

**REGISTRATION FORM:**  
HALF DAY SEMINAR ON "PRESSURE REDUCTION, SURGE AND LEVEL MANAGEMENT FOR BUILDING APPLICATIONS & WATER / WASTEWATER UTILITY USING AUTOMATIC CONTROL VALVE"



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

Company: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Mobile: \_\_\_\_\_ Tel(O): \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

(Please write clearly as the "Information Update 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'.

**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 as to avoid disappointment.

**HALF DAY SEMINAR ON  
"PRESSURE REDUCTION, SURGE AND LEVEL  
MANAGEMENT FOR BUILDING APPLICATIONS &  
WATER / WASTEWATER UTILITY USING  
AUTOMATIC CONTROL VALVE"**

Speaker:

Dr. KUBERAN ANANDARAJAH

Date	:	30 <sup>th</sup> September 2017 (Saturday)
Time	:	8.30 a.m. – 1.30 p.m.
Venue	:	C & S Lecture Room and TUS Lecture Room, 2 <sup>nd</sup> Floor, Wisma IEM, Petaling Jaya, Selangor Darul Ehsan

Organised and hosted by  
Building Services Technical Division,  
The Institution of Engineers, Malaysia

**REGISTRATION FEES (SUBJECT TO 6% GST)**

Grade	Online Fee	Normal Fee
Student Member	RM 80.00	RM 100.00
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

**6% GST IS IMPLEMENTED EFFECTIVE FROM 1<sup>ST</sup> APRIL 2015**

**\*Closing Date: 27<sup>TH</sup> SEPTEMBER 2017**

**BEM Approved CPD/PDP Hours: 4.0 Hours  
Ref. No.: IEM17/HQ/230/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 status.

**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 issues pertaining to pressure reduction and surges are becoming more relevant not just in buildings but also in the water and wastewater utilities. There are numerous cases of pipe burst or ruptures as a result of pressure transients and surges. The consequences arising to a water utility because of a pipe burst could be costly, as it may result in damages to properties (eg. houses, vehicle), disruption to traffic, and possibly, road closure. In addition to this, maintenance cost to the water utility will also begin to increase due to damages to the utilities assets, which include pipes, fittings and pump station.

In buildings, on the other hand, the quick starting and stopping of pumps would result in a water hammer in the main riser, if proper pump control valves and surge dissipating valves are not in place. The noise and vibration produced are at times very significant, which causes residents to complain. If these problems are not arrested quickly enough, the surges will begin to affect weak joints on the pipeline, which may result to a pipe burst. There have been cases, locally, where pipe burst have caused the water to flood into the lift shafts.

Leakage or waterloss/ Non-Revenue Water (NRW) has been a challenge for many water utilities due to aging pipe network, improper installation and etc. Pressure management has been found as the most economical and effective method of managing pressure in a water utility. Pilot operated pressure reducing valves (PRV) is another key topic that will be highlighted during this seminar. This is because reducing pressure will not only satisfy the minimum pressure required by the consumer, but also a reduction in leakage.

The solutions available for level management will also be discussed during this seminar. There are a variety of pilot operated level control valves which are operated mechanically without the need of electrical requirements. Altitude Valves are commonly found in the water utilities reservoir and it is effective in controlling the water level by means of sensing the static pressure from the water reservoir. In buildings, the use of either modulating automatic control valve for suction tank, and non – modulating (on/off) control valve for elevated / roof tanks are commonly practiced.

In this seminar, the operations and functionality of pilot operated automatic control valve in pressure reduction, surge dissipation and level control will be described for building applications and also for water and wastewater utilities.

## SPEAKER'S PROFILE

### - Dr. Kuberan Anandarajah

**Kuberan Anandarajah** has been working for SINGER VALVE since 2006. Kuberan is involved in supporting and advising clients and consultants on the application of automatic control valves. This includes the employment of Automatic Control Valves for Pressure, Level and Flow Management. At the very same time, he also provides solutions on the appropriate selection of pilot operated automatic control valve for the purpose of pressure and leakage reduction.

Kuberan graduated with a Bachelor degree in Mechanical Engineering from Loughborough University in the United Kingdom in 2001. Kuberan then carried on pursuing his PhD in the Department of Mechanical Engineering of Loughborough University, and completed it in 2005.

Kuberan is also involved in providing training and briefings on the basics of automatic control valve, sizing and selection, and application of automatic control valves. Besides this, he has also presented papers in water conferences in Malaysia, Indonesia, India and the Philippines.

## PROGRAMME :

Time	Programme
08.30 – 8.55	<b>Registration</b>
09.00 – 09.05	Welcome Address
09.05 – 10.30	<b>Session 1 :</b> Introduction to Automatic Control Valve Common Application of Control Valve
10.30 – 10.45	<b>Morning Tea Break</b>
10.50 – 11.30	<b>Session 2 :</b> Level Control Solution for Building's suction tank, break & roof tank Pump Control Valve Application for PUMPS starting and stopping
11.30 – 12.00	<b>Session 3 :</b> Surge Relief Applications for PUMPS Pressure Reducing Valves for High Rise Buildings – IMPORTANCE IN SELECTION
12.00 – 12.30	<b>Session 4 :</b> Water supply level control and SURGE Reliefs for PUMPS NRW / Water Loss – Pressure Management
12.35 – 1.15	<b>Q &amp; A Session and Discussion</b> End of Seminar

### FOR FURTHER DETAILS, PLEASE CONTACT:

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