

**Industry 4.0 Sharing Session on  
“The Rising of Industries 4.0: Opportunities and Challenges”**  
Organised by the Consulting Engineering Special Interest Group, IEM

Date : **13 December 2017 (Wednesday)**  
Time : **5.30pm – 7.30pm** (*Refreshments will be served*)  
Venue : **C&S and TUS Lecture Room, 2<sup>nd</sup> Floor Wisma IEM, Petaling Jaya**  
Speakers : **Ir. Dr. Tan Chee Fai and Dr. Low Cheng Yee**

**BEM Approved CPD/PDP:  
Applying**

**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). For this sharing session, current global industry 4.0 direction in various countries and the knowledge can be learned from Germany Industries 4.0 will be described.

**BIODATA OF SPEAKER**

**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. In addition, 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. He is actively involved in strategic and technical consultation as well as research, design and development activities. His field of expertise covers the aspects of mechanical engineering and manufacturing engineering. He has lead various private, university and Malaysia Government funded projects as well as International Funded Projects. He is a UNESCO Individual Specialist, qualified HRDF trainer, NIOSH trainer and HRDF Recognition Prior Learning (RPL) Assessor. Currently, Chee Fai is actively in giving awareness and assistance to Malaysia small and medium engineering industries.

**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. Dr. Ng Kok Chiang**  
Chairman  
Consulting Engineering Special Interest Group, IEM

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

**Members**

Registration Fee	: FOC
Administrative Fee	:
<b>Online</b>	RM15
<b>Walk In</b>	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)

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