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REGISTRATION FORM
HALF DAY SEMINAR ON “SURGE PROTECTION FOR
RAILWAY SIGNALLING, A CASE FOR SAFETY”
(Closing Date: 15th October 2019)

No	Name(s)	M'ship No.	Grade	Fee (RM)*
SUB TOTAL				
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

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.



HALF DAY SEMINAR ON “SURGE PROTECTION FOR
RAILWAY SIGNALLING, A CASE FOR
SAFETY”

17 OCTOBER 2019

Organised by
 ELECTRICAL ENGINEERING TECHNICAL DIVISION, IEM

In cooperation with
 Novaris Technologies (M) Sdn Bhd

Venue: Malakoff Auditorium, Ground Floor, Wisma IEM, PJ

Time: 1.30pm – 5.00pm

Speaker: Mr. Robert Jordan

BEM Approved CPD/ PDP hours: 3.5 Ref Number : IEM19/HQ/472/S

REGISTRATION FEES

	ONLINE	NORMAL (Offline)
IEM Student Member	RM50.00	RM80.00
IEM Graduate Member	RM100.00	RM150.00
IEM Corporate Member	RM100.00	RM150.00
Non-IEM Member	RM200.00	RM250.00
SST shall be at 6% with effect from 1 Mac 2019		

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,

SPEAKERS' PROFILE

Robert Jordan is the principal engineer at Novaris. He is an electrical and electronic engineer with over 35 years of experience. Graduated in year 1983 in Electrical and electronics engineering from Plymouth University UK. He is a full member of the institute of railway signaling engineers, IRSE. A career railway signaling and train control professional who has extensive experience of technical and management roles both in Australia and overseas. He has specialized in mass rapid transit systems for much of his career and had long periods of employment with some of the major signaling manufacturer's in the world, including time in the R&D and product development fields. As well as railway engineering Robert has gained much experience in lightning and surge protection, starting in 1996 when he developed a series of special safety critical surge protection products for the SSI computer based interlocking system. For this work he won the Institute of Engineers Australia, Railway Engineering Award in 1998. Since then he has also developed specific surge protection products for Siemens and Frauscher Axle counters, Invensys Rail track circuits and Westinghouse code generators and solved many lightning Related surge problems for various companies. Robert currently on the committee for the development of AS7703, the new standard for Railway signaling power supplies

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.

SYNOPSIS

This paper presents a general discussion on the use of surge protection devices to protect railway signaling systems. It covers some of the aspects that make the application of SPD's to signaling more onerous than for other industrial applications. It specifically addresses the need to understand the failure modes of SPD's to prevent unsafe conditions occurring and particularly the unwanted and undetected connections to earth that can compromise the safety of the signaling system. It also presents two case studies on the development of specific SPD's to suit specific needs.

Time

TENTATIVE PROGRAM

1.00pm- 0130pm	Registration
0130pm – 0145pm	Railway Signalling background
01.45pm – 14.00pm	Why railway signalling is different, Safety
14.00pm – 14.30pm	Faults to Earth
14.30am – 15.00pm	Power supply and distribution
15.00pm – 15.30pm	Tea Break
15.30pm -15.45pm	Case study Track circuits
15.45pm – 16.00pm	Case study Axle counters
16.00pm – 16.30pm	Q & A Session and End of the Course