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The Institution of Engineers, Malaysia

Bangunan Injenieur, Lots 60/62, Jalan 52/4, Peti Surat 223, 46720
Petaling Jaya, Selangor Darul Ehsan

REGISTRATION FORM

**Half-Day Course on Macro Synthetic Fibre Reinforced Concrete for
Tunnelling and Underground Structures**

Date: 21st September 2019

No	Name(s)	M'ship No.	Grade	Fee (RM)*
TOTAL PAYABLE:				

* Fee MUST be fully paid A WEEK BEFORE the commencement of the course. Bookings via fax from outstations MUST be followed with payment at least A WEEK BEFORE the day of the course. Seats could only be confirmed upon payment.

Enclosed herewith a crossed cheque No: _____ for the sum of _____ of RM _____ issued in favour of "The Institution of Engineers, Malaysia" and crossed "C" please 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 course, the paid registration fee will not be refunded.

Contact Person: _____ Designation: _____

Name of Organisation: _____

Address: _____

Telephone No.: _____ (O) _____ (Fax)

_____ (H) _____ (HP)

Email: _____

Signature & Stamp

Date

Photocopies are acceptable

**Half-Day Course on Macro Synthetic Fibre Reinforced
Concrete for Tunnelling and Underground Structures**

Organised by: Tunnelling & Underground Space Technical Division,
IEM

POSTPONED UNTIL FURTHER NOTICE

Date: 21st September 2019 (Saturday)
Venue: Auditorium Malakoff, Ground Floor, Wisma IEM,
Petaling Jaya
Time: 8.30am – 1.00pm

BEM Approved CPD Hours = 6

Ref. No: IEM19/HQ/280/C

REGISTRATION FEE:

Grade	Normal	Online
IEM Student Member	RM100.00	RM80.00
IEM Graduate Member	RM180.00	RM150.00
IEM Corporate Member	RM300.00	RM250.00
Non IEM Member	RM530.00	RM440.00

Terms & Conditions:

- Closing date: **13th September 2019**
- For ONLINE REGISTRATION, 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 participant fails to attend the course, the fee shall still be settled in full.
- Fee paid is not refundable. Registration fee includes lecture notes and refreshments.
- The Organising Committee reserves the right to cancel, alter, or change the programme 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

Macro synthetic fibre reinforced concrete has its roots in the late 1990's. Thus, it is a relatively new technology but has reached maturity as an engineered construction material and today it is widely used in all forms of underground construction.

Temporary and permanent shotcrete linings, precast tunnel segments, final tunnel linings, and railway track slabs for instance are applications that benefit from the advantageous properties that the fibres contribute to concrete, rendering the brittle concrete into a ductile, robust, durable and sustainable composite construction material. Significant cost savings can be achieved by the use of fibres, mainly by partial or total replacement of ordinary reinforcement, as well as by improving the serviceability and durability.

Its many advantages over steel reinforcement have established itself a strong position in the marketplace and continuous research and development opens up more fields of applications.

This short course gives a comprehensive overview on the possibilities and the potential of macro synthetic fibre reinforced concrete in underground construction, covering fibre technology, material's properties, testing and quality assurance, designs, normative situation, durability and sustainability as well as research. These topics will be illustrated by case histories related to its specific field of application.

About the Speaker



Dr Ralf Winterberg specialises in fibre reinforcement for concrete and its application development. In his two employment positions as Technical Director and Managing Director successively in German companies, he started his own Engineering firm in Germany specialising in the development of fibre reinforced concrete solutions and its applications in 2001. In 2005, he has been a consultant to a Fibre Division of Officine Maccaferri S.p.A., headquartered in Italy, supporting their worldwide subsidiaries in the technical market development of their Fibre Division.

In February 2010, he joined Maccaferri Asia Headquarters in Malaysia, as Business Development Manager and Technical Director of the Fibre Division Asia/Oceania. In July 2014 he joined BarChip Inc. (formerly Elasto Plastic Concrete), a market leader in structural synthetic fibre reinforcement, headquartered in Japan, to take up the role of Group Chief Engineer for their worldwide network.

He is currently the President of Macro Synthetic Fibre Association (MSFA).

Course Schedule & Outline

08.30am – 09.00am	Scan-in and Registration
09.00am – 09.05am	Welcoming and Opening Address
09.00am – 10.30am	Macro Synthetic Fibre Reinforced Concrete Technologies
10.30am – 10:45am	Tea Break
10:45am – 12.30pm	Design Aspect of Fibre Reinforced Concrete & Case Study
12.30pm – 01.00pm	Lunch

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 course. No cancellation will be accepted less than 7 days before the course. However, replacement or substitute may be made at any time with prior notification and substitute will be charged according to membership rates.

PERSONAL DATA PROTECTION ACT

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

POSTPONED UNTIL FURTHER NOTICE