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REGISTRATION FORM

**ONE DAY SEMINAR ON ELECTROMAGNETIC COMPATIBILITY (EMC) AND
 FUNCTIONAL SAFETY
 (Closing Date: 20 APRIL 2018)**

No	Name	M'ship No.	Grade	Fee (RM)
SUB TOTAL				
ADD 6% GST				
TOTAL PAYABLE				

Enclosed herewith a crossed cheque No: _____ for the sum of RM _____ issued in favour of "**The Institution of Engineers, Malaysia**" and crossed 'A/C payee only'. I/We understand that the fee is not refundable if I/We withdraw after my/our application is accepted by the Organising Committee as stated in the **cancellation term**. If I/We fail to attend the seminar, the paid registration fee will not be refunded.

Contact Person: _____ Designation: _____

Name of Organization: _____

Address: _____

Telephone No.: _____ (O) _____ (Fax)

_____ (H) _____ (HP)

Email: _____

Signature & Stamp

Date

Photocopies are acceptable

CANCELLATION POLICY

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund 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



The Institution of Engineers, Malaysia

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MADE IN JAPAN

**ONE DAY SEMINAR ON
 ELECTROMAGNETIC COMPATIBILITY
 (EMC) AND FUNCTIONAL SAFETY**

23RD APRIL 2018

Organised by
Electrical Engineering Technical Division, IEM
In cooperation with
Hioki Singapore Pte. Ltd.

**Venue : Tan Sri Prof Chin Fung Auditorium, 3rd Floor, Wisma IEM,
 Petaling Jaya, Selangor, Malaysia**

Time : 8:30am – 5:30pm

BEM Approved CPD/PDP hours: 7 Ref. No.: IEM18/HQ/062/S

REGISTRATION FEES (SUBJECT TO 6% GST)

	ONLINE	NORMAL (Offline)
IEM Student Member	RM 50.00	RM 80.00
IEM Graduate Member	RM 150.00	RM 200.00
IEM Corporate Member	RM 250.00	RM 300.00
Non-IEM Member	RM 500.00	RM600.00
GST will be implemented with effect from 1 April 2015		

IMPORTANT NOTES

- **Closing Date: 20 APRIL 2018**
 - For **ONLINE REGISTRATION**, payment **MUST BE MADE VIA ONLINE PAYMENT [via RHB Now and Maybank2u - Personal Saving & Personal Current; Any Credit Card - Visa/Master]**. If payment is not received within the stipulated time, the registration fee will automatically be reverted to the normal fee.
 - Payment via **CASH/CHEQUE/BANK-IN TRANSMISSION/BANK DRAFT/MONEY ORDER/ POSTAL ORDER/LOU/LOG/WALK -IN** will be considered as **NORMAL REGISTRATION**
 - **FULL PAYMENT must be settled before commencement of the event**, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails 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 to alter or change the programme due to unforeseen circumstances.

SYNOPSIS

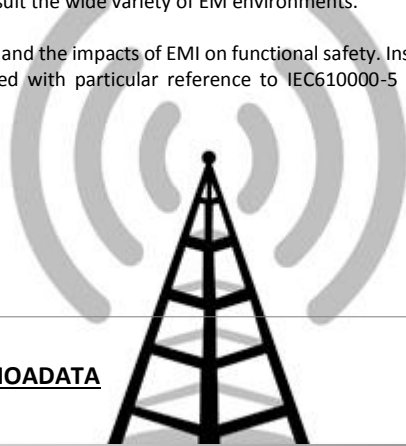
Electrical and electronic equipment are designed and built to operate satisfactorily under specified power quality and electromagnetic environment. They may malfunction or degrade in performance when operating beyond the stipulated power quality and EM environment. Electromagnetic compatibility (EMC) describes the ability of electronic and electrical systems or components to function correctly together. A system or equipment is electromagnetic compatible if it satisfies three criteria:

1. It does not cause interference to other systems;
2. It is not susceptible to emissions from other systems;
3. It does not cause interference to itself.

In the case of mission-critical control and signaling equipment, functional safety depends on the system or equipment operating correctly in response to its inputs. If the input signals are corrupted by electromagnetic interference (EMI), disastrous consequences may occur. EMC standards are used to ensure adequate availability of equipment and system functionality, with different standards developed to suit the wide variety of EM environments.

This one-day seminar will examine the fundamentals of EMC and the impacts of EMI on functional safety. Installation and mitigation guidelines to achieve EMC will be illustrated with particular reference to IEC61000-5 series of standards. The key topics include:

- Fundamentals of EMC
- Functional safety
- Cabling guidelines
- Earthing and bonding design
- HEMP and lightning protection concepts
- Protection against conducted disturbances
- Protection against radiated disturbances



SPEAKER'S BIOADATA

Er. Professor Dr. Lock Kai Sang

B.Sc, Ph.D, FSEng Hon., FIES, SFAAET, FIET, FICS, FSI Arb, CEng., ACPE, PEng., PBM

Dr. Lock is a Professor at Singapore Institute of Technology (SIT) and concurrently an Adjunct Professor at Singapore University of Technology and Design (SUTD). He has a unique blend of practicing and academic experience acquired through a career equally split between the industry and the academia. As a teacher and trainer, his key strength is the fusion of practical examples with fundamental principles.

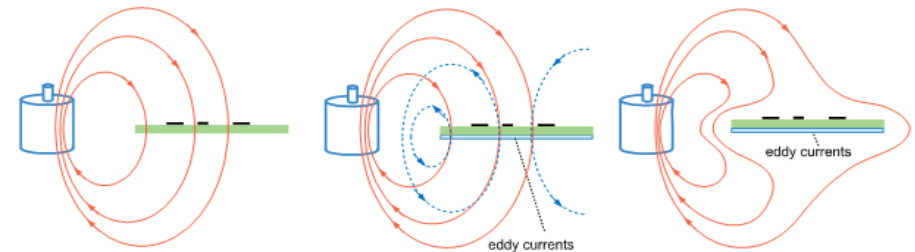
He is a Board Member of the Professional Engineers Board, Singapore and a Past President of the Institution of Engineers, Singapore. He is well-versed with standards and codes of practice and was the Chairman of Singapore Standards Council for 6 years, actively contributing to the promotion and establishment of Standards and Codes of Practice in Singapore. He is a Fellow of Academy of Engineering, Singapore, Honorary Fellow of ASEAN Federation of Engineering Organizations and Senior Fellow of ASEAN Academy of Engineering and Technology.

He received his BSc (1st Class Honours) in Electrical and Electronics Engineering in 1975 from the University of Strathclyde, UK. He completed his Ph.D. degree at the same university in 1979 researching on the design optimization of electrical machines. He joined the National University of Singapore as a lecturer in 1980 and was the Head of its Power and Machines Division, Department of Electrical Engineering, when he left in 1997 to set up his consulting practice. He has authored over 200 consultancy reports, mainly in power quality and reliability, EMC, lightning and surge protection, failure analysis, and design for mission-critical power system. After 19 years in consulting practice, he returned to the academia in 2016 as a Professor at SIT.

He is the co-author of the book "Grounds for Grounding: A Circuit-to-System Handbook" published by IEEE/John Wiley in 2010.

TENTATIVE PROGRAMME

Time	Topic
08:30 – 09:00	Registration
09:00 – 09:45	Introduction to the Fundamentals of EMC and Functional Safety
09:45 – 10:45	Cabling guidelines
10:45 - 11:00	Morning Break
11:00 – 12:00	Earthing and bonding design
12:00 – 13:00	HEMP and lightning protection concepts
13:00 – 14:00	Lunch
14:00 – 15:00	Interactive Engineers Challenge Exercise
15:00 – 15:45	Protection against conducted disturbances
15:45 – 16:00	Coffee Break
16:00 – 16:45	Protection against radiated disturbances
16:45 – 17:30	Question & Answer Session
17:30	End of Seminar



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.