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The Institution of Engineers Malaysia,
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REGISTRATION FORM

ONE DAY COURSE ON

" Lightning Protection MS IEC 62305"

Date : 8th August 2016

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

Closing Date : 5th August 2016

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

***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

ONE DAY COURSE ON
"Lightning Protection MS IEC 62305"

Organised by: Electrical Engineering Technical Division, IEM

Date : 8th August 2016
Venue : Auditorium Tan Sri Chin Fung Kee , 3rd Floor, Wisma IEM, Petaling Jaya
Time : 9.00 a.m. - 5.30 p.m.

BEM Approved CPD/PDP Hours : 6
Ref No:IEM16/HQ/124/C

REGISTRATION FEE (GST NOT INCLUDED)				
Registration Fee		**Normal Fee**		**On-line Fee**
IEM Student Member	:	180.00		150.00
IEM Graduate Member	:	300.00		250.00
IEM Corporate Member	:	450.00		400.00
Non IEM Member	:	1200.00		1100.00

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.

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.

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.

Details Synopsis:

1) **Are yout still designing the Lighitng Protection System based on the BS 6651:1999 British Standard?**
Did you know that Malaysia has adopted the MS IEC 62305 Part 1 to 4 Protection Against Lightning since 2006 Britain replaced BS6651 with BS EN 62035 from 1st September 2008 What are the main differences between BS6651 and MS IEC 62305

2) **Should a Risk Analalysis be done for every project?**
Yes !!
Explanation of Risk Analysis based on MS IEC 62305 Part 2 Simplify risk analysis with Dehn risk analysis software demonstration Level of external lighting protection based on risk analysis LPS I, II, III or IV

3) **External Lighting Protection MS IEC 62305 part 3**
Three components of External Lightning Protection: Air Termination, Down Conductors and Earthing Rolling Spehere Protection angle and mesh size according to LPS I, II, III or IV Placement of Air Termination Rod based on Rolling Sphere Definition and use of Seperation Distance 'S' Spacing between down conductors according to LPS I, II, III or IV Use of reinforcement bars as down conductors Welded Joints v/s clamped Joints v/s Bound joints v/s latched joints Types of Earthing; Type A or Type B Equipotential Earthing

4) **Save up to 33% costs of material and labour by knowing the materials and installation methods while still complying to MS IEC 62305 standard.**
LPS Materials and conditions of use. Table 5 MS IEC 62305 Part 3 Material, configuration and minimum cross-sectional area of air-termination conductors, air-termination rods, earth lead-in rods and down-Conductors. Table 7 MS IEC 62305 Part 3 Material, configuration and minimum dimensions of earth electrodes. Table 7 MS IEC 62305 Part 3

5) **Internal Lighting Protection MS IEC 62305 Part 4**
Should SPD (kA) discharge capability specification be 160 / 200kA - with "super low" let through voltage ?? Does a SPD rated 200kA able to withstand a 200kA surge - 10/350us or 8/20us??? What International Standard is applied - IEEE (UL Std), BS Std, AS Std or the IEC Std? What is the differences? Malaysia had adopted the IEC STD for Risk Analysis and SPD application Correct application for Lightning Current Protection (10/350us) and Surge (Transient) Current (8/20us). Differences in energy level For 10/350us or 8/20us?- video show Terminology :- per mode, per phase, per conductor, total surge, Imax, I imp, In etc…Do IEC Std recognize such phases? Differences and Comparision in Class I (Type1), Class II (Type2) and Class III (Type3) for ALL types of SPD - Spark gap technology vs MOVs and Coordination - Video show "SHORT CIRCUIT CURRENT RATING" or Short-circuit withstand - Isccr of SPD IEC Std Testing required SPD to withstand the Prospective Short Circuit Current at point of installation - the "short-circuit withstand" of SPD must be rated eg: 50kA rms or 25kA rms with the coordinated fuses Is the Fuses / MCCB recommended by supplier correct?? To ensure correct Fuses / MCCB rating, IEC STD have recommended calculation and value against I crest (kA) for 10/350us and 8/20us

About our Speakers

Our presenters are registered presenters with the IEM institute. Wisepro has been operating in the industry for over 25 years and is highly experienced in the topics mentioned above and others.

Mr Jeffrey Ng is currently the Managing Director for Wisepro Sdn Bhd, a company established since 1992. He has vast experience in handling LV electrical components such as circuit breakers, power capacitors, and light- ning and surge devices, automatic transfer switches motor starters, motor protection relays and other related products for the past 30 years. Ha has been actively involved in offering his advice on technical services to the industries which include design, trouble shooting at site and installation of equipment. He has a Diploma in Mechanical Engineering in 1980 at Federal Institute of Technology.

Program 1 Lightning Protection MS IEC 62305	
Time	**Contents**
8.30am – 9.00am	Registration
9.05am – 09.10am	Introduction by Session Chairman
09.00am to 10.30am	Definition of lightning current and surge voltage Comparison of 10/350uS and 8/20us energy Definition of Lightning zones Equipotential bonding
10.30am to 11.00am	**Tea Break**
11.00am to 12.30pm	Risk components and tolerable risks Bases risk calculation Addition of measures. Demo of risk analysis software
12.30pm to 13.30pm	**Lunch**
13.30pm to 15.00pm	Definition of Lighting protection level I, II, III and V Rolling Sphere, Protective Angle, Meshing External lighting protection components: Air termination Down conductor Earthing Review of materials used for external lighting protec- tion.
15.00pm to 15.30pm	**Tea Break**
15.30pm to 17.00pm	Internal Lightning Protection: Selection of SPD Installation of SPD SPD for signal lines

Mr Kenny Ong is currently the chief Representative of Shizuki Electric Co. Inc. He has vast experience in capac-itors and power factor correction for the past 17 years. He is actively involved in power factor correction ca-pacitors offering his advices on capacitors, reactors and harmonics implications and solutions. He graduated from Toyoma University Japan with a degree in Electronics Engineering.

Mr SF Ng is currently the sales and marketing engineer at Wisepro Sdn Bhd. He has been working in the industry for the past 10 years and has gathered great experience in the design, installation, troubleshooting and site works for the industries mentioned above. He has also received extensive training on the Lightning Protection at Dehn headquarters in Germany, power factor capacitors, reactors and harmonics at Shizuki headquarters in Japan and ATS applications and troubleshooting at Vitzrotech headquarters in Korea. He graduated from the University of Hertfordshire with a Master's Degree in Automotive Engineering.

Mr Ritesh Lutchman is currently the Senior Sales and Marketing Manager at Wisepro Sdn Bhd. He has been working in the industry for the past 15 years and has gathered great experience in the design, installation, troubleshooting and site works for the industries mentioned above. He has also received extensive training on the Lightning Protection at Dehn headquarters in Germany, power factor capacitors, reactors and harmonics at Shizuki headquarters in Japan and ATS applications and troubleshooting at Vitzrotech headquarters in Korea. He graduated from the University of Cape Town with a Master's Degree in Electrical Engineering.