Chairman,

Tunelling & Underground Space Technical Division, The Institution of Engineers Malaysia, Lots 60 & 62, Jalan 52/4, P.O. Box 223 (Jalan Sultan), 46720 Petaling Jaya, Selangor Darul Ehsan Tel: 03-7968 4001/2 Fax to 03-7957 7678 Email: zainun@iem.org.my



## **REGISTRATION FORM**

Half Day Seminar On GRP Pipe Technology & Installation Using Pipe Jacking Method 4 December 2017

# Half Day Seminar On GRP Pipe Technology & Installation Using Pipe Jacking Method

Organised By: Tunelling & Underground Space Technical Division. IEM



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.

| Contact Person:       | Designation: |       |
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| Name of Organization: |              |       |
| Address:              |              |       |
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| Telephone No.:        | _ (0)        | (Fax) |
|                       | (H)          | (HP)  |
| Email:                |              |       |
|                       |              |       |
| Signature & Stamp     | Dat          | e     |

Photocopies are acceptable

### **REGISTRATION FEE (SUBJECT TO 6% GST)**

| <u>Grade</u>         | Normal   | <u>Online</u> |
|----------------------|----------|---------------|
| IEM Student Member   | RM100.00 | RM80.00       |
| IEM Graduate Member  | RM180.00 | RM130.00      |
| IEM Corporate Member | RM250.00 | RM200.00      |
| Non IEM Member       | RM430.00 | RM350.00      |

#### Terms & Conditions:

Closing date : <u>30 November 2017</u>

• 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.

### **Synopsis**

GRP (Glass Reinforced Plastic) pipes have been used as an alternative to RC (reinforced concrete) and VC (vitrified clay) pipes in the conveyance of water and sewage for a long time already in Europe and Middle East due to its better corrosion resistance and lighter weight. However, its usage in Malaysia is not so wide spread as many engineers are not very familiar with this type of pipes. This seminar will introduce the GRP pipe technology covering its production process, quality control, stiffness classes and load capacities. It will also address the design criteria for flow coefficients, hydraulic and mechanical properties with respect to other type of pipe materials and design of the pipeline in a few case studies involving installation of buried pipe, above ground and in pipe jacking.

### About The Speakers

Dr. Hassan Assaee, obtained his Bachelor degree (1999), Masters (2001) and Phd (2008) in Aerospace Engineering, Tehran Polytechnic, Iran. He is now ar Assist an Professor of Mechanical Engineering in Shiraz University of Technology, Iran as the Engineering Director of Farrasan Manufacturing (d) of A lia Company, Iran – a manufacturer of GRP pipes. He has us the I of Science and the empire in the second se

Ir. Neo Boon Kheng obtained his Bachelor of Engineering & Master of Science in Geotechnical from Illinois, USA. He has over 15 years of experience in trenchless technology projects, ie pipe jacking, micro-tunnelling, horizontal directional drilling and over 10 years of experience in design of sewerage network.

He is members of Board of Engineers, Malaysia, Institutions of Engineers, Malaysia, American Society of Civil Engineer, ASEAN Engineer, Road Engineering Association of Malaysia and Permanent Way Institution. He is actively serving in TUSTD since year 2010 and currently a committee member of WTC 2020.

### 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.

#### 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.

## Who Could Benefit From The Course

ProjectManager/Leader/TeamMember/Coordinator/Administrator/Supervisor/ Sponsor/Director; Professional /Graduate Engineer; Architect / Quantity Surveyor/ Product Manager; Business/ Marketing Manager; Senior Manager/General Manager/CEO; Developer/ Contractor/ Consultant/Project Client; Government and Non-government officers; Anyone responsible for or involved in project.

### Course Schedule & Outline

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|------------------|---|--|
| 08:30 -          | Scan in and migis and Colored   |  |
| 09:00            |   |  |
| 0 10 -<br>0 0    | Welcome and Opening Address   |  |
|                  | Session 1: by Dr Hassan Assaee  |  |
| 09:05 –<br>10:45 | <b>GRP Pipe Technology:</b> This session covers the GRP construct,<br>manufacturing process including the quality control required<br>to meet international standards (DIN, BSI and AWWA), and<br>its mechanical and hydraulic properties compared to pipes of<br>other type of materials. Comparison of project costs using<br>value engineering and discussion on design parameters using<br>Hazen Williams C-value and Manning's coefficient as well as<br>pipe stiffness classes and its impact on pipeline dimensions<br>and long term durability. |  |
| 10:45 –<br>11:00 | Tea Break   |  |
| 11:00 –<br>12:30 | Session 2: By Ir. Neo Boon Kheng<br>Case Studies: This session covers the usage of GRP pipes in<br>several projects in harsh environmental conditions, high<br>water table, corrosive soil conditions and in pipe jacking. The<br>case studies will cover design, selection of pipe stiffness class,<br>pipe jacking force, installation, and testing and<br>commissioning.   |  |
| 1230 -           | Q & A Session   |  |
| 1300             | End of Seminar  |  |
| 13:00 -          | Networking and Lunch  |  |
| 13:30            |   |  |