlement calculation and prediction using field monitoring data will also be covered. Case histories on use of PVDs and preloading for soil improvement projects will be presented.
- 3) The latest development in vacuum preloading methods will be introduced. The advantages and disadvantages of each method will be highlighted. Technical issues such as mechanisms of vacuum preloading and dewatering, instrumentations, improvement depth, vacuum pressure distribution in soil, and methods for evaluating the degree of consolidation will be discussed. Methods for assessing the effectiveness of vacuum preloading methods will be introduced. Case histories on the use of vacuum preloading for soft soil improvement projects will be presented.
- 4) Different methods for construction on very soft ground will be introduced. In particular, methods for the formation of a working platform on very soft ground will be presented. Methods for the evaluation of the undrained shear strength of soft soil its variation with pore pressure changes will be discussed. The use of column supported load transfer platform and different types of columns will also be introduced with examples.
- 5) A few methods of using soft or excavated soil for land reclamation will be presented.

#### 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.

- 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.
- 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.
- Fee paid is not refundable. Registration fee includes lecture notes, refreshment.
- The Organizing 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.

### PROGRAMME

| 8.15 am  |   | 9.00 am  | Registration   |
|----------|---|----------|--|
| 9.00 am  | - | 9.05 am  | Opening Remarks  |
| 9.05 am  | - | 10.00 am | Update on various soft soil improvement methods                                |
| 10.00 am | - | 10.30 pm | PVDs and preloading methods  |
| 10.30 am |   | 10.50 am | Tea Break  |
| 10.50 am | - | 12.15 pm | PVDs and preloading methods (cont'd)   |
| 12.15 pm |   | 1.00 pm  | Lunch  |
| 1.30 pm  | - | 3.00 pm  | Vacuum preloading methods  |
| 3.00 pm  |   | 3.20 pm  | Tea break  |
| 3.20 pm  | - | 5.10 pm  | Construction methods on very soft ground. Land<br>reclamation using soft soils |
| 5.10 pm  | - | 5.30 pm  | Questions and Discussions  |
| 5.30 pm  |   |          | Closure  |
|          |   |          |  |

## **BIODATA OF SPEAKER**

**Professor Chu Jian** is the Chair of School of Civil and Environmental Engineering and the Director of the Centre for Urban Solutions at Nanyang Technological University (NTU) in Singapore. He also worked for Iowa State University, USA, as professor and James M. Hoover Chair in Geotechnical Engineering from 2011 to 2014. Currently, Prof Chu is the President of the Geotechnical Society of Singapore and the Chair for ISSMGE Technical Committee TC217 on Land Reclamation. His other involvements include being a Committee Member for ISSMGE Technical Committees TC211 on Ground Improvement and chair for ISSMGE Technical Committee TC39 on Geotechnical Engineering for Disaster Mitigation and Rehabilitation from 2005 to 2009. Prof Chu has delivered over 60 keynote or invited lectures at international conferences. He is an editor for a high impact geotechnical journal and associate editor or editorial board member for other 8 international journals. As a consultant, Prof Chu has also involved in several large scale construction projects in Singapore or overseas. He received the R. M. Quigley Award from the Canadian Geotechnical Society in 2004 and the Outstanding Geotechnical Engineer Award from the Geotechnical Society of Singapore in 2018 among other honours.