

ASHRAE LINK

THE NEWSLETTER OF HONG KONG CHAPTER OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.

美國供暖製冷及空調工程師學會 香港分會

www.ashrae.org.hk

ASHRAE Night 2007



ASHREA Night 2007 Group Photo (committee members and student helpers)

The ASHRAE Night 2007 was successfully held on 15 February 2007. Over 80 ASHRAE members and non-members not only established closer links but also enjoyed the good time at that night.

To mark the start of that night's program, Mr. K.L. Chan, Secretary of ASHRAE Hong Kong Chapter presented a welcoming speech on behalf of Dr. Sam Hui, our Chapter President. Afterwards, Mr. Albert Lin, on behalf of Mr. Jacob Yiu, Membership Promotion Chair, presented a PowerPoint to introduce ASHRAE which offer information to all participants to have a better understanding of our Society and our Chapter.

In order to appreciate the individuals and companies who supported our Society's research program, Mr. K.M. So, Research Promotion Committee Chair, gave an introduction on research promotion and gave deeply acknowledgement to those companies and individual donors.

Chaired by Mr. S.L. Li, President-Elect, the election of the nominating committee was held and the committee members elected were Mr. Tim Cheng, Dr. Roger Chu, Ms. Tracy Pang, Mr. W.K. Pau and Dr. Philip Yu. We expect that they will consolidate our great family in coming year.

The most exciting part of the celebration was an award presentation for Fifty-year Member Certificate and Fellow Member Certificate. ASHRAE recognizes and appreciates those members with us over 50 years. Dr. Roger Chu presented the honorable certificate to Mr. John Lim who has been an ASHRAE member since 1956. Mr. Lim shared his engineering life experience with us and encouraged our young members to serve the evolving needs of the public and ASHRAE. ASHRAE also awards certificate to full grade member having substantial contribution. This year, Dr. Yuguo Li has been elected to the grade of Fellow by the Board of Directors.

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Mr. S.L. Li, Dr. Sam Hui, Mr. John Lim, Dr. Roger Chu, and Mr. K.L. Chan (L to R)



Dr. Roger Chu presented membership certificate to Mr. John Lim, Fifty-year Member (R to L)

Apart from the above awards, we had invited Mr. Matthew Ngan to provide the enlightening presentation "Energy Management – Project Case Studies" by sharing his experience in energy saving design, district cooling system design and project management. All in all, all of the participants came away with happy memories of an enjoyable and meaningful event. See you next year!

History of HVAC&R

Task Force on History of HVAC&R in Hong Kong

A Task Force was set up recently in our Chapter to focus on studying the history of HVAC&R in Hong Kong and developing a historic publication for the 25th anniversary of the Chapter (in 2009). In fact, the ideas come from informal discussions with some senior members who kindly shared with us their memories on the older-days works and contribution of HVAC&R to economic development of our society. We believe it is very meaningful to collect the past information and develop this historic publication.





Documenting the History of HVAC&R in Hong Kong

Air-conditioning industry has over 50 years history in Hong Kong. Hong Kong is well known of numerous modern skycrapers fully furnished with mechanical ventilation and air-conditioning systems. Who knows which is the first building with air-conditioning? What year was it commissioned? How was the building cooling load estimated and the system sized at that time? How the engineers selected the equipment and/or other system components? Any record for a on-site constructed air handling unit, what they looks like? For sure very few people can answer all these questions. As a leading engineering society of advancing the science and technology



in HVAC&R, ASHRAE Hong Kong Chapter is in the best position to document the various HVAC systems that are specifically designed and running in these building. This will be the first official publication in the industry by the Chapter and to mark the 25th anniversary as well.



As told by Dr. Philip Yu, through collective effort of a special task group nominated by the Board of Governors and with the helping hands of the past presidents of the Chapter, the initial thought is to obtain 25 well known buildings in the history of Hong Kong for the publication. The design engineer and/or operation engineer of each building will be invited to write or to provide the specifics of the HVAC system in use. Members (or non-members) interested are welcome to make contribution. The final product may be sold through publisher and be collected in the university libraries. Suggestions and comments are welcomed.

China Refrigeration Expo 2007

Representatives from our Chapter have attended the China Refrigeration Expo 2007 held on 4-6 April 2007 at the Pazhou Exhibition Centre in Guangzhou. It is one of the major HVAC&R exhibitions in the world and the largest of its kind in this region. We were able to meet the ASHRAE President Mr. Terry Townsend, other representatives of the Region XIII Chapters and the China HVAC&R leaders. Further information about the Expo can be found on "www.cr-expo.com".



ASHRAE President Terry Townsend



Some people from Hong Kong Chapter

Technical Seminar: Indoor Temperature at 25.5 °C?

A technical seminar to discuss the issues relating to indoor temperature at 25.5 °C was held on Friday, 2 February 2007. This seminar is jointly organized by five professional bodies (ASHRAE-HKC, BSOMES, CIBSE-HKB, HKIE-BSD and HKIE-EnvD) and has attracted more than 200 applicants. The speakers at the seminar include Dr Sam C M Hui, Ir Richard S T Chan and Ir Dr Joseph H K Lai. The welcome and introduction was done by Ir K K Lam and the discussion was moderated by Ir Kenneth Li.

The event provides a good opportunity to examine the issues from professional viewpoints. The key principles of thermal comfort and energy efficiency were described. Important issues of air-conditioning design were presented. Practical considerations in building operation and management were explained. There was also a discussion session for participants to exchange ideas and express their concerns. Further information about the presentations can be found on "http://www.ashrae.org.hk/25.5/".

The organizers wish to thank all the people who have contributed to make the seminar a very successful function. By studying technical factors of the issues, it is hoped that a better understanding can be developed for ensuring energy conservation and comfort.



Welcome and introduction by Ir K K Lam

Technical Workshops on HVAC Control and Water System Design

Our Chapter has organised the following two technical workshops to promote continuing education and lifelong learning. Further information and some references can be found on the following websites.

- 18, 19, 25, 26 April 2007, ASHRAE Technical Workshop Fundamentals of HVAC Control Systems http://www.hku.hk/bse/cpd/control/index.htm
- 17, 18, 24, 25 January 2007, ASHRAE Technical Workshop Fundamentals of Water System Design http://www.hku.hk/bse/cpd/water-system/index.htm

Joint Institution Bowling Tournament

The bowling tournament, held on 21 April 2007 (Sat), was jointly organised by ASHRAE-HKC, CIBSE-HKB, HKIE-BSD and IFrireE-HKB. It aims to provide opportunities for social gathering and sports promotion. The results of the tournament are given below.

Team Competition:

- Champion: HKIE-BSD
- 1st Runner-up: IFrireE-HKB
- 2nd Runner-up: ASHRAE-HKC
- 4th Place: CIBSE-HKB
- Highest scores: Mr. Clarence Mak (HKIE-BSD) and Mr. Tim

Cheng (ASHRAE-HKC)

9-pin Competition:

- Champion: Mr. Gilbert Law (HKIE-BSD)
- 1st Runner-up: Dr. Sam C. M. Hui (ASHRAE-HKC)
- 2nd Runner-up: Mr. Andy Chan (IFrireE-HKB)
- 4th Place: Mr. Thomas Soon (CIBSE-HKB)



ASHRAE bowling team and family members

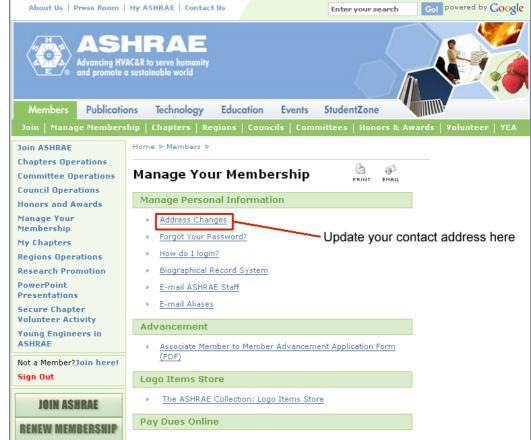
Membership Promotion

Manage Your ASHRAE Membership

If our members have changed their contact addresses or personal information, please remember to inform the **ASHRAE** Headquarters so that they can update the records. You can update your contact address and personal information easily on the **ASHRAE** website (www.ashrae.org). Please login as

Please login as a Member (using your email address and password that you established with ASHRAE before) and go to "Members" and then "Manage Membership" to find out the links.

By keeping your membership information updated, you can avoid delays in receiving the ASHRAE Journals, other publications and circulars. The circulars



of our Hong Kong Chapter were sent based on the mailing addresses provided by ASHRAE Headquarters. Therefore, it is important for you to inform the ASHRAE Headquarters to update the address. If you have any queries, please contact us at "info@ashrae.org.hk".

ASHRAE Online Society Ballot

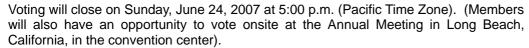


ASHRAE members will have the opportunity to cast their votes online for Society officers and directors as well as their votes on proposed Bylaws amendments. All voting members of ASHRAE who have valid email addresses will receive the email notice with a link to access the ballot. Voting members who do not have valid email addresses will receive paper ballots. If you prefer to receive a paper ballot, please contact Membership at ASHRAE headquarters (membership@ashrae.org OR 678-539-1207) and a ballot will be mailed to you.

To vote, login using the login parameters noted below: URL: https://eballot3.votenet.com/ashrae/login.cfm

Member ID: XXXXXXXXX PIN: YYYYYYY

ASHRAE members must meet eligibility requirements in order to access the ballot and vote. Your ASHRAE Member ID and PIN are located at the bottom of the email invitation you received and on your membership card. Please be sure to include the preceding zeroes in your Member ID and PIN when you log in.





Important Remark

Our Chapter was informed by the Region XIII's Director and Regional Chair (DRC), Dr. C S Ow, that there will be a petition for amendments to bylaws submitted by some Members. If the petition is not defeated, it will remove all DRCs from the Board of Directors and the Regions will lose their power to determine policy at the highest level in ASHRAE. That means the grassroot involvement will be diluted.

It is advised by Dr. C S Ow that our Members in Region XIII shall cast vote in accordance with recommendations by ASHRAE Board of Director so as to defeat the petition. Please sound out to all Members to vote against the petition online. Members may also request for printed copy of ballot from society. Deadline for casting of votes is **24 June 2007**.

ASHRAE Certification Programs



ASHRAE is now pursing a certification program that will focus on areas of the building environment such as healthcare facility engineering, sustainability, commissioning, building operation and management. Certification from ASHRAE will add professional credibility to people, as well as providing educational resources to better enable them in designing and operating buildings that are more efficient.

Each program will have its own eligibility requirements that applicants must meet in order to be eligible to earn

that certification. These requirements will consist of sets of stated combinations of education and experience in the HVAC&R industry. Each applicant will be required to submit a completed application indicating how he or she meets the eligibility requirements for a specific certification program. After receiving approval from ASHRAE, the applicant will be considered to be a candidate, who can then enroll for the appropriate examination. A candidate who successfully passes an ASHRAE certification examination will be known as a Certificant.



To earn the certification, an individual must meet certain eligibility requirements and must pass a 2-hour, 100-item multiple choice examination. Membership in ASHRAE is not a prerequisite to participation in the program. However, ASHRAE members will receive discounts on certification examinations.

Each program will have its own renewal and recertification requirements that ASHRAE certification earners must meet in order to retain certification – or to become recertified if certification has lapsed. These requirements will

consist of professional development activities such as attendance at ASHRAE and other industry meetings and participation in relevant industry courses.

In collaboration with the American Society for Healthcare Engineering (ASHE) of the American Hospital Association, ASHRAE has developed the Healthcare Facility Design Professional (HFDP) certification program in this year. The purpose of the HFDP certification is to increase understanding and knowledge of HVAC&R design in healthcare facilities. The first administration of the examination for the HFDP certification program will take place on June 28, 2007 in Long Beach, CA, immediately following the 2007 ASHRAE Annual Meeting. The HFDP certification is renewable every three years. To retain certification, each certificant must earn 45 PDHs during the three year period following initial certification or the last renewal. The price for the HFDP examination is US\$275 for ASHRAE members and US\$395 for non-members.

Sustainability Column

Sustainability Committee

Our Chapter has discussed and proposed to establish a "Sustainability Committee". We can see that ASHRAE Headquarters has produced a sustainability roadmap in 2006 and put much emphasis on developing a leadership position in sustainability. Many policies and actions have been taken to promote sustainability at both Society and Chapter levels. It is believed that promoting sustainability is important for our Hong Kong Chapter and can contribute to better recognition and healthy development of the Chapter. The proposed committee will take care of the work and determine the strategy and policies so that our Chapter can effectively carry out actions on sustainability matters.



The committee will study and assess the sustainability matters for the Chapter. It will also coordinate and propose actions for improving the awareness and education of sustainability. For example, we can promote educational seminars having a clearly

identified sustainability theme and encourage chapter activities in community that is sustainability-oriented. The committee will advise the Chapter to conduct meetings and functions in accordance with sustainable guidelines. It will also develop articles in chapter newsletter on sustainability topics.

At present, we are recruiting the founding members for this committee and planning the details of the actions. If you would like to participate, please contact us at "sustainability_committee@ashrae.org.hk".

Student & Young Members

ASHRAE Functions for Students and Young Members

ASHRAE is putting much emphasis on developing students and young members because they are the future of our society. A summary of the relevant functions for the students and young members is given below. Please feel free to explore them and encourage our younger generation to join and develop themselves.

ASHRAE StudentZone (www.ashrae.org/students)

- ASHRAE Student Membership (benefits and application)
- Student Design Project Competition (apply knowledge to practical design use and promote team work; submission deadline: early May in each year)
- Senior Undergraduate Project Grants (provide grants to universities for design and construction of student projects)
- Scholarships (various types for undergraduate students)
- Graduate Student Grant-in-Aid Program (designed for postgraduate students)
- Student resources (to learn the benefits of becoming a student member of ASHRAE and about careers in HVAC&R)

Young Engineers in ASHRAE (YEA) (www.ashrae.org/yea)

The YEA Subcommittee of ASHRAE's Members Council was set up in 2005 and its primary objective is to enhance our member benefits for young professional ASHRAE members by identifying activities and services focused on their needs.



- ASHRAE Young Member Guide (brief guide for young engineers)
- YEA Connection (a quarterly newsletter for young engineers)
- New Faces of Engineering (young members may be selected as ASHRAE's top New Face of Engineering and be recognized by Engineers Week in USA)

License 2 Chill Video (www.ashrae.org/students/page/951)

ASHRAE: License to Chill features a hot soundtrack and interviews with young members highlighting the importance of the HVAC&R industry to the world, the diverse and creative opportunities related to engineering as a career, and the difference the building industry makes related to sustainability. The video can be watched online or downloaded to a computer or iPod. Please enjoy.



ASHRAE Hong Kong Chapter - Young Member Committee (www.ashrae.org.hk/ymc.html)

The Young Member Committee (YMC) was established in 2003 with the aim to involve young members and recent graduates who passed the stage of student member. YMC creates a friendly platform for technology acquisition, professional growth, networking and career advancement. It also helps youngsters to develop soft skills (such as leadership, communication and teamwork) with other young professionals. In addition, it offers social opportunities that help people connect personally with Chapter members. The YMC Chairs of the past few years are listed below. If you would like to join and participate in the YMC activities, please contact us at "ymc@ashrae.org.hk".

2003-04: Ms. Eagle Mo; 2004-06: Mr. Chan Ka Ching; 2006-07: Ms. Tracy Pang

Student Branches (www.ashrae.org.hk/students.html)

ASHRAE Student Branches are bodies operated by current students. At present, there are five student branches established under the Hong Kong Chapter in the following tertiary institutions (the year of establishment and advisors are also shown). If students would like to participate in the student branches, please contact their committee members, the advisors, or send email to "studentbranches@ashrae.org.hk".

- The Hong Kong Polytechnic University (PolyU) (1984, Prof. Daniel W T Chan)
- City University of Hong Kong (CityU) (1999, Dr. Square Fong)
- The University of Hong Kong (HKU) (2002, Dr. Yuguo Li)
- Hong Kong Institute of Vocational Education (IVE) (2002, Mr. Y N AuYeung)
- The Hong Kong University of Science and Technology (HKUST) (2005, Dr. Christopher Chao)

Quality Student Project Campaign 2006-2007

The ASHRAE Hong Kong Chapter's Quality Student Project Campaign is a student competition aiming to arouse the interest of students in the HVAC&R discipline, to encourage them to be innovative in applying their knowledge to practical design and research, and to commend excellent student projects. In this year (2006-2007), the competition was carried out in early 2007 and arranged by the Student Activities Committee, led by Dr. Y C Lee. The assessment panel consists of five persons: Dr. Y C Lee (Student Activities Chair), Dr. Roger Chu, Mr. Vincent Chu, Mr. Alan Lam and Mr. Albert Lo. The results have been confirmed and the award presentation will be carried out at the Annual Dinner on 31 May 2007.



Group A (Bachelor degree level):

Diamond Award (Degree):

"Study of solar film performance in an office using computer simulation"

Mr. MAK Hoi Lam, Department of Building and Construction, City University of Hong Kong

Outstanding Awards (Degree):

"Flow dynamics and design of kitchen hoods in residential buildings in Hong Kong"
Miss HO Sze Ling Iris, Department of Mechanical Engineering, The University of Hong Kong, AND
"Dust deposition on interior vertical surfaces in a double-skin façade in high-rise buildings"
Miss YAU Hiu Kun Tiffany, Department of Mechanical Engineering, The University of Hong Kong

Group B (sub-degree level):

Diamond Awards (Sub-degree):

"Community Centre (design project)"

Mr. LEE Hoi Kam, Division of Building Science & Technology, City University of Hong Kong

Outstanding Awards (Sub-degree):

"Logistic Building (design project)"

Mr. LEUNG Wai Kwan, Division of Building Science & Technology, City University of Hong Kong

Region XIII Functions

CRC 2007 and Taiwan Study Tour

The ASHRAE Region XIII Chapters Regional Conference (CRC) 2007 will be held on 3-4 August 2007 in Taipei. Our Chapter will form a delegation to attend this conference and promote exchanges with other Region XIII Chapters including Malaysia, Philippines, Singapore, Taiwan and Thailand (see "www.ashrae-region13.org" for further info). The ASHRAE President and some key staff will also attend. It is a good opportunity to know more about the latest developments in ASHRAE and build up people's network in the Asia Pacific region. If you would like to participate and join the delegation, please contact us at "crc2007@ashrae.org.hk".

In order to allow the students in Hong Kong to expand their horizon and develop themselves, a Taiwan Study Tour on Building Energy and Environmental Technology will be held on 2-8 August 2007 (Thu-Wed). This



study tour is jointly organized by ASHRAE HKU, CityU, PolyU and HKUST Student Branches, and supported by ASHRAE Hong Kong Chapter and the Hsin Chong – K.N. Godfrey Yeh Education Fund for Joint Student Projects. Application to the study tour is open to full-time undergraduate or postgraduate students of HKU, CityU, PolyU and HKUST who are current ASHRAE student members or applying for membership. The deadline for application is 4 May 2007. Further information can be found on "www.ashrae.org.hk/studytour".

Coming Events

| MAY ~ JUNE | JULY ~ NOVEMBER |
|--|--|
| 17 May 2007 (Thu) | 6-7 Jul 2007 (Fri-Sat) |
| Annual General Meeting, N001, PolyU | Zhejiang-HK Joint Symposium, Hangzhou |
| (Technical Seminar: Ventilation for Control of Infectious Diseases in Built Environment) | Jul 2007 (to be confirmed) Retreat 2007 |
| 26-27 May 2007 (Sat-Sun) | |
| ASHRAE Region XIII Regional Planning Meeting, City | 3-4 Aug 2007 (Fri-Sat) |
| Garden Hotel, Makati City, Philippines | Chapters Regional Conference 2007, Howard Plaza Hotel, Taipei, Taiwan |
| 31 May 2007 (Thu) | [2-8 Aug 2007 (Thu-Wed) Taiwan Study Tour] |
| Annual Dinner, Butterfield's, Dorset House, Taikoo Place | |
| | 13 Nov 2007 (Tue) |
| Jun 2007 (to be confirmed) | Joint Symposium 2007, Kowloon Shangri-la Hotel, |
| Technical Workshop on Sustainable and Green Building Design | Hong Kong |
| | 22-23 Nov 2007 (Thu-Fri) |
| 23-27 Jun 2007 (Sat-Wed) | Asia Pacific Conference on Built Environment, The |
| ASHRAE Annual Meeting, Long Beach, CA | Grand Hotel, Bangkok, Thailand |