

**Highway & Transportation Engineering Technical Division, IEM**

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### 1-Day Road Safety Seminar: Retro-Reflective Innovation and Technology for Enhanced Road Safety

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

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.



Jointly Organised with:

Highway & Transportation Engineering Technical Division,  
 The Institution of Engineers, Malaysia & 3M Malaysia Sdn Bhd

## 1-Day Road Safety Seminar: Retro-Reflective Innovation and Technology for Enhanced Road Safety

Date : 29<sup>th</sup> August 2019

Time : 9.00am – 5.30pm

Venue : C&S & TUS Lecture Hall, 2<sup>nd</sup> Floor, Wisma IEM,  
 Petaling Jaya

#### REGISTRATION FEES (SUBJECT TO 6% SST)

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 350.00	RM 450.00

**Closing Date: 23rd August 2019**

**BEM Approved CPD/PDP Hours: 7**  
 Ref No: IEM19/HQ/353/S

#### 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 stat

#### 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

The seminar will provide participants a deep understanding of retro-reflective science and material technologies to help make road signs, pavement markings, construction work zones more visible and vehicles more conspicuous. It will give an overview of the traffic fatality data in the region and Malaysia and emphasize more could be done to reduce the alarming rate of traffic accidents and fatalities. The seminar focus is on the concept of helping drivers and how retro-reflective science can be tapped to increase the visibility of road signs and road lines. It will compare different global standards in signs and pavement markings through best practice and safety study sharing. The seminar shall be able to guide road construction engineers and players to adopt highly functional signs and pavement marking solutions in road projects which will lead to safety for all.

### Speaker 1 - Ir. Muhamad Syakir Mahi Din

Ir. Muhamad Syakir Mahi Din is a Professional Engineer with 15 years of civil engineering practice. Currently, he has been focusing on road safety solutions by being directly involved in the research and design of road furniture technology implementation and evaluating its effects on reducing driving conflicts and road accidents. Previously, he was working on bridge repair, upgrade and rehabilitation design and construction as well as longitudinal barrier design, analysis, crash tests, crash test evaluation and construction. He received his Masters of Engineering (Civil) from Niigata University, Japan and his first degree in Civil Engineering from the University of Technology Malaysia. He is currently employed as a Senior Application Engineer for Transportation Safety Division of 3M Malaysia Sdn. Bhd. and was previously a Bridge Engineer at Perunding ZAR Sdn. Bhd.

### Speaker 2 - Dr Kim Leong Tan

Dr Tan is an Application Engineering and Regulatory Development Specialist with 3M Asia Pacific team. He has been supporting the 3M Transportation Safety business for four years. Prior to that, he was developing optical communications and display devices for over 15 years. He has been able to utilize broad understanding of optical science and technologies in road safety devices, leveraging global 3M network of developers, application and regulatory specialists to share safety solutions, regulatory and best practices. Dr Tan is an optical engineering PhD graduate from the University of Cambridge. His optical science background has been invaluable in addressing visibility challenges in road safety.

## IEM Road Safety Seminar – Programme

8:15 – 8:45am	Arrival of Participants & Registration ( <i>Light Refreshment will be served</i> )
8:45 – 9.00am	Welcoming Speech by the Session Chairman and Speakers Introduction
9:15 – 10:00am	Malaysia Traffic Safety Situation <ul style="list-style-type: none"><li>● Fatality Trend in the Region</li><li>● Normalized fatality rate by 10k vehicles</li></ul>
10:00 – 10:15am	<b>Tea Break</b>
10:15 – 11:15am	Science of Retro reflectivity <ul style="list-style-type: none"><li>● Disadvantaged Driving</li><li>● Retro-reflection Science</li></ul>
11:15 – 12.00pm	Global Signing Standards + Safety Studies <ul style="list-style-type: none"><li>● MUTCD, ASTM, EN, etc requirements</li><li>● Accident Reduction Studies</li></ul>
12:00 -1.00pm	Wet Reflective Pavement Markings <ul style="list-style-type: none"><li>● Safety Studies with brighter markings</li><li>● Retro-reflection and Refractive Index</li><li>● Durability and Cost of Ownership</li></ul>
1:00 – 1.30pm	<b>Lunch</b>
1.30 -3.00 pm	Construction Workzone Challenges and Solutions <ul style="list-style-type: none"><li>● Elevated Workzone Risks</li><li>● Workzone Devices and Visibility Improvements</li></ul>
3:00 – 4:00pm	Safety of Vehicles - Big and Small <ul style="list-style-type: none"><li>● Conspicuity of Vehicle and Drivers' Reaction</li><li>● Heavy Vehicle Conspicuity</li><li>● Increase Conspicuity of Motorcycles</li></ul>
4:00- 4:15pm	<b>Tea Break</b>
4:15pm -5.00pm	The Socio-economic Cost due to Traffic Incidents <ul style="list-style-type: none"><li>● World Health Org - % of GDP Impact Estimates</li><li>● Data based sector examples of benefit vs costs</li></ul>
5:00 – 5.45pm	Questions and Answers