Chairman
Young Engineers Section
c/o The Institution of Engineers, Malaysia
P O Box 223 (Jalan Sultan), 46720 Petaling Jaya
Tel No: 03-7968 4001/02 Fax : 03-7957 7678

Email: **aklanie@iem.org.my**
Website**: www.myiem.org.my**

CLOSING DATE: 2 AUG 2015

REGISTRATION FORM

One Day Course on Development of Precast Concrete Technology

5 August 2015

No	Name (s)	M'ship No	Grade	Fees (RM)
			Sub-Total	
			Add GST @6%	
			Total Payable	

**** Fees MUST be fully paid A WEEK BEFORE the commencement of the course. Bookings by fax from outstations MUST be forwarded with payments at least A WEEK BEFORE the day of the course. Seats could only be confirmed upon payment.***

Enclosed herewith a 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 registration is accepted by the Committee but substitution of participants will be allowed. If I/we fail to attend the course, the fee paid would not be refunded.

Contact Person: .....

Designation: .....

Name of Organization: .....

Address: .....

.....

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Tel (O): ..... Tel (HP): .....

Fax No.: ..... E-mail: .....

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Signature & Stamp *(Photocopies are acceptable)* *Date*

BEM Approved
CPD/PDP Hours: 6.5
Ref No: IEM15/HQ/236/C

The Institution of Engineers, Malaysia

CLOSING DATE: 2 AUG 2015

One Day Course on Development of Precast Concrete Technology

Organised by:
Young Engineers Section (YES), IEM

Date : 5 August 2015 (Wednesday)
Time : 9.00 a.m. - 5.00 p.m.
Venue : Tan Sri Prof. Chin Fung Kee Auditorium, 3rd Floor, Wisma IEM, Petaling Jaya
Speakers : 1) **Ir. Tan Geem Eng**
2) **Ir. Dr Voo Yen Lei**
3) **Dr. Chai Hwa Kian**

GST implemented effective 1 April 2015

REGISTRATION FEE *(GST not included)*		
Grade	**Online Registration (www.myiem.org.my)**	**Normal Registration**
IEM Student Member	**RM 150.00**	**RM 180.00**
IEM Graduate Member	**RM 250.00**	**RM 300.00**
IEM Corporate Member	**RM 400.00**	**RM 450.00**
Non - Member	**RM 550.00**	**RM 600.00**

Terms & Conditions:

- 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

Ultra High Performance Concrete Technology: From Research to Practice

This lecture demonstrate the delivery of research into ultra-high performance concretes (UHPC) from the laboratory and into practice. In 2001 a research project was initiated at UNSW Australia on the behaviour of reactive powder concrete girders; where models have been further developed and enhanced to bring together a consistent approach for the analysis and design of structural members constructed of UHPC. Example on a newly constructed single span 100m span UHPC integral-deck precast segmental box Girder Bridge. To-date, this bridge is the world longest single span UHPC box girder bridge. Detail design calculation and construction method of this bridge will be presented. Besides that, comparative studies show that these structures provide for environmentally sustainable and economic alternatives to the use of conventional concrete or steel composite construction with respect to the reduction of CO2 emissions, embodied energy and global warming potential. The enhanced durability of UHPC also provides for significant improvements in design life, further supporting the concept of sustainable development.

Research and Development of Precast Concrete Products in Malaysia

Recent trends and introduction of several new precast concrete products in Malaysia for both infrastructure and building sectors for the past decades to alleviate the problems faced by the construction industry shall be introduced. The innovations described herein include large culverts and pipes, arches, noise barriers, retaining wall systems in the infrastructure sector. For the building sector, precast components and building systems were introduced. Brief outlines on the development of precast concrete industry, research and development trends and approaches, complete with product features and applications for the series of innovative products are discussed.

Quality Control of Precast Concrete Elements

Quality control of precast concrete elements at the manufacturing plant is relatively easy to manage despite requirement of highly stringent procedure to ensure consistency and reliability. Also, similar to normal cast in-situ concrete, strategic maintenance is essential for structures constructed with precast concrete elements to guarantee anticipated service lifespan. In relation to these, this lecture introduces a series of standard tests required for quality control of precast concrete during the manufacturing process, from physical property check of raw materials up to strength check of finished products. In addition, there will be introduction on some of the standard and advanced non-destructive testing (NDT) methods for diagnosis and defect assessment of under-service precast concrete structures that will facilitate appropriate maintenance.

Time	Tentative Programme
0830	Registration
0900	Introduction to Precast Concrete Q & A
1015	Tea Break
1030	Ultra High Performance Concrete Technology Q & A
1300	Lunch Break
1400	Research and Development of Precast Product in Malaysia Q & A
1530	Tea Break
1545	Quality Control of Precast Concrete Elements Q & A
1700	End of Course

SPEAKERS

Ir. Dr. Voo Yen Lei graduated with a PhD in Civil Engineering (Structural) from University of New South Wales (UNSW) Australia at the age of 26 is the founder of Dura Technology Sdn Bhd. Dura Technology Sdn. Bhd. specialised in the manufacturing of precast and customised concrete product made from Ultra High Strength Concrete or Ultra High Performance Concrete (UHPC). To-date, he is the director and CEO of this wholly Malaysian owned company. In addition to that, he also serves as an Adjunct Professor in the School of Civil Engineering at the University Putra Malaysia (UPM), where he teaches advanced concrete technology to postgraduate students. He is also a two time national record holder from the Malaysia Book of Record and several recognized international excellence awards. His book titled "Reactive Powder Concrete; Analysis and Design of RPC Girders" was published in 2009.

Ir. Tan Geem Eng is currently the Technical Director of Rivo Precast Sdn Bhd founded in 2004. He received his Bachelor's degree in Civil Engineering from University of Malaya in 1987. He started his engineering career in contracting, research and consultancy services for the first few years before venturing into precast concrete industry in 1991. For the past twenty over years, he had been actively involved in design and product development works related to precast concrete practices. He spearheaded the research efforts primarily in civil infrastructure sector with conceptualization of new product idea, feasibility study, structural design, experiment, promotion and market development of new inventions. Some notable products introduced were precast Tripod and Counterfort Wall; Sheetpile and Soldierpile Wall; Closed Spandrel and Open Spandrel Arch bridge systems. He had obtained several patents and published technical papers on precast construction. He is a registered PE with BEM, member of IEM, IABSE and IASS.

Dr. Chai Hwa Kian is a Senior Lecturer at the Department of Civil Engineering, University of Malaya, Kuala Lumpur. He obtained his PhD degree in Civil Engineering (Structural Engineering) from Osaka University, Japan and Master of Engineering Science (Concrete Materials) from University of Malaya. Prior to joining University of Malaya, Chai was a Research Engineer in Tobishima Corporation Research Institute of Technology, Chiba, Japan and Assistant Professor in Osaka University. His research interests include condition assessment, repair and strengthening of concrete structures.

If you require further details or clarifications kindly contact the IEM Secretariat at:

The Institution of Engineers, Malaysia
Lot 60/62, Jalan 52/4, 46720 Petaling Jaya
Selangor Darul Ehsan
Tel No: 03-7968 4001/02 Fax: 03-7957 7678
Email: aklanie@iem.org.my Website: www.myiem.org.my