



Technology for a Better Environment

Malaysia Chapter Secretariat: Unit 518 Block A, Kelana Jaya Business Centre, No. 97 Jalan SS 7/2, 47301 Petaling Jaya, Selangor Darul Ehsan, Malaysia. Email: mashrae.my@gmail.com

ASHRAE Distinguished Lecturer Webinar – Advanced Energy Design Guide Series, VPF and Chilled Water System Decisions

Date : 15th and 16th December 2020
Time : 7:00pm – 9:00pm (Malaysia and Taiwan)
6:00pm – 8:00pm (Thailand and Vietnam)
Venue : Online platform (Meeting ID and link will be provided for successful applicant)
Co-host : Malaysia, Philippine, Taiwan and Vietnam

Background

Since 2002, ASHRAE, the Illuminating Engineering Society (IES), USGBC, and AIA, with support from the Department of Energy, have collaborated on a series of Advanced Energy Design Guides (AEDGs) that result in significant energy savings in the built environment beyond what is expected by using only ASHRAE Standard 90.1. The AEDG series of documents is now one of the most popular publications in ASHRAE's history with over 600,000 copies in circulation.

Speaker



Professional: Mick Schwedler, PE, FASHRAE, LEED® AP BD+C, has been involved in the development and support of HVAC systems since 1982. As an applications engineer his areas of expertise include system optimization (in which he holds patents) and chilled water and water source heat pump system design.

Mick serves as a Treasurer on the ASHRAE Board of Directors and has been nominated for the position of ASHRAE President-Elect (2020-2021). He is an ASHRAE Fellow, recipient of ASHRAE's Exceptional Service, Distinguished Service, and Standards Achievement Awards, and was Chair of SSPC 90.1-2010. Mick also served as Chair of the Advanced Energy Design Guide Steering Committee and on project committees for the 50% Hospital and Office Buildings AEDGs. He is Past President of the La Crosse Area ASHRAE Chapter and misses serving on Technical Committees.

Moving beyond energy to an environmental perspective, Mick chaired the LEED Technical Committee and served on the LEED Steering Committee. He is also a past member of several USGBC technical and education groups, authored portions of the original ASHRAE Green Guide and served on technical groups for the New Buildings Institute.



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Personal: Mick and Jen have three children -- Ben (married to Mandi), Caroline (married to Aaron with grandson James), and Karl -- that are all blessings to them. Their family is quite active at First Evangelical Lutheran Church where Jen is an organist. Mick sings in barbershop quartets whenever possible and golfs when work and volunteer activities allow. Raised 30 miles from Green Bay, WI in the 1960's, Mick is an avid (or is that rabid?) Packer fan.

Lectures

Day 1 (15th Dec 2020)



Session 1: Advanced Energy Design Guide Overview

This presentation gives a broad overview of all the developed Advanced Energy Design Guides, the processes used to develop those guides, and examples of technologies, tips, systems and other recommendations in the AEDG Series to reduce building energy consumption by 30% to 50%, and also covers information on the newest Zero Energy guides.

Recommended audience:

Building owners, consulting engineers, contractors, facilities managers, and students.

Session 2: The Advanced Energy Design Guide for Hospitals – Reducing energy consumption by 50%

This program provides a brief history of the AEDG Series, and then focuses on the 50% Large Hospital AEDG which will be covered in detail including examples of recommendations, case studies, technologies, systems, and controls to reduce energy use by 50% or more (compared to ASHRAE 90.1-2004).

Recommended audience:

Hospital facility managers and environmental directors, ASHE members, consulting engineers, contractors, facilities managers, and students.



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Day 2 (16th Dec 2020)

BEM 2 CPD
APPROVED

Session 1: Variable Primary Flow (VPF) Systems

When we consider a chilled water system configuration, such as VPF, it is beneficial to examine and compare the new system with conventional systems. While VPF systems have now been in use for over 20 years, the system still must be designed and operated properly to provide the expected benefits to the building owner.

This presentation covers:

- A brief overview of primary-secondary systems, and a comparison with VPF
- Why are people considering VPF today, when it was not allowed in the past?
- Challenges associated with varying water flow through the chiller's evaporator
- Plant sequencing, and various chilled water plant configurations that might be considered
- Control, specification and operating issues
- And even systems that should not be considered for VPF design.

Recommended audience:

Consulting engineers, contractors, facilities managers, and students.

Session 2: Chilled Water System Decisions

This presentation covers many common chilled water system decisions, benefits and adverse effects of those decisions, and reasons a design team may want to choose a particular option.

The chapter will get to pick approximately 7-8 topics from the following list in this fast-paced presentation.

- Bypass line sizing
- Ice tanks upstream or downstream of chillers
- Use of existing coils
- Minimum and maximum flow limits
- Valves: Balancing or triple duty
- Pumps: Manifoldded or dedicated
- Pressure independent valves
- Buffer tank size
- Variable condenser-water flow



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- Series counterflow savings
- Controlling chillers in series
- One or two pump misperceptions

Recommended audience:

Students, consulting engineers, contractors, and facilities managers.

Registration and Fees

Category	1 Day Lecture	2 Days Lecture
MASHRAE Member	RM30	RM50
ASHRAE Member	RM50	RM90
Public	RM80	RM150

Registration Procedure

Step 1: Register yourself at Google Form <https://forms.gle/sygCTrSm2oHeEp397>

Step 2: Receive payment request link from ASHRAE Malaysia Chapter

Step 3: Click the Paypal link and pay with credit card/ debit card (No Paypal account is required)

Step 4: Receive confirmation and log in link