



# The Institution of Engineers, Malaysia

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## Talk on "Why Malaysians are weak in (Electrical) Engineering Design"

How they occur, how to avoid them and how to get better at it ....

Organised by the Consulting Engineering Special Interest Group, IEM BEM Approved CPD/PDP Hours: 2 Ref No: IEM19/HQ/073/T

Date : 12th March 2019 (Tuesday)

Time : 5.30 pm - 7.30 pm (Refreshments will be served at 5.00 pm)

Venue : Tan Sri Prof. Chin Fung Kee Auditorium, 3<sup>rd</sup> Floor Wisma IEM

Speaker: Ir. S. Vignaeswaran, PEPC (Malaysia) RPEQ (Australia)

#### **SYNOPSIS**

Around the world, no one combines innovation and engineering like designers of installations and plants. It is a glorified occupation that is not only highly rewarding but also leaves a lasting legacy. Currently, most if not all, of the major innovative engineering comes from overseas and/or foreign expatriates. Have we as Malaysians wondered why or how long that this is going to go on? However, the notion of being a designer has been tainted over the years in many parts of the world. Even in Malaysia, the definition of being a practicing designer in any of the engineering disciplines has become vague and too general. All this started when every graduate rightly or wrongly has started to call themselves as designers and / or professing to having design abilities fresh out of universities. The criteria and the requirements of being called a designer, has not been aggressively discussed or defined to date in Malaysia.

The Malaysian engineering curriculum does not aggressively address the structure training, teaching and education of designers from the enrolment stage. Such approaches are left to the world class research category universities, where funding for such universities are difficult to come by.

Hence, the talk will highlight what it takes to be a designer and the design flaws that must be avoided by designers, so that Malaysian designers are internationally recognized and portable in nature for further development. This talk comes from the speaker's experience in carrying out design work during his international employment periods throughout his career. Subsequently, this has led to the speaker to be able to compare and contrast the varying expectations from the international Client's perspective. Hence, in order to become world class designers, there are about 20 design principles and values that must be considered and imbued into the prospective future designer's value system.

#### **BIODATA OF SPEAKER**



A specialist in Electrical and Organizational Information automation systems, Ir. S. Vignaeswaran has established his career in the design and implementation aspects of Electrical, IT, Distributed Control Systems (DCS), Supervisory Control and Data Acquisition Systems (SCADA), Substation Control System (SCS) and, has published international papers on them. The publication reflects a wide area of the utility industrial sector and has leveraged on his electrical, instrumentation and industrial control expertise. His interest in SCADA systems and subsequently

project management, has led him to present an 'out of the box' project and information management paper to the Institution of Engineers, Australia, as part of his Australian chartered certification.

He has a wide area of experience in the design, consultancy and field work in the Oil & Gas, Building Services, Utility and Mining electrical engineering arena. He has worked overseas in a USD 3 billion dollar Saudi Arabian King Saud University project and has a high passion for cross-discipline applications in automation, advanced information systems, electrical and project management. With a formal education in Electrical Engineering from Monash University, Australia in 1989, Ir. S. Vignaeswaran has gone on to obtain his Masters of Science in Business Information Systems / Information Technology from the University of Keele, United Kingdom. His MSc (BIS/IT) thesis in 2002 was based on the development of a Web-based SCADA system.

Ir. S. Vignaeswaran Chairman Consulting Engineering Special Interest Group, IEM

### **FEE ANNOUNCEMENT**

(Effective: 1st October 2017)

#### Members:

(i) Registration Fee: No Charge

(ii) Administrative Fee:

(a) Online RM15 (b) Walk-In RM20

#### Non-Members:

(i) Registration Fee: RM50(ii) 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 <a href="https://www.myiem.org.my">www.myiem.org.my</a>

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

## **CPD Hours Validation:**

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Membership No.:
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