

REGISTRATION FORM:
**HALF DAY SEMINAR ON “DESIGN AND APPLICATION OF WATER COOLED VRF
(VARIABLE REFRIGERANT FLOW) SYSTEM”**



Name(s)	Membership No. / Grade	Fees (RM)
Sub Total:		
SST 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 COURSE ON “DESIGN AND
APPLICATION OF WATER COOLED VRF
(VARIABLE REFRIGERANT FLOW) SYSTEM”**

By
Ir. NG YONG KONG & Mr POH KAI SIN

Date	: 31 st July 2019 (Wednesday)
Time	: 9.00 a.m. – 1.30 p.m.
Venue	: Auditorium Tan Sri Prof. Chin Fung Kee 3 rd Floor, Wisma IEM Petaling Jaya, Selangor Darul Ehsan

Jointly Organised by
**Building Services Technical Division,
The Institution of Engineers, Malaysia
& ASHRAE MALAYSIA CHAPTER**

REGISTRATION FEES (SST NOT INCLUDED)

Grade	Online Fee (RM)	Normal Fee (RM)
IEM Student Member	RM80.00	RM100.00
IEM Graduate Member	RM 150.00	RM 180.00
IEM Corporate Member	RM 250.00	RM 300.00
ASHRAE Member	Nil	RM 250.00
Non IEM/ASHRAE Member	RM 400.00	RM 500.00

6% SST IS IMPLEMENTED EFFECTIVE FROM 1ST MARCH 2019

***Closing Date: 27th July 2019**

**BEM Approved CPD/PDP Hours: 3.5
Ref. No.: IEM19/HQ/222/C**

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 maybe 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

Variable Refrigerant Flow (VRF) System is a direct expansion (DX) technology that built on the standard reverse Rankine vapor compression cycle. The system is similar to split units thermodynamically. The main differences for VRF are the multiple indoor unit connection with long piping length and expansion devices located at indoor units.

Air cooled VRF system was invented/commercialized in year 1982 in Japan and soon getting very popular due to the simple design configuration and significant energy saving under partial load.

In year 1996, water cooled VRF was invented/commercialized with the combination technology of water cooled heat pump and air cooled VRF system. Since then, VRF technology has dominate the China and Japan HVAC market especially during the rapid property development in China for the past 15 years. It is estimated that more than 70% of the global VRF market share is in China and Japan. Although the application of VRF system is getting popular in Southeast Asia and United States, the application of using Water Cooled VRF system is still very new in Malaysia market.

This course provides an overview of Variable refrigerant flow (VRF) system technology, its consideration for design and application of VRF system in Green Buildings. The advantages of water cooled VRF system for buildings will also be discussed.

SPEAKERS

Ir. Ng Yong Kong

Ir. Ng Yong Kong is a Professional Engineer registered with the Board of Engineers, Malaysia (BEM) and is currently ASHRAE Director and Regional Chair (DRC) Region XIII. He was also the Council Member for the Institution of Engineers, Malaysia (IEM) 2015-2018 and was Treasurer for Malaysia Green Building Confederation (MGBC) 2016-2018.

He obtained his B.Eng. (Hons in Mechanical Engineering) from University of Malaya, Kuala Lumpur in 1985 and an MBA (Hull, UK) and has more than 35 years experience in the HVAC industry having worked as a System and Application Engineer in two major chiller manufacturers, air diffusion and control companies. He is also a member of the ASHRAE Indoor Air Quality Steering Committee 2010, Panel of Judges for ASHRAE Technology Award 2011-2013 and is currently the Malaysia Green Building Index Facilitator (GBIF), trainer and examiner. He is also one of the working group members in various SIRIM MS Standards like the MS1525, MS2578, MS2449 and MS2678.

Ir. Ng is the director of NYK Engineering & Trading S/B & BEZAIRE S/B and was the Past President for Malaysia Air-Conditioning and Refrigeration Association (MACRA I). He is a a qualified Trainer under the HRDF since 2014. He is currently a working member in IEM Professional Practice (PPC) and Examinations and Qualifications (E&Q) Committee.

Mr Poh Kai Sin

Mr. Poh Kai Sin obtained his Bachelor Degree in Mechanical Engineering and Master in Engineering Science from University of Malaya, Malaysia. He has actively involved in HVAC research and development, Building Mechanical Services in a M & E Consulting Firm involving HVAC system design, IAQ audit, testing and commissioning of various HVAC systems including VRF system and chilled water system. He was also involved in facilitating the execution of various green buildings in achieving Green Building Index (GBI) green building rating tools in Malaysia.

He has published two technical papers in international ISI journals in the area of IAQ and UFAD system. He has vast experience and involvement in building services especially in HVAC system such as VRF system, chilled water system and UFAD system. With his design experience as well as the on-site inspection and IAQ audit experience, he has helped to solve many site issues and provide guidance in proper HVAC system's design.

Mr Poh is currently the Asia Pacific Technical Director of Qingdao Hisense Hitachi Air-conditioning Marketing Co., Ltd. He served as the sub-committee in MASHRAE. He also served as a committee in Building Services Technical Division (BSTD) in the Institution of Engineers, Malaysia (IEM).

PROGRAMME :

Time	Programme
08.30 am – 09.00 am	Registration and Welcome Coffee / Tea
09.00 am – 10.00 am	Introduction to VRF System
10.00 am – 10.20 am	<i>Morning Tea Break</i>
10.20 am – 12.10 pm	Water Cooled VRF System Design and Application
12.10 pm – 12.45 pm	The Advantages of Using Water Cooled VRF System
12.45 pm – 13.00 pm	Q & A Session and Discussion End of Course
13.00 pm onwards	<i>Lunch</i>

FOR FURTHER DETAILS, PLEASE CONTACT:

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