Consulting Engineering Special Interest Group
The Institution of Engineers, Malaysia
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REGISTRATION AWARENESS PROGRAMME ON "CONSTRUCTION 4.0: THE NEXT REVOLUTION IN CONSTRUCTION INDUSTRY"

Name(s)	IEM M'ship No. /Grade	Fees (RM)
SUB TOTAL		
ADD GST @ 6%		
TOTAL PAYABLE		

Company:_____

Address:_____

_____

Mobile:_____ Tel(O):_____Fax:_____

E-mail:_____
(*Please write clearly as the "Confirmation Notification" will be sent via email*)

Contact Person:_____ Designation:_____

Signature:_____ Date:_____

PAYMENT DETAILS

☐ Cash RM_____

☐ Cheque no. _____ for the amount of RM _____
(non-refundable) and made payable to "**THE INSTITUTION OF ENGINEERS, MALAYSIA**" and crossed '**A/C Payee Only".**

IMPORTANT NOTES

- For ONLINE REGISTRATIONS, payment MUST BE MADE ON REGISTRATION [via RHB Now and Maybank2u – Personal Saving & Personal Current: Any 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. If the participant failed to attend the course, the fee paid is non refundable. IEM reserve the right to reject any LOU/LOG not in accordance with these instructions.
- The Organising Committee reserves the right alter or change the program due to unforeseen circumstances.

The Institution of Engineers, Malaysia

Organised by:
Consulting Engineering Special Interest Group,
The Institution of Engineers, Malaysia

Sharing Programme on "Construction 4.0: The Next Revolution in Construction Industry"

Speakers: Ir. Dr. Leong Wai Yie, Ir. Dr. Low Cheng Yee, Ir. Dr. Tan Chee Fai and Ir. Tejinder Singh
Date : 13th January 2018 (Saturday)
Time : 9.00am – 1.00pm
Venue : Auditorium Tan Sri Prof. Chin Fung Kee, 3rd Floor Wisma IEM, Petaling Jaya

REGISTRATION FEES (SUBJECT TO 6% GST)

Grade	Online Fee	Normal Fee
IEM Student/Graduate/Corporate Member	RM 50.00	RM 50.00
Non IEM Member	RM 100.00	RM 100.00

Closing Date: 11th January 2018

BEM Approved CPD/PDP Hours: 4
Ref. No: IEM18/HQ/003/A

GST is implemented effective 1 April 2015

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 stat

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.

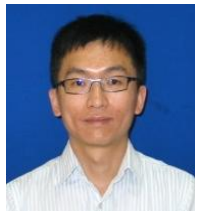
SYNOPSIS

The emerging technologies has changed the manufacturing environment in the fast pace. The emerging technologies, such as cloud computing, internet of things, wireless sensor network, big data and mobile internet are starting to be implemented into manufacturing industries and it is believed to be approaching. The advances of science and technology continuously support the development of industrialization all over the world. From a technological evolution perspective, there are four stages commonly identified for industrial revolution. The first three industrial revolutions took place in around two centuries, and are the result of, respectively: (1) the usage of wind, water and steam energy to power the machinery; (2) the introduction of electrical into manufacturing line for mass production; and (3) the use of automation technology for the manufacturing line. Due to the emergent of fourth industrial revolution, many worldwide governments have initiated different national plan towards new industry revolution. For example, Advanced Manufacturing Partnership (United States), Industrie 4.0 (German), La Nouvelle France Industrielle (France), Future of Manufacturing (United Kingdom), Made in China 2025 (China), Innovation in Manufacturing 3.0 (Korea), and Smart Manufacturing (Netherlands). The new trend and advancement in manufacturing industry also is able to improve current construction industry. The digital revolution of construction design has created building information modeling (BIM) with the ability to plan and manage the construction information as well as visualize the design in 3D environment. Unlike other industries, the construction sector has been slow to adopt new technologies, and has certainly never undergone a major transformation. As a result, productivity of construction industry has stagnated over the last 40 years, or in some cases, even declined. In this forum, some new technologies used in engineering and construction industry will be described and how the industry can take advantage of the cyber-physical era will be described.

BIODATA OF SPEAKER

Ir. Dr. Leong Wai Yie received her PhD in Electrical Engineering (Hons I) from The University of Queensland (UQ), Brisbane, Australia in 2005. She has authored 6 book series and more than 100 papers that highlight the innovation on Electronics and Biomedical Signal Processing. Wai Yie is currently the EXCOMM Committee and Council Member of The Institution of Engineers Malaysia, Chairman of Women Engineers Section, Malaysia, Honorary Secretary of Women Engineers, The ASEAN Federation of Engineering Organisations (WEAFEO) and Vice President of The Institution of Engineering and Technology (Malaysia Local Network). She is specialized in big data analysis, medical signal processing and telecommunications, and has received the Australia Richard Jago Research Prize in 2004 and Australia Trailblazer Innovation Award in 2005. Wai Yie has been actively involving in Women In Technology (Brisbane) and has received the Smart-State-Smart-Women Award presented by Queensland Government, Australia, in 2005.

Ir. Dr. Tan Chee Fai has more than 17 years of working experience in mechanical and manufacturing projects for building, road transport & intelligent manufacturing consultancy. He is actively involved in strategic and technical consultation as well as research, design and development activities. Currently, he is the Director of Perunding IBS Sdn Bhd. and Senior Technical Director of Intellogic Technology Sdn. Bhd. Ir. Dr. Tan is actively consult and conducting small and medium manufacturing facilities audit and upgrading towards Industry 4.0. He has led various Industries, University and Malaysia Government funded projects as well as International Funded Projects. In addition, He has won many innovation awards, more than 20 awards since 2005 such as Brussels INNOVA 2009, International invention, innovation & Technology Exhibition (ITEX), Engineering Invention and Innovation Exhibition (EINIX), MaGIC e@Standord, Public Higher Learning Institutions Research & Development Expo (PECIPTA) and Malaysia Technology Expo (MTE). He is the Keynote Speaker in various important international engineering events such as World Intelligent Manufacturing Summit at Nanjing, China and ICE-IEM Future Engineers Conference. He was the UNESCO Individual Specialist to study on engineering education at Asia and the Pacific. From June 2016 to July 2017, Ir. Dr. Tan was represented IEM as Technical Member for a Demand Site Management Preliminary Study under Economic Planning Unit (Energy Sector) for Malaysia on Transport Energy Use. He is the qualified HRDF Trainer and NIOSH Trainer. Based on his contribution to engineering community, Ir. Dr. Tan was awarded as the JCI Ten Outstanding Young Malaysian Award Honoree in 2014.



Ir. Dr. Low Cheng Yee studied mechanical engineering at Universiti Teknologi Malaysia and mechatronics at King's College London. Afterwards, he worked as a research associate at the Chair for Product Engineering at the Heinz Nixdorf Institute of the University of Paderborn. During this time, he was awarded a fellowship by the International Graduate School "Dynamic Intelligent Systems". In 2009, he received his Ph.D. degree in the field of design methodology for mechatronic systems under the supervision of Prof. Jürgen Gausemeier. At the moment, he works closely with Fraunhofer IEM and serves as a coordinator for the "Research Alliance for Intelligent Systems in Medical Technology in Malaysia" (RAISE-MED) funded by the German Federal Ministry of Education & Research. He is a Corporate Member of the Institution of Engineers Malaysia (MIEM).

Ir. Tejinder Singh currently helms a boutique engineering advisory and consulting services company, which operates in a space that intersects energy efficiency, energy management, automation, artificial intelligence, blockchains, big data and cybersecurity. He has more than 25 years of professional experience and has worked in many industries, from steel manufacturing to semiconductor industry, from energy contracting to electrical consulting, from telecommunications to academia and ICT. He is also one of the few experts in both the electrical energy and cyber security domains. He is a certified National EnMS Expert by United Nations Industrial Development Organization (UNIDO), a Lead Auditor for ISO 27001, a Six Sigma Black Belt, a HRDF Certified Trainer, a GBI facilitator, a Registered Electrical Energy Manager (REEM) and a Certified Information Systems Security Professional (CISSP). Tejinder Singh graduated with a Bachelor's of Science degree in Electrical and Computer Engineering from Tri-State University, Angola, Indiana, USA and also holds a Masters degree in Embedded Systems Design from University of Lugano, Switzerland. He is a Professional Electrical Engineer with Practicing Certificate and is a council member of the Institution of Engineers Malaysia (IEM).

TENTATIVE PROGRAMME

TIME	PROGRAMME
08:30am – 09:00am	**Registration**
09:00am – 09.50am	**Current Technology Trends in Construction Industry** By Ir. Dr. Tan Chee Fai
09.50am – 10.40am	**Big Data and Analytics for Construction Industry** By Ir. Dr. Leong Wai Yie
10.40am – 10.55am	**Coffee Break**
10.55am – 11.45am	**Artificial Intelligence** By Ir. Tejinder Singh
11.45am – 12.35pm	**Mechanization for Construction Industry** By Ir. Dr. Low Cheng Yee
12.35pm – 01.00pm	**Question & Answer**