

## Industry 4.0 Sharing Session: "Fourth Industrial Revolution and Its Implications to Malaysia Industries"

Organised by Consulting Engineering Special Interest Group, IEM

BEM Approved CPD/PDP Hours: **Applying**

Ref No: **Applying**

**Date** : 11<sup>th</sup> November 2017 (Saturday)  
**Time** : 9.00am to 11.00am (*Refreshments will be served at 8.30am*)  
**Venue** : Auditorium Tan Sri Prof. Chin Fung Kee, 3<sup>rd</sup> Floor, Wisma IEM, Petaling Jaya, Selangor  
**Speakers** : Mr. Richard Peh, Ir. Dr. Leong Wai Yie, Ir. Dr. Tan Chee Fai & Ir. Tejinder Singh

**BEM Approved CPD/PDP: 2**  
**Ref. No.: IEM17/HQ/452/T**

### 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). In this sharing session, current global industry direction, technologies, issues and how the Malaysian industry can take advantage of the cyber-physical era will be described.

### BIODATA OF SPEAKERS

**Mr. Richard Peh** is a General Manager at Pacastar Industries (Selangor) Sdn. Bhd. He is graduated with MBA major in Marketing and He has 24 years experience in manufacturing industry. Richard is active in Federation of Malaysia Manufactures (FMM). Currently, Richard is FMM SMI committee member in FMM HQ and FMM Selangor Branch where he is the organizing committee of FMM SME Conference since 2016, participate in Focus Group Meeting on Budget 2018 (under FMM SMI Committee) and participate in SME Corp Technical Working Group to draft National Policy on Industry 4.0.



**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** is a Practising Mechanical and Manufacturing Consultant and Innovator. He is graduated with Bachelor of Engineering (Mechanical) and M. Sc. (Manufacturing Systems Engineering) from Universiti Putra Malaysia (UPM), as well as PhD in Industrial Design Engineering from Eindhoven University of Technology (TU/e), the Netherlands. He is a registered Professional Engineer with Practising Certificate (Mechanical), Board of Engineers, Malaysia and a Fellow of Institution of Engineers, Malaysia. Besides, he is a registered ASEAN Chartered Professional Engineer (ACPE), ASEAN Engineer (AE), APEC Engineer and International Professional Engineer (IntIPE). He is the JCI Ten Outstanding Young Malaysian Award 2014 Honoree. He is a member of FEIAP Engineering Education Guidelines Review Panel and Malaysia Engineering Accreditation Council Review Panel.



**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 Practising Certificate and is a council member of the Institution of Engineers Malaysia (IEM).

**Ir. Dr. Ng Kok Chiang**

Chairman 2017/2018, Consulting Engineering Special Interest Group, IEM

### ANNOUNCEMENT TO NOTE FEES (Effective 1<sup>st</sup> October 2017)

#### Members

Registration Fee : FOC  
Administrative Fee :  
**Online** RM15  
**Walk In** RM20

#### Non-Members

Registration Fee : RM50  
Administrative Fee : RM20

- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- To secure your seat, kindly register online at [www.myiem.org.my](http://www.myiem.org.my)

#### PERSONAL DATA PROTECTION ACT

have read and understood IEM's Personal Data Protection Notice published on IEM's website at [www.myiem.org.my](http://www.myiem.org.my) and I agree to IEM's use and processing of my personal data

### TENTATIVE PROGRAMME

08:30 - 09:00	Registration
09:00 - 09:25	The Implications of Industry 4.0 to Malaysian Industries By Ir. Dr. Tan Chee Fai
09:25 - 9:50	National Direction Towards Industry 4.0 By Mr. Richard Peh
09:50 - 10:15	Big Data and Analytics for Engineers By Ir. Dr. Leong Wai Yie
10:15 - 10:40	Deep Learning for Industry 4.0 by Ir. Tejinder Singh
10:40 - 11:00	Q&A End of Talk