# **REGISTRATION FORM: TWO DAYS COURSE ON "DESIGN CONCEPTS OF PLUMBING & SWV SYSTEMS"**

Name(s)	Membership No. / Grade	Fees (RM)
Sub Total:		
6% GST Added:		
Total Amount Payable:		

	PAVMENT	T DETAILS	
Signature:		Date:	
Contact Person:		Designation:	
E-mail:	mation Update will b	e sent via email)	
Mobile:	Tel(O):	Fax:	
Address:			
Company:			

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".	

#### 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. If the participant failed to attend the course, the fee paid is non 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



# TWO DAY COURSE ON "DESIGN CONCEPTS OF PLUMBING & SWV SYSTEMS"

Speaker: Ir. GARY LIM ENG HWA

Date	:	16 <sup>th</sup> & 17 <sup>th</sup> May 2016
Time	:	9.00a.m – 5.00p.m
Venue	:	C& S and TUS Lecture Room, 2 <sup>nd</sup> Floor, Wisma IEM , Petaling Jaya, Selangor.

**Organized by: The Institution of Engineers, Malaysia** Building Services Technical Division

#### **REGISTRATION FEES (GST NOT INCLUDED)**

Grade	Online Fee	Normal Fee
Student Member	RM 250.00	RM 280.00
Graduate Member	RM 500.00	RM 600.00
Corporate Member	RM 900.00	RM 1000.00
Non IEM Member	RM 1200.00	RM 1300.00

\*Closing Date: 11th May 2016

\* Limited to 35 participants only

## BEM Approved CPD/PDP Hours: 13 Ref. No.: IEM15/HQ/194/C

### 6% GST WILL BE IMPLEMENTED EFFECTIVE 1<sup>st</sup> APRIL 2015

#### LEARNING KEY OUTCOME

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

- 1. Understand the basis to determine the cold water storage demand and size the transfer pump accordingly
- 2. Select the suitable type of pumping system to meet the water usage requirements namely direct, variable speed drive, pneumatic tank
- 3. Select the piping material amongst the many choices of plastic and metal
- 4. Calculate the piping size for cold water in accordance to the BS6700 standard methodology of Loading Units
- 5. Take preventive measures to minimize the impact of water hammer to the pipe lines by way of design and selection of the right equipment
- 6. Determine the stack size of Soil, Waste, Vent (SWV) using Discharge Unit methodology and understand the constraints impose on branch discharge pipe in particular on the gradient to minimize blockage
- 7. Observant of poorly installed plumbing and SWV systems which are preventable. Solutions to overcome smelly toilets.

Note: Participants are required to bring along a scientific calculator to work on the case studies and the SPAN Uniform Technical Guidelines (draft) deliberated.

Time	16 <sup>th</sup> May 2016	17 <sup>th</sup> May 2016
8.45am	Registration	Registration
9.00am	Fundamental of Fluid Dynamics	Joining methods of plastic pipe
9.30am	To apply the formula on pipe sizing	Practical session to join ABS pipe and PERT mechanical joints
10.15am	Pump sizing and case studies	Water hammers and preventive measures
10.45am	Tea Break	Tea Break
11.00am	Cold water demand and storage tanks. SPAN draft UTG.	BS6700 calculate pipe size, case study
11.45am	System design, direct VSD & pneumatic	
12.30pm	Lunch	Lunch
1.30pm	Sizing of pneumatic tanks	SWV stack design MS1402, BS5572. Overcome smelly toilets
2.45pm	Choice of plastic pipes and friction loss	Installation pitfalls – piping & SWV
3.30pm	Tea Break	Tea Break
3.45pm	Hot water pipe design for expansion	Commissioning of Plumbing & SWV
5.00pm	End of session	End of session

#### **Personal Data Protection Act**

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <u>http://www.myiem.org.my</u> and I agree to IEM's use and processing of my personal data as set out in the said notice.

#### <u>SPEAKER</u>

#### Ir. GARY LIM ENG HWA BE(Mech.) NZ, Mgt Dip. FIEM, P.Eng, Asean Eng.

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, diary products, jam, sauces, chocolates, confectionnaires, industrial gases (liquid nitrogen, oxygen, argon, etc), blow moulding of plastic containers and paint manufacturing (highly fire hazardous). In the diary industry involved in the design of Clean-In-Place (CIP) system of the process pipings.

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 Institute of Management. 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 Profitabily 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.

#### FOR FURTHER DETAILS, PLEASE CONTACT:

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