

Chairman  
 Building Services Technical Division  
 c/o The Institution of Engineers, Malaysia  
 P O Box 223 (Jalan Sultan), 46720 Petaling Jaya

Fax No. : 03 – 7957 7678



BEM APPROVED  
 CPD Hours: 12  
 Ref: IEM12/HQ/271 /C

**“FIRE CONTROL CONCEPTS & DESIGN OF ACTIVE WET SYSTEMS”**

(31<sup>st</sup> October and 1<sup>st</sup> November 2012)

REGISTRATION FORM

No	Name (s)	Membership No	Grade	Fees (RM)
Total Payable				

Enclosed herewith a 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 registration is accepted by the Committee but substitution of participants will be allowed. If I/we fail to attend the course, the fee paid would not be refunded.

Contact Person: .....  
 Designation: .....  
 Name of Organisation: .....  
 Address: .....  
 .....  
 Tel (O): ..... Tel (R): ..... Mobile: .....  
 Fax No.: ..... E-mail: .....  
 Signature: ..... Date: .....

**IMPORTANT NOTES**

- **FOR ONLINE REGISTRATION, PAYMENT MUST BE MADE VIA ONLINE PAYMENT** [VIA RHB AND MAYBANK2U -PERSONAL SAVING & PERSONAL CURRENT; CREDIT CARD - VISA/MASTER; MEPS FPX - BANK ISLAM PERSONAL ACCOUNT, CIMB CLICKS PERSONAL ACCOUNT & CIMB BIZ CHANNEL BUSINESS ACCOUNT, HONG LEONG BANK PERSONAL ACCOUNT, MAYBANK2U PERSONAL ACCOUNT & MAYBANK2E BUSINESS ACCOUNT, PUBLIC BANK PERSONAL ACCOUNT AND RHB BANK PERSONAL ACCOUNT]
- **FULL PAYMENT** MUST BE SETTLED BEFORE COMMENCEMENT OF THE EVENT, OTHERWISE PARTICIPANTS WILL NOT BE ALLOWED TO ENTER THE HALL. IF A PLACE IS RESERVED AND THE INTENDED PARTICIPANT FAILS 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.
- PAYMENT VIA CASH/CHEQUE/BANK-IN TRANSMISSION/BANK DRAFT/MONEY ORDER/ POSTAL ORDER/LOU/LOG/WALK -IN WILL BE CONSIDERED AS **NORMAL REGISTRATION**

**For further details, kindly contact:**

The Institution of Engineers, Malaysia, Bangunan Ingenieur, Lots 60/62, Jalan 52/4,  
 P.O. Box 223 (Jalan Sultan) 46720 Petaling Jaya.  
 Tel : 603-7968 4001/2 Fax : 603-7957 7678 Email : ruhaida@iem.org.my

**TWO-DAY COURSE ON  
 “FIRE CONTROL CONCEPTS & DESIGN OF ACTIVE WET SYSTEMS”**

Organizer:

The Institution of Engineers Malaysia –  
**Building Services Technical Division**

Telephone: 03-7968 4001/2 Fax: 03-7957 7678

Web: <http://www.myiem.org.my> E-mail: [ruhaida@iem.org.my](mailto:ruhaida@iem.org.my)

**(31<sup>st</sup> October & 1<sup>st</sup> November 2012)  
 9.00 am – 5.00 pm**

**Venue:**

Tan Sri Prof. Chin Fung Kee Auditorium, Wisma IEM,  
 Petaling Jaya, Selangor

**\*LIMITED TO 35 PARTICIPANTS ONLY\***

**Registration Fee**

	Online	Normal
IEM Graduate/Corporate Member	RM600.00	RM 650.00
Non IEM Member	RM800.00	RM 850.00

- **Closing Date : 27<sup>th</sup> October 2012**
- **Online registration will NOT be allowed after the closing date.**

## **LEARNING KEY OUTCOME**

At the end of the training course, participants would be able to:

1. Understand the Risk Management Process and Major causes of Fire Losses
2. Understand the principles of combustion, fire behaviour
3. Identify the possible causes of fire and explosion (gas and dust) like static electricity
4. Minimize these causes and design of active wet systems in case to mitigate the potential losses
5. Understand the incentives provided by the insurance company for the installation of active wet systems, up to 70% discounts on the premium
6. Able to design fire pumps and pipe sizing of the wet systems (jockey and duty pump for hydrant ring main, wet riser, sprinkler)
7. MS1910:2006 Fixed Firefighting systems – Automatic Sprinkler Systems Design, Installation and Maintenance, able to design a Pre-Calculated Sprinkler system for Ordinary Hazard and selection of orifice plate
8. Understand the difference between Clean and Non-clean gaseous suppression systems and its application
9. Able to conduct a fire pump flow test using a Pitot tube and its applicable formula

**Note: Participants are required to bring along a scientific calculator to work on the case studies.**

### **Course contents:**

- ISO 3100 Risk Management Standard, Fire risk assessment steps and Risk Treatment that follows, 2 case study of actual fire losses
- The 3 types of fuels expected in fire situation
- The various heat sources which would ignite a fire or an explosion. Static electricity which is the invincible potential heat source underestimated by many. An actual fatal incident due to static electricity as a case study
- Explosion hazards
- Concept of pre-calculated sprinkler design in accordance to MS1910:2006 Fixed Firefighting Systems-Automatic Sprinkler Systems-Design, Installation and Maintenance, case study to apply the knowledge in designing the system
- Determine the pump size of each of the wet systems including jockey pump
- A case study on conducting a pump flow test using pitot tube to determine the pump curve.

## **Trainer Profile**

**ENGR. IR. GARY LIM ENG HWA**

**BE(Mech.) NZ, Mgt Dip. FIEM, P.Eng, Asean Eng, APEC Eng, Int PE(My)**

Ir. Gary Lim is an experienced and qualified Professional Engineer with over 20 years of manufacturing experience in these areas; Industrial Engineering (Work Study), Project Management, Maintenance, Production and Factory Management. The 20 years of his work spanned over various industries namely industrial chemicals, dairy products, jam, sauces, chocolates, confectionnaires, industrial gases (liquid nitrogen, oxygen, argon, etc), blow moulding of plastic containers and paint manufacturing (highly fire hazardous).

His last 11 years of his working experience was with a multinational insurance company where he received further training in the area of Fire Engineering from an insurer perspective, started as the Risk Engineer and retired as the Risk Manager of the MNC insurer. He attended a course from HSB Industrial Risk Insurers at Hartford, United States of America on the Implementing The Concepts of Industrial Fire Control in August 1998. He also attended The Insurance School (Non-Life) of Japan Advance Course on Risk Management in year 2008 and was presented a Diploma.

Gary had conducted numerous risk management surveys of various industries from wafer plant to power plants. Currently, a council member and committee member of the Building Services Technical Division and member of the Fire Advisory Board of the Institution of Engineers, Malaysia. He has a degree in Mechanical Engineering from the University of Canterbury, New Zealand and a Management Diploma from New Zealand. He is a Professional Engineer registered with the Board of Engineers, Malaysia and a Fellow of the Institution of Engineers, Malaysia (IEM). He spoke in many public seminars both for the insurance industry, Malaysia Fire Protection Association and the Institution of Engineers, Malaysia.

Currently, he conducts courses regularly on the concepts and design in the area of Fire Engineering and Plumbing Engineering at all the IEM branches in Malaysia. He also conducts courses with Malaysia Institute of Insurance on these topics: The Art of Property Underwriting Profitability and Essence of Survey Report; Applying Fire Engineering Knowledge in Property Survey and Loss Control; Enterprise Risk Management & Business Continuity Management.

He is an active member in number of SIRIM Work Group in drawing up Malaysian Standards on plastic pipes.