

ASHRAE LINK



The Newsletter of ASHRAE Hong Kong Chapter

May 2017

The Sha Tin Communications & Technology Centre (SCTC)
Top Innovative Building in Region XIII ASHRAE Technology Award 2016



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President's Message 2016-2017

It has been my pleasure and an honor to serve as ASHRAE Hong Kong Chapter President.

ASHRAE HK Chapter continues in advancing human well-being through sustainable technology. Focusing on building systems, energy efficiency, indoor air quality, refrigeration and sustainability across the industry. We provide the foremost source of technical educational material, standards and guidelines.



Our Core Value is to further excel in achievement of technical quality and eminence in our programs, training and activities. We are devoted to service our members and the public of Hong Kong.

We strive to make our Chapter somewhere that's exciting and fun, somewhere with promising career prospects for our members. Most importantly, a useful social network; a place where people stick together, to innovate in the arts and science of heating, ventilation, air conditioning and refrigeration.

In order to achieve sustainability and technological advancement, we must invest into our young engineers, it is a necessity for us to continue to attract more talented young runners into our industry. We must inspire our young engineers to further explore the excitements of science and engineering, which in return may serve the evolving needs of our economy.

I am delighted to see so many members and friends gathered together at ASHRAE activities. As president, I would also like to address my thanks to everyone who devoted their valuable time to make ASHRAE Hong Kong Chapter's success happen.

Many thanks to our officers, committee chairs and co-chairs, OC members and student helpers for their diligent hard work and leadership to make this success possible.

In closing, I would like to say that it has been an absolute pleasure and my greatest honor that I served as your President this year.

Dr TUNG Siu Lok Dennis

President 2016-17
ASHRAE Hong Kong Chapter

Committee 2016-17

Officers, Board of Governors & Working Committee Chairs

President	<i>Dr. TUNG Siu Lok, Dennis</i>
President-Elect	<i>Mr. SUNG Ka Leung, Michael</i>
Secretary	<i>Mr. WONG Shu Hung</i>
Treasurer	<i>Mr. NG Chun Kei, Jacky</i>
Immediate Past President	<i>Dr. WONG Chun Sing</i>
Member, Board of Governors	<i>Dr. CHAN Ka Lung, Raymond</i>
Member, Board of Governors	<i>Mr. LIN Wan Fuk, Albert</i>
Member, Board of Governors	<i>Ms. MO Cheung Ying, Eagle</i>
Member, Board of Governors	<i>Mr. TSE Kam Chuen, Vincent</i>
Chapter Technology Transfer Chair	<i>Mr. HUANG Hung Man, Patrick</i>
Membership Promotion Chair	<i>Mr. TAM Tsz Lung, Tenny</i>
Research Promotion Chair	<i>Mr. CHOW Joe</i>
Student Activities Chair	<i>Mr. WONG Joao</i>
Attendance Chair	<i>Mr. LAU Tom</i>
Auditing Chair	<i>Mr. CHU Tak Wing, Vincent</i>
Chapter Programs Chair	<i>Mr. CHOW Chi Fung, Taylor</i>
CRC Action Chair	<i>Dr. WONG Chun Sing</i>
Electronic Communication Chair	<i>Dr. LAM Hang Yat, Abraham</i>
Grassroots Government Advocacy Chair	<i>Dr. HUI, Chun Man, Sam</i>
Historical Chair	<i>Mr. PAU Wai Keung</i>
Honors & Awards Chair	<i>Dr. YU Chung Hoi, Philip</i>
Information Technology Chair	<i>Mr. LAM Ying Wai, Alan</i>
Institutions (HK) Liaison Chair	<i>Mr. CHAN Hei Kin, Thomas</i>
Mainland Relations Chair	<i>Mr. LIU Li Zheng, Ben</i>
Public Sector Liaison Chair	<i>Mr. MAK Ka Chun</i>
Publications & Newsletter Chair	<i>Ms. LEE Rosa</i>
Publicity Chair	<i>Mr. TANG Chi Hang, Calvin</i>
Reception Chair	<i>Ms. LAU Eason</i>
Refrigeration Chair	<i>Mr. LAM Yu Hung, Peter</i>
Sustainability Chair	<i>Mr. CHAN Chun Kit Kelvin</i>
Young Members Committee Chair	<i>Miss PUN Cindy</i>

Retreat 2016-17

ASHRAE Hong Kong Chapter Retreat 2016-17

Retreat for Year 2016-17 was held in Room V312, The Hong Kong Poly University on 9 July 2016. At first, all committee members introduced themselves and shared their experiences on chapter operation. Before Chapter President, Dr. Dennis Tung introduced the Year Plan General for ASHRAE Hong Kong Chapter to the new committee members; Immediate Past President Dr. C.S. Wong reviewed and talked about Chapter Operation of the past year.

Chapter President, Dr. Dennis Tung also presented his strategy plan for the development of ASHRAE Hong Kong Chapter and described the seven categories included in this year's Presidential Award of Excellence (PAOE) which issued by Society President, Timothy G. Wentz; such as: Chapter Operations, Chapter Technology Transfer, Grassroots Government Advocacy, Historical, Membership Promotion, Research Promotion, and Student Activities.

Finally, Prof. Chan of PolyU was invited to have a presentation with the topic of Leadership Training to all committee members.



Young Members Committee (YMC) / Student Activities (SA) Committee

Summer Boat Party at Night

On 26 August 2016, YMC and Student Activities Committee had organized a boat trip for travelling around the beautiful Victory Harbour and Sai Kung. There are total around 30 members of YMC and student had joined the event. They were having a nice buffet dinner together.



YEA Leadership International

On 9-11 September 2016, ASHRAE Hong Kong Chapter had a sponsorship scheme for 2 nos. of YMC member for the ASHRAE YEA Leadership International which was held in Athena, Greece.



Chapter Technology Transfer Committee (CTTC)

Technical Seminar on Sustainable HVAC System Design



Mr. William P. Bahnfleth,
Ph.D., P.E.
Distinguished Lecturer of ASHRAE
Professor, Department of Architectural Engineering
The Pennsylvania State University, United States

The technical seminar was jointly organized with Building Environment Council Institute of Environmental Education on 18 November 2016 at BEC Auditorium in Kowloon Tong. There were around 150 participants attended the technical seminar. In Session 1 – Variable Primary Flow Chilled Water Systems; Mr. Bahnfleth explained the design and how to adopt a variable primary flow in chilled water system more efficient and cost effectively.

In Session 2 – Cool Thermal Energy Storage in the Era of Sustainability; Mr. Bahnfleth was described the Cool Thermal Energy Storage (TES) was a key technology in US utility demand side management (DSM) programs, which will be happened about the design has been shifted from energy cost savings toward sustainability today. He gave participants the case for TES without the incentives of DSM ear and the role of TES in achieving net zero energy buildings and communities.



Research Promotion (RP) Committee

Research Promotion (RP) Walk 2016

On 19 November 2016, Research Promotion Committee organized ASHRAE Research Promotion (RP) Country Walk to Dragon's Back (龍脊) for fundraising to support ASHRAE research. There were 68 participants with the fundraising amount of US\$10,490 (i.e. HK\$91,830) donation.

The route total 9.5 km start from Shek O Peak (打爛埗頂山) → Dragon's Back (龍脊) → Big Wave Bay (大浪灣) → BBQ at Big Wave Bay Picnic Area.



Joint Events

ASHRAE Region XIII & Region at Large Chapters Regional Conference 2016 on 30 September – 2 October 2016

The ASHRAE Region XIII & Region at Large Chapters Regional Conference 2016 (Super-CRC-2016) was successfully held in Centara Grand at Central Ladprao in Bangkok, Thailand on 30 September – 2 October 2016. There were total 19 members joined this CRC which included Technical Seminar, Committee Workshops and Regional Planning Meetings.



Regional Award for year 2015-16

There were the following awards for year 2015-16 achieved in CRC 2016:-

- | | |
|---|-------------------------------|
| 2015-16 PAOE Award | – Dr. WONG Chun Sing |
| 2015-16 Blue Ribbon Award (Highest PAOE for MP) | – Mr. NG Chun Kei, Jacky |
| 2015-16 Certificate of Achievement for RP | – Mr. HUANG Hung Man, Patrick |
| 2015-16 Certificate of Achievement for CTTC | – Mr. TAM Tsz Lung, Tenny |
| Chapter Service Award | – Mr. LO Chan Kit, Albert |



2016 ASHRAE Regional XIII Technology Award – Shatin Communications and Technology Centre (Category I: Commercial Buildings)

ASHRAE Night 2017

ASHRAE Night 2017 was held on 10 January 2017. Many VIPs and guests joined the event. During the function, our President of ASHRAE HK Chapter, Dr. Dennis Tung, gave an opening speech to the audience, followed by MP Chair, YMC Chair and RP Chair's introduction of ASHRAE. Some awards for the RP donors were presented. Then, the following candidates were proposed to be the members of Nominating Committee:

- Dr. Raymond KL Chan (Governor, 2016-2017)
- Mr. Vincent Chu (Co-Chair, Auditing Committee, 2016-17)
- Dr. Sam Hui (Chair, Grassroots Government Advocacy Committee 2016-17)
- Mr. Patrick Huang (Chair, Chapter Technology Transfer Committee 2016-17)
- Mr. Taylor Chow (Chair, Chapter Programs Committee, 2016-17)

Last but not least, Dr. Benny Chow gave an interesting technical seminar to the floor. The topic was "The Design of High-Performance Green Buildings for Smart City Development". All members and guests had a wonderful evening.



Membership Promotion (MP)

On 31 October 2016, our Membership Promotion Committee Chair, Mr. Tenny Tam, was invited to visit Asian Institute of Built Environment and give a brief introduction of ASHRAE to the students. The aims were to promote ASHRAE Hong Kong Chapter to the students and to invite them to be our members.



ASHRAE Hong Kong Chapter Library

On 15 May 2017, ASHRAE Hong Kong Chapter Library has been relocated and set up in Asian Institute of Built Environment (AIBE). Relocate the library set up into an institute would be beneficial to the students and members. All members are welcome to borrow the latest books of Standard and Handbook over there. The latest book list as below :-

Standard

- 62.1-2016 Ventilation for Acceptable Indoor Quality
- 90.1-2016 Energy Standard for Buildings Except Low-Rise Residential Buildings
- 90.4-2016 Energy Standard for Data Centers
- 189.1-2014 Standard for the Design of High-Performance Green Buildings

Book

- Procedures for Commercial Building Energy Audits
- ASHRAE Design Guide for Tall, Supertall, and Megatall Building Systems
- IT Equipment Design Impact on Data Center Solutions
- ASHARE Greenguide: Design, Construction, and Operation of Sustainable Buildings, 4th Edition
- Air-Conditioning System Design Manual, 2nd Edition
- ASHRAE Guide for Buildings in Hot and Humid Climates, 2nd Edition



AIBE Address

3/F, Oxford Commercial Building, 494-496 Nathan Road, Yau Ma Tei, Kowloon
Tel : (852) 2376 1933 Fax : (852) 3579 2908
URL : www.aibe-edu.org Email : general@aibe-edu.org

Region XIII ASHRAE Technology Award 2016

Cover Story

The Sha Tin Communications & Technology Centre (SCTC) recognized as top innovative building in Region XIII ASHRAE Technology Award 2016

The Sha Tin Communications & Technology Centre (SCTC) has been recognized for its outstanding achievements in the design and operation as an energy efficient building under the New Building Category of 2016 Regional ASHRAE Technology Award in Asia Pacific area (including Hong Kong, Macau, Taiwan, Malaysia, Thailand, Singapore, Philippines, Indonesia, Japan and South Korea).

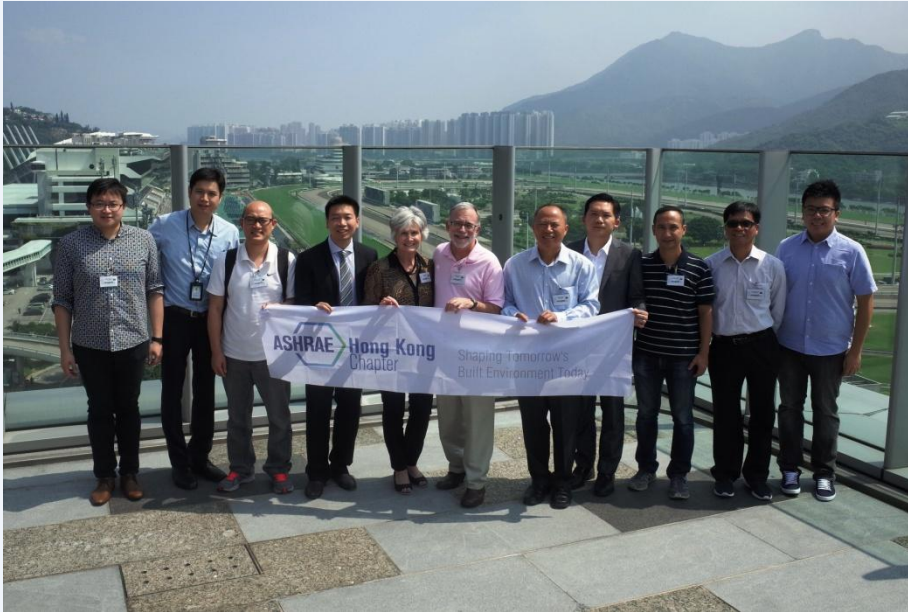
The purpose of the ASHRAE Technology Awards program is to recognize exceptional building design with innovative technological concepts and the performance has to be verified by 1 year actual operation and energy utilization data. The scheme also promotes innovative systems design and technological achievements to associated professionals and societies worldwide.

Major achievements in design, construction and facilities management of SCTC include:

- Active stakeholders involvement and Facilities Management input in the design, specifications and operating plans for SCTC to ensure that operational and maintenance aspects are fully considered and justified in the early design stage
- Integration of effective energy efficiency strategy into active and passive building design
- Adoption of innovative green features, e.g. Solar Hot Water System, Rainwater Harvesting Facilities and Roof Garden
- Provision of workplace integration with Building Automation to deliver the environment with excellent indoor air quality and thermal comfort through optimization of indoor ventilation control, Day light Harvesting, Occupancy sensor for lighting and air-conditioning temperature reset



Tim Wentz (Centre), President of ASHRAE, presents the award to the team during the Society's Super Chapters Regional Conference held at Bangkok.



Tim Wentz visited SCTC and met with The Hong Kong Jockey Club Property team for sharing of insights of innovative building design and management on 25 Sep 2016.



Appreciation to 2015-16 ASHRAE Investor Honor Roll

Research Promotion Committee would like to express our sincere thanks to the following donors who contributed the ASHRAE Research Funds in 2015-16.

Silver of US\$1000 – US\$2499

FSE Engineering Group Ltd.	Mr. Edward Ka Cheung Tsui
Gotop Engineering – Hong Kong	
Honest Air-Conditioning Ltd.	
Kambo Project Services Limited	
Trane Hong Kong	
Wardson Engineering Ltd.	

Bronze of US\$500 – US\$999

Intelligent Technologies Limited	Dr. Chun-Sing Wong, PhD Mr. Hung Man Huang
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Antique of US\$200 – US\$499

BeeXergy Consulting Limited	Dr. Dennis Siu-Lok Tung
Belimo Actuators Ltd.	Mr. Hei-Kin Chan
Botop Engineering (Macau) Ltd.	Mr. Chun-Leung Lau
CaSO	Mr. Ho-Bun Liu;
Centresource Engineering Limited	Mr. Wai-Tong Willance Yip
Decoraco Kin Heng	Mr. Wai-Hung Chow
Fortune Links Hong Kong Ltd.	Dr. Chi-Man Yiu
GEES Tech Limited	San LuiYi
Lisum Engineering – Hong Kong	
Telex Environmental and Energy Management Ltd.	

Honor Roll of US\$100 – US\$249

Mr. Woon-Yuen Fung; Dr. Roger C.Y. Chu; Dr. Sam C.M. Hui; Mr. Cheng Wee Leong; Mr. Tak-Wong Chu; Mr. Chi-Fung Taylor Chow; Ms. Ching-Man Tracy Pang; Dr. Tin-Tai Chow; Mr. Hon-Ming Lam; Mr. Low Han Guan Den; Mr. Shu-Hung Wong; Mr. Kit-Ying Wong; Mr. Ka Lung Raymond Chan; Mr. Kei-Chun Ng; Mr. Wai-Keung Pau; Ms. Chiu-Wah Lee; Mr. Tse-Wai Law; Mr. Wai-Keung Ng; Mr. Johnny K.Y. Lam; Mr. Tat-Ming Wong; Mr. Chake Ling Choy

ASHRAE Learning Institute

2017 Online Course Series

2 WAYS TO REGISTER

Internet: www.ashrae.org/onlinecourses

Phone: Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

One-part course (3 hours) **\$284 (\$219 ASHRAE Member)** – – – Two-part course (6 hours) **\$484 (\$359 ASHRAE Member)**

Basics of High-Performance Building Design
Wednesday, February 8, 2017 – 1:00 p.m. to 4:00 p.m.

Designing Toward Net-Zero Energy Commercial Buildings
Tuesday, February 14, 2017 – 1:00 p.m. to 4:00 p.m.

ASHRAE Guideline 0: The Commissioning Process
Tuesday, February 21, 2017 – 1:00 p.m. to 4:00 p.m.

Commissioning Process & ASHRAE Standard 202
Monday, February 27, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Fundamental Requirements of Standard 62.1-2016
Thursday, March 9, 2017 – 1:00 p.m. to 4:00 p.m.

Commissioning Process in New and Existing Buildings
Part I: Monday, March 13, 2017 – 1:00 p.m. to 4:00 p.m.
Part II: Wednesday, March 15, 2017 – 1:00 p.m. to 4:00 p.m.

Design of Affordable & Efficient Ground Source Heat Pump Systems
Wednesday, March 29, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Complying with Standard 90.1-2016: Envelope/Lighting
Wednesday, April 5, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Complying with Standard 90.1-2016: HVAC/Mechanical
Tuesday, April 11, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Complying with Standard 90.1-2016: Appendix G
Tuesday, April 18, 2017 – 1:00 p.m. to 4:00 p.m.

Air-to-Air Energy Recovery Fundamentals
Wednesday, May 3, 2017 – 1:00 p.m. to 4:00 p.m.

Air-to-Air Energy Recovery Applications: Best Practices
Tuesday, May 9, 2017 – 1:00 p.m. to 4:00 p.m.

Humidity Control: Basic Principles, Loads and Equipment
Tuesday, June 13, 2017 – 1:00 p.m. to 4:00 p.m.

Humidity Control: Applications, Control Levels and Mold Avoidance
Tuesday, June 20, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! New ASHRAE-Classified Refrigerants to Meet Society's Changing Needs
Tuesday, July 11, 2017 – 1:00 p.m. to 4:00 p.m.

Advanced High-Performance Building Design
Wednesday, August 9, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Fundamental Requirements of Standard 62.1-2016
Wednesday, September 6, 2017 – 1:00 p.m. to 4:00 p.m.

Designing High-Performance Healthcare HVAC Systems
Tuesday, September 19, 2017 – 1:00 p.m. to 4:00 p.m.

Laboratory Design: The Basics and Beyond
Tuesday, October 10, 2017 – 1:00 p.m. to 4:00 p.m.

Introduction to Ultraviolet Germicidal Irradiation (UVGI) Systems
Monday, October 16, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! Complying with Standard 90.1-2016
Part I: Wednesday, November 1, 2017 – 1:00 p.m. to 4:00 p.m.
Part II: Tuesday, November 7, 2017 – 1:00 p.m. to 4:00 p.m.

NEW! New ASHRAE-Classified Refrigerants to Meet Society's Changing Needs
Tuesday, December 5, 2017 – 1:00 p.m. to 4:00 p.m.

ASHRAE HVAC Design Training

2 Courses, 5 Days of Intense Instruction

Atlanta • Dallas • Doha • Hartford • Toronto

HVAC Design: Level I – Essentials - Registration is \$1,264 (\$1,009 ASHRAE Member)

Gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

HVAC Design: Level II – Applications - Registration is \$854 (\$699 ASHRAE Member)

HVAC Design: Level II — Applications provides instruction on HVAC system design for experienced HVAC designers and those who complete the HVAC Design: Level I – Essentials training. The training provides information that allows practicing engineers and designers an opportunity to expand their exposure to HVAC systems design procedures for a better understanding of system options to save energy.

Visit www.ashrae.org/hvactraining to register and learn how your Chapter can earn PAOE points.

Contact Karen Murray (kmurray@ashrae.org) to discuss scheduling ASHRAE HVAC Training in your Chapter area.

The Benefits of an ASHRAE Certification

SHINE IN A RISING FIELD

Certification validates critical job knowledge, skills and abilities in a given practice area.

GAIN A COMPETITIVE EDGE

ASHRAE certifications are recognized by over 30 national, state and municipal entities.

DISTINGUISH YOURSELF

Use the ASHRAE Certified logo and designation—e.g. Curtis Smith, BEAP, BEMP—in email signatures, professional networking and business cards to enhance your reputation.

LET ASHRAE PROMOTE YOUR ACHIEVEMENT

Certificants and their employers are listed on the website and in *ASHRAE Insights*.



5 Easy Steps to Earn and Maintain an ASHRAE Certification

1. Read the *Candidate Guidebook*

Visit www.ashrae.org/certification and download the guidebook for the program in which you are interested.

2. Complete the Application

Complete the online application at www.ashrae.org/certification. Membership in ASHRAE is not a requirement for certification.

3. Schedule an Examination

BCxP, BEAP, BEMP, HBDP, HFDP and OPMP examinations are offered at over 300 conveniently located computer-based testing centers worldwide. Candidates may schedule an examination appointment online or by telephone.

4. Review Available Resources

The *Candidate Guidebook* for a program identifies available resources, including practice exams, that may help candidates gain an understanding of the body of knowledge that the examination tests. Purchase of books or course registrations is not a prerequisite to taking any ASHRAE certification examination.

5. Renew the Certification

Each certification is renewable every three years. To retain certification, each certification holder must earn 45* Professional Development Hours (PDHs) during the three year period following initial certification or the last renewal.

*BCxP requires 50 PDHs.

Schedule an exam at one of over **300 testing centers** worldwide
TODAY!

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www.ashrae.org/certification

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Jeffrey G Ross-Bain, BEMP, Ross-Bain Green Building, LLC

