

Consulting Engineering Special Interest Group

The Institution of Engineers, Malaysia

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Organised by:

Consulting Engineering Special Interest Group,
The Institution of Engineers, Malaysia

Half-Day Course on “ENERGY DELIVERY SYSTEM – UNDERSTANDING POWER CABLES AND CONNECTIONS”

Date : 16th December 2017 (Saturday)

Time : 9.00am – 1.00pm

Venue : C&S and TUS Lecture Room, 2nd Floor,
Wisma IEM, Petaling Jaya

Speakers: Ir. Tan Chow Heang & Mr. Ng Choon Guan

REGISTRATION (HALF DAY COURSE ON “ENERGY DELIVERY SYSTEM – UNDERSTANDING POWER CABLES AND CONNECTIONS”

Name(s)	IEM M'ship No. /Grade	Fees (RM)
SUB TOTAL		
ADD GST @ 6%		
TOTAL PAYABLE		

Company: _____

Address: _____

Mobile: _____ Tel(O): _____ Fax: _____

E-mail: _____

(Please write clearly as the “Confirmation Notification” will be sent via email)

Contact Person: _____ Designation: _____

Signature: _____ Date: _____

PAYMENT DETAILS

 Cash RM _____ Cheque no. _____ for the amount of RM _____
(non-refundable) and made payable to “**THE INSTITUTION OF ENGINEERS, MALAYSIA**”
and crossed ‘A/C Payee Only’.

IMPORTANT NOTES

- For ONLINE REGISTRATIONS, payment MUST BE MADE ON REGISTRATION [via RHB Now and Maybank2u – Personal Saving & Personal Current: Any 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. 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 alter or change the program due to unforeseen circumstances.

REGISTRATION FEES (SUBJECT TO 6% GST)

Grade	Online Fee	Normal Fee
IEM Student Member	RM 80.00	RM 100.00
IEM Graduate Member	RM 150.00	RM 180.00
Corporate Member	RM 250.00	RM 300.00
Non IEM Member	RM 400.00	RM 500.00

Closing Date: 12th December 2017BEM Approved CPD/PDP Hours: 4
Ref. No: IEM17/HQ/441/CGST is implemented
effective 1 April 2015

CANCELLATION POLICY

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund less 30% 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 state

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.

SYNOPSIS

PART I

Power cables are important component in energy delivery system. In depth understanding of its design & construction, installation, O&M as well as failure or fault analysis will ensure safe operation and improve reliability of the supply system. This talk will cover the following topics :- cable design and construction, cable application, selection, and specification, underground cable installation, cable ampacity ratings, jointing and termination standards and practices, commissioning & in service maintenance testing, cable failure modes and Faults analysis on cable.

PART II

Electrical connections come in two forms – end terminations and joints between two conductors. A good electrical connection is one that is able to conduct current safely at a low temperature, resulting in energy savings and should last for many years. But how can you ensure and achieve a good electrical connection every time? This section covers important factors in executing a good electrical connection, with actual cases of applications. Relevant Malaysian Standards will also be discussed. Lastly the talk will also cover cases involving less common terminations, by evaluating different types of critical connections and recommended procedures.

BIODATA OF SPEAKER

Ir. **TAN CHOW HEANG** currently is attached with Asset Management Department of TNB Distribution Division. He holds the post of Specialist – Underground Cable Performance & Diagnostic. He has served LLN/TNB for more than 33 years in various positions working in areas including Distribution System Planning, Construction, Operation & Maintenance as well as Head of Section for Underground Cable and Head of Section for Substation Equipment. He has developed technical specification for MV underground cables and its related accessories for TNB. Additionally he has extensive experience in underground cable operation and maintenance including commissioning & maintenance testing and fault analysis. He offers specialist consultancy and advice to TNB regional and states operational staffs.

Ir. **TAN CHOW HEANG** graduated with Diploma in Electrical Power from UTM in 1983, Bachelor of Engineering Degree from University of Strathclyde, Glasgow, Scotland in 1990 and Master of Engineering (Power) from UTM, Malaysia in 1997. He is a Certified Competent Engineer by Energy Commission of Malaysia, Professional Engineer, ASEAN Engineer and Member of IEM.

Mr. Ng Choon Guan obtained his tertiary education in Electrical Engineering from Tai Chung Senior V.I. School (Electrical Engineering), Taiwan in 1969. He started his career in the engineering field working on electrical maintenance and subsequently on mechanical and electrical projects. In 1979 he started Conway Terminals Manufacturer Sdn Bhd, a company producing cable connectors and related electrical tools. Conway has been growing steadily over the years and today the company offers a wide range of quality electrical conductor jointing and termination products. Conway's cable lugs and bi-metal lugs are type-test to MS 1540:2002 and IEC 61238-1 respectively.

Mr. Ng has also been instrumental in setting up and operating other related outfits such as Taian Jaya Electric Sdn. Bhd. (Manufacturing of magnetic contactor, overload relay and motor starter) and Conlap Precision Industries Sdn. Bhd. (Manufacturing of tools and dies, stamping of component parts).

TENTATIVE PROGRAMME

TIME	PROGRAMME
08:30am – 09:00am	Course Registration & Welcome Refreshment
09:00am – 10:30am	<u>PART I (POWER CABLES)</u> ✚ Design and construction ✚ Selection and application ✚ Maintenance and failure analysis
10:30am – 10:55am	Tea Break
11:00am – 12:30pm	<u>PART II (ELECTRICAL CONNECTION)</u> ✚ Standards and type-tests on connectors ✚ Selection of tools and dies ✚ Case studies of electrical terminations
12:35noon – 12:55noon	Q & A Session End of Course
13.00pm – 14.00pm	Buffet Lunch