



**TALK ON "FORENSIC ENGINEERING: AN OVERVIEW"**  
 (Organised by the Engineering Education Technical Division, IEM in collaboration with Engineers Australia Malaysia Chapter (EAMC), and Institute of Mechanical Engineers Malaysia Branch (IMechE))  
**BEM Approved CPD/PDP: 2 hours Ref: IEM16/HQ/422/T**

Date : **1<sup>st</sup> November 2016 (Tuesday)**  
 Time : **5.30 p.m. – 7.30 p.m.** (Refreshments will be served at 5.00 p.m.)  
 Venue : **C&S and TUS Lecture Room, 2<sup>nd</sup> Floor Wisma IEM, Petaling Jaya**  
 Speaker : **Ir. Dr. Ezzarhan bin Abdullah**

**SYNOPSIS**

There are many possible causes due to the accident, such as substandard material, incompetence engineer and lack of safe operating procedure. In addition, most of the theory of accident suggests the unsafe act and unsafe condition are the main factor contributes the cause of the accident. Due to that, many parties involved in a claim and lawsuit such developer, contractor, employer and government authority. Beside, experts from various backgrounds are called to testify the cases for litigation process. This evening talk will give an overview for engineers and practitioners the principle of the forensic engineering matter related to the occupational safety and health. It will share the basic technique and methodology on how to conduct the forensic engineering investigation. Furthermore, this will highlight how important the chain of custody from the accident site to present in a court which evidence will be used during judicial proceedings. Besides, real past cases will be presented for better understanding.

**SPEAKER BIODATA**

Ezzarhan bin Abdullah is working at the Department of Occupational Safety and Health (DOSH), Malaysia as a Deputy Director. He holds Doctor of Engineering from Kyushu University, Japan. He received his Master of Science in Forensic Engineering with distinction from the University of Teesside, UK, Bachelor of Mechanical Engineering, UiTM and Diploma in Mechanical Engineering from UTM. He had 16 years of working experience involved in safety and health. During his 6 years with Design Section under Industrial Safety Division, he was involved with design approval for unfired pressure vessel, crane, hoisting machine, elevator and escalator. He is experienced in international code such as ASME, ASTM, BS, ANSI, EN and API. He had hands on experience of inspection and testing of the certificated and general machinery. Currently, he heads the Analysis and Research Section in Forensic Engineering Division specialized in analysing the accident cases. Many of the incident cases which related to failure of the component, structure or system have been investigated since the Forensic Engineering Division established in 2007. Structural collapsed at Jaya Supermarket, bulk storage tank fire at Johor, dust explosion at Perak and boiler explosion at Sabah are the few examples of accident cases which involved loss of life and damage of properties. He is also certified as a Professional Engineer (Mechanical), Qualified Crane Inspector and Assessor (by SGS International), Qualified Lead Auditor of Occupational Safety and Health Management System (OSHMS), OSHAS 18000 (by SGS International) and also Authorized Gas Tester and Entry Supervisor (by NIOSH). In addition, he is well taught in the root cause analysis technique (RCaT) and Tripod Beta which is the systematic method in accident investigation. He is also actively involved in giving talks and paper presentation in OSH seminar, national and international conference. Occasionally, he involved in giving advice and sharing experience from accident investigation to local university such as UKM, UiTM and UTHM. Periodically, he trains the DOSH officer for the subject of incident investigation, failure analysis and related to OSHMS.

**Ir. Assoc. Prof. Dr. Mandeep Singh**  
**Chairman**  
**Engineering Education Technical Division**  
**Session 2016 / 2017**

**ANNOUNCEMENTS TO NOTE:**

- Preferential admission to talk shall be accorded to IEM members (pre-registration and online registration are NOT required). Telephone and/or fax reservation will NOT be entertained.
- **Nonmembers** may also attend the talk but will need to pay a registration fee of **RM50** and an administrative fee of **RM15**. GST is inclusive.
- For members of affiliated organisations, there will be no registration fee payable. However, they are requested to produce their membership card as proof of membership. For the list of affiliated organisations, please refer to IEM website at [www.myiem.org.my](http://www.myiem.org.my) under International/MoU.
- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- IEM members are required to produce membership cards for confirmation of attendance (CPD purpose).
- Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD.
- *IEM members who fail to produce their membership cards will be charged a fee of **RM25.00**. GST is inclusive.*

**ADMINISTRATIVE FEE**

- Kindly be informed that an administrative fee of **RM15** is payable for talks organized by IEM. GST is inclusive.
- The fee would be used to cover overhead costs, building maintenance expenses as well as contribute to Wisma IEM Building Fund.
- All contributions will be deeply appreciated by IEM.
- Student Members are however exempted.

**CPD HOURS CONFIRMATION**

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