

Technology for a Better Environment

Thailand Chapter Office: 487 Soi Ramkamhaeng 39(Thepleela), Wangthonglang, Bangkok 10310 Tel. 0-2318-4119, 0-2318-4123 Fax. 0-2318-4120 e-mail:ashrae@ashraethailand.org

Co-Organizers



สัมมนาวิชาการ ครั้งที่ 4 (ASHRAE Technical Seminar # 4)

Co-organize a Technical Seminar presented by ASHRAE Distinguished Lecturer Titled: -

- 1. Why Buildings Matter and the Role of ASHRAE Standard 90.1
- 2. Energy Efficient Window and Fenestration Technologies
- 3. How Long Will It Last? Addressing the Challenge of Sustainability
- 4. Building Science Lessons from the Honey Bee

Date: Friday 22th May 2015 **Time:** 08:30 - 17:00 hrs.

Venue: Swissotel Le Concorde

Bangkok



ใช้เป็นคะแนนสำหรับเลื่อนวุฒิสามัญ วิศวกรต้องได้ CPD อย่างน้อย 18 หน่วย หลักสูตรนี้รับ CPD Point 1.5 เท่า

By...
ASHRAE Thailand Chapter
Air-Conditioning Engineering Association of Thailand (ACAT)

Abstract

1. Why Buildings Matter and the Role of ASHRAE Standard 90.1

As our flagship standard for the minimum energy efficiency for buildings (except low-rise residential) ASHRAE 90.1 represents the Standard of Care for all certifying professionals serving the building industry. The latest version of that standard, 2013, contains dramatic changes that all certifying professionals should know. In this lecture, attendees will be provided a renewed perspective on the importance of our buildings. Attendees will be learn about the connections between buildings and their energy use and other social and environmental objectives. We will discuss peak power, water consumption, carbon emissions and other connected issues. Attendees will learn about some of the latest changes to 90.1, especially in those critical areas often overlooked by HVAC professionals – the revised building envelope provisions – as well as other changes, and will be challenged to update their knowledge and understanding of the Standard and its role in delivering better buildings. The presenter served 10 years on the 90.1 development committee and remains an active participant in its development.

2. Energy Efficient Window and Fenestration Technologies

There are now thousands of new, different window and glazing technologies available to both residential and commercial building professionals. Many of these technologies have dramatic impacts on HVAC sizing, peak loads and thermal comfort. This presentation will provide attendees with valuable information concerning key performance indices necessary in making energy efficient fenestration product decisions. Implications on HVAC sizing, peak loads and human comfort will be addressed. Implications for existing and new buildings will be discussed.

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3. How Long Will It Last? Addressing the Challenge of Sustainability

This lecture explores some of the roadblocks, pitfalls and opportunities on the road to truly sustainable buildings. It invites the audience to question long held assumptions and habits in building design, engineering and construction, and challenges how we assess numerous building performance attributes. From energy efficiency to durability to life expectancy, we will explore some of the challenges necessary to establish meaningful product and building performance metrics. We will examine how these sustainability objectives fit in with ASHRAE's minimum code standards (90.1 and 90.2), green building standards (189.1 and 189.2) and others.

4. Building Science Lessons from the Honey Bee

This informative and entertaining presentation is based on an ASHRAE published paper addressing lessons we might learn from the 90 million years of evolution and building science embodied in the work and structures of the honey bee. From temperature management, thermal storage, indoor air quality, active and passive ventilation techniques and energy efficiency, the honey bee has developed a highly efficient construction system to support its biological needs. Attendees will be challenged to consider how we might employ these time-tested building science lessons into today's architecture and engineering practice, as well as challenging our current definitions of "sustainability."

About Speakers:

R. Christopher Mathis
President of MC2 Mathis Consulting Company
P.O. Box 18055 Asheville, NC 28814, United States

Speaker's Profile

R. Christopher "Chris" Mathis has spent the past 30 years focusing on how buildings and building products perform – from energy efficiency to code compliance to sustainability and long-term performance durability.

Chris received his undergraduate degree in Physics from the University of North Carolina at Asheville. He received a Master of Science in Architecture Studies from MIT where his graduate work focused on energy use in buildings. He has served as a Scientist in the Insulation Technology Laboratory at the Owens-Corning Fiberglas



Technical Center, was the Director of the Thermal Testing Laboratory for the National Association of Home Builders Research Center, and Director of Marketing for Architectural Testing, Inc., a private laboratory specializing in the performance of buildings and building products.

Chris has published a variety of technical papers on topics including: advanced test methods for insulation materials and wall systems; daylighting design and assessment techniques; off-peak cooling techniques for commercial office buildings; new residential and commercial energy codes; and metrics for environmentally preferable products. He has written numerous builder, architect and consumer-targeted articles and guides on building and product performance issues.

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His most recent publication is "Insulating Guide" - a book for home builders providing insulating best practices for many of the most common home building details. He is a frequent contributor to a number of building and consumer publications about a variety of building science topics such as window and insulation performance, energy efficiency, sustainability, code compliance and comfort issues. He is an active participant in Standards development at ASHRAE, NFRC and ASTM. He served 6 years on the Board of Directors of EEBA – the Energy and Environmental Building Association. Chris has been selected four times to serve on the International Energy Conservation Code Committee of the ICC, working to refine and improve the national model energy code.

Chris is also an on-going student of about 90 million years of sustainability and building science through his activities as a beekeeper. He lives and works near the farm the grew up on in the beautiful mountains of Western North Carolina.

Target Audiences

- 1. ASHRAE Thailand Chapter, ACAT Members
- 2. RHVAC Designer& Consulting Engineers and Contractors
- 3. University Lecturers in Dept. of Architecture & Engineering
- 4. End user, HVAC Facilities Engineers, Building Owner and others.

Agendas:-

08:30 - 09:00	Registration		
09:00 - 09:15	Opening Speech: President, ASHRAE THAILAND CHAPTER 2014-2015		
09:15 - 10:30	Why Building Matter and The Role of ASHRAE Standard 90.1		
10:30 - 10:45	Coffee-Tea Break		
10:45 - 12:00	Energy Efficient Window and Fenestration Technologies		
12:00 - 13:00	Lunch Break		
13:00 - 14:30	How Long Will It Last? Addressing the Challenge of Sustainability		
14:30 - 14:45	Coffee-Tea Break		
14:45 - 16:30	Building Science Lessons from the Honey Bee		
16:30 - 16:45	Questions & Answers		
16:45 - 17:00	Closing Ceremony: President, Air Conditioning Engineering Association of		
	Thailand		

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ใบสมัครสัมมนาวิชาการ ครั้งที่ 4

เรื่อง Why Buildings Matter and the Role of ASHRAE Standard 90.1 Energy Efficiency Window and Fenestration Technologies How Long Will IT Last? Addressing the Challenge of Sustainability Building Science Lessons from the Honey Bee

วันศุกร์ที่ 22 พฤษภาคม พ.ศ. 2558 ณ ห้องเลอโลตัส 2 ขั้น 2 โรงแรม Swissotel Le Concorde

ชื่อ	นามสกุล	สม	าชิก		
บริษัทเลขประจำตัวผู้เสียภาษี			สียภาษี		
ที่อยุ	(ในการออกใบเสร็จ)				
โทร	ศัพท์โทรสาร	E-mail			
<u>อัตราค่าลงทะเบียน</u>		ชำระเงินภายใน 12 พ.ค. 58	ชำระเงินหลัง 12 พ.ค. 58		
่ แบบ สมาชิก ASHRAE Thailand Chapter/ACAT/TRA		🔾 ราคา 2,200 บาท	🔾 ราคา 2,600 บาท		
🗌 บุค	คลทั่วไป	🔾 ราคา 2,600 บาท	🔾 ราคา 3,000 บาท		
1. 2. 3.	1. อัตราค่าลงทะเบียนข้างต้น <u>รวมค่าภาษีมูลค่าเพิ่ม 7 %</u> ,ค่าเอกสารการบรรยาย , ค่าอาหารว่าง , ค่าอาหารกลางวัน เรียบร้อยแล้ว 2. สมาคมไม่อยู่ในข่ายที่ต้องถูกหักภาษี ณ ที่จ่าย 3 %				
<u>วิธีการช้</u>	<u>าระเงิน</u>				
0 0 0	 เงินสด ณ ที่ทำการสมาคมฯ เช็คสั่งจ่าย "สมาคมวิศวกรรมปรับอากาศแห่งประเทศไทย" โอนเงินเข้าบัญชี <u>ธนาคารกสิกรไทย</u> สาขาโลตัส ทาวน์อินทาวน์ บัญชี <u>ออมทรัพย์</u> 				
J	ชื่อบัญชี <u>"สมาคมวิศวกรรมปรับอากาศแห่งประเทศไทย</u> " เลขที่บัญชี -644-2-10754-6				

กรณี โอนเงินเข้าบัญชีเรียบร้อยแล้ว กรุณาแฟ็กซ์เอกสารการชำระเงินพร้อมระบุรายละเอียคชื่อ-ที่อยู่ในการออกใบเสร็จที่ถูกต้อง โคยแนบใบนำฝากมา พร้อมกับใบสมัครที่หมายเลขแฟ็กซ์ 02-318-4120

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