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 The Institution of Engineers Malaysia,  
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**REGISTRATION FORM**  
**HALF DAY COURSE ON**  
**“POWER QUALITY IN MODERN FACILITY”**

**Date : 18<sup>th</sup> May 2016**

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

**Closing Date : 10<sup>th</sup> May 2016**

No	Name(s)	M'ship No.	Grade	Fee (RM)*
<b>SUB TOTAL</b>				
<b>ADD GST @6%</b>				
<b>Total Payable</b>				

**\*Fees MUST be fully paid BEFORE the CLOSING DATE. Seats could only be confirmed upon payment.**

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



*The Institution of Engineers, Malaysia*

**HALF DAY COURSE ON**  
**“POWER QUALITY IN MODERN FACILITY”**

Organised by: Electrical Engineering Technical Division, IEM

**Date : 18<sup>th</sup> May 2016, Wednesday**

**Venue : Auditorium Tan Sri Chin Fung Kee , 3<sup>rd</sup> Floor, Wisma IEM, Petaling Jaya**

**Time : 9.00 a.m. - 12.30 p.m.**

BEM Approved CPD/PDP Hours : 3 RefNo: IEM16/HQ/145/C

**REGISTRATION FEE (GST NOT INCLUDED)**

Registration Fee	Online Fee	Normal Fee
IEM Student Member	: 80.00	100.00
IEM Graduate Member	: 150.00	180.00
IEM Corporate Member	: 250.00	300.00
Non IEM Member	: 800.00	1000.00

**Closing Date : 10<sup>th</sup> May 2016**

**Terms & Conditions:**

- For **ONLINE REGISTRATIONS**, only **ONLINE PAYMENT** is applicable [via RHB and Maybank2u –Personal Saving & Personal Current ; Credit Card - Visa/Master].
- Payment via **CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK -IN** will be considered as **NORMAL REGISTRATION**.
- **FULL PAYMENT** must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail to attend the course, the fee is to be settled in full.
- Fee paid is not refundable. Registration fee includes lecture notes, refreshment.
- The Organizing Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.

## **SYNOPSIS POWER QUALITY IN MODERN FACILITY**

The increased usage of Variable Speed Drive, Computer and Energy Saving Lighting in modern building has brought about reduced energy usage and increased productivity. However, this also place higher stress on the electrical network due to harmonics pollution, irregular power factor swing and voltage stability problem. The operation of any non-linear load such as inverter circuit in speed drive, computer power supply and electronic ballast in lightning system introduce a current and voltage condition known as harmonics distortion on the network power line. In some cases, the stability of the network during critical time may falter due to unexpected condition of how the network interact with UPS and backup generation supply. Consequence of power quality issues may result in catastrophic failure of capacitor system, intermittent disruption of computer & micro-processor circuit, hot spot at bus bar and panel cable terminals.

### **This talk covers on the following areas:**

1. Underlying technical fundamental of the sources of harmonics pollution and how to identify it objectively
2. Review on International Standard that helps to assess the severity of a PQ Condition
3. Current state of the art solution to mitigate PQ condition
4. Case studies on some critical facilities PQ event, the learning and option
5. Q&A

## **SPEAKER'S BIODATA**

Chee Khar Chit is an Engineering Specialist since 2002. He has worked for mobile utility company, engineering consultant and IT company in product design, project management and business development. He graduated from Loughborough University UK in 1993 where he studied Electrical & Electronics Engineering and hold an MBA in Finance from Leicester University UK. He is currently the Product Development Manager in Mun Hean Singapore and is responsible for product & business development in the Asia region.

## **PROGRAMME**

0930AM – 0945AM	Introduction
0945AM – 1100AM	Introduction to Power Quality - Understanding the Sources of PQ Pollution and Its Impact to Operation - Harmonics, Voltage Stability, Power Factor Swing - Industrial Standards governing PQ
1100AM – 1115AM	Tea break
1115AM – 1200PM	Case Studies of PQ Impact to Critical Facilities - Data Center backup failure - Semicon Process Plant Yield management - PV Over Voltage for Grid Feedin Control - Understanding the IGBT technology function - Application in Active Harmonics Filter, Reactive Power Factor Control, Phase Load Balancing, Voltage Stability Control
1200PM – 1230PM	Q&A on AHF/SVG/AVC
1230PM	Lunch & Adjourn

### **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.

### **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 membership status.