

# ASHRAE LINK

THE NEWSLETTER OF HONG KONG CHAPTER OF <u>THE AMERICAN SOCIETY OF HEATING,</u> 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

## **Visit by ASHRAE President**



The ASHRAE President, Mr. Kent Peterson, visited Hong Kong on 14-15 February 2008. The Hong Kong Chapter has arranged a series of activities for him and made sure he enjoyed St. Valentine's Day and the culture of Chinese New Year in Hong Kong too. We are also very pleased that two distinguished guests from Taiwan have joined Mr. Peterson during the visit in Hong Kong. These two guests are the Director and Regional Chair (DRC) of ASHRAE Region XIII, Dr Robert Hu and the Past President of ASHRAE Taiwan Chapter, Mr. Chao Uen-Hua.

Mr. Peterson has visited the headquarters of Hong Kong Institution of Engineers (HKIE) and Electrical & Mechanical Services Dept. (EMSD) to exchange ideas on professional and technical issues, including HVAC&R technologies, building energy efficiency codes, sustainable building design and climate change policy. He has also met with our Young Members and Student Members to share career and life experience. Mr. Kent Peterson has made a speech "Sustainable Built Environment and Better Efficiencies, Blue Skies Tomorrow" at the ASHRAE Night 2008 held on 15 February 2008 and the event was attended by more than 200 participants.

During the ASHRAE Night 2008, Mr. Peterson has witnessed the election of the Nominating Committee Members of the Hong Kong Chapter for 2007-2008. The newly elected Nominating Committee Members are:

- Mr. Edward Tsui (R13 Nominating Alternate, 2007-2008)
- Dr. Raymond Yau (Regional Vice Chair Chapter Technology Transfer, 2007-2008)
- Dr. Philip Yu (Chair, Historical Committee, 2007-2008)
- Mr. T K Chan (Chair, Institutions (HK) Liaison, 2007-2008)
- Mr. Albert Lo (Chair, Refrigeration Committee, 2007-2008)

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## Visit by ASHRAE President (Cont'd)



Interview with Mr. Kent Peterson (by Ms Eagle Mo)



Visit to Hong Kong Institution of Engineers (HKIE)



Meet with HKIE President Ir Dr Lo Wai Kwok



Visit to Electrical & Mechanical Services Dept. (EMSD)



Meet with Young Members & Student Members



ASHRAE Presidential Speech & ASHRAE Night 2008 (Photo taken with members of our Student Branches)

## Valuable Time with Hong Kong ASHRAE Students

(Extracted from the Blog of ASHRAE President, Mr. Kent Peterson, www.ashrae.org/blog, February 25, 2008)

I had the pleasure to spend some time with our ASHRAE student members and young ASHRAE members in Hong Kong a couple of weeks ago. This is a very professional group of current and future engineers. The young ASHRAE members mentor the five student branches in Hong Kong and provide a valuable connection for the students as they begin to consider potential career paths.

(Cont'd on next page)

The students in Hong Kong have numerous opportunities with the booming construction in many parts of Asia. I indicated that it is important for everyone to set goals in both their career and life. Always be concerned about what programs future employers offer that will continue to develop their careers – do not be satisfied with only on-the-job training. I believe that any job we choose in life must have a great sense of personal satisfaction that goes far beyond the salary we earn. I also recommended that as young engineers it is very important to ask "why?" to both gain a better understanding of current concepts and question the status quo – we are relying on today's engineering students to engineer a better world in the future

## **Recent Events**

## **Inter-Institutional Sports Tournament**

A badminton tournament, jointly organised by ASHRAE Hong Kong Chapter, CIBSE Hong Kong Branch, HKIE Building Services Division and IFireE Hong Kong Branch, was held on 3 May 2008 (Sat). This is a very good function to promote healthy sports and social gathering. Our Chapter is the leader of the organization for the tournament in this year and the organizing committee was chaired by Ms Tracy Pang, the Chairperson of our Young Members Committee.



The results of the tournament are given below:

- Overall Champion: CIBSE Hong Kong Branch
- Mens Single: CIBSE Hong Kong Branch
- Mens Double: CIBSE Hong Kong Branch
- Mixed Double: IFireE Hong Kong Branch
- Presidents' Challenge: IFireE Hong Kong Branch



## **Technical Functions (completed)**

- 28 Apr 2008: ASHRAE-HKC Technical Seminar: Selection of air filtration systems to achieve indoor air quality goals and for the control of environmental tobacco smoke
- 24 Apr 2008: Joint Technical Talk: Fire engineering from structural engineers' perspective
- 26 Feb-17 Apr 2008: Comprehensive Certificate Course on Air Conditioning and Mechanical Ventilation System in Buildings
- 15 Mar 2008: Joint Technical Visit: Fire Services Training School, Pat Heung
- 11 Mar 2008: Joint Technical Talk: Technical Guidelines on Grid Connection of Renewable Energy Power systems - 2007 Edition
- 8 Mar 2008: Joint Technical Visit: the Venetian Macao Resort Hotel
- 27 Feb 2008: Joint Technical Forum: Proposed mandatory implementation of the building energy codes
- 23 Feb 2008: Joint Technical Visit: Hong Kong Science & Technology Parks Phase 2
- 15 Feb 2008: ASHRAE Presidential Visit & Membership Night 2008
- 1 Feb 2008: Joint Technical Talk: M&E design on modern exhibition centres
- 26 Jan 2008: Joint Technical Visit on Tai Kok Tsui Municipal Services Building
- 9 Jan 2008: Joint Technical Visit: Acoustic design of building services system in low noise spaces in Hong Kong
- 8 Dec 2007: Joint Technical Visit: CLP Power Quality Exhibition Centre and Energy Efficiency Exhibition Centre

## **ASHRAE Opens 170th Chapter in Indonesia**

The existence of ASHRAE Indonesian Chapter was made official on 27 Nov 2007, when ASHRAE Vice President Vincent Tse handed over the gavel to the Indonesian Chapter's first President, J. J. Luthan during the Chartering Night. About 80 people attended the event including past DRC CS Ow, RVCs Wichai Laksanakorn and Den Low, and Distinguished Lecturer Jim Calm.



"ASHRAE recognizes that technology developed outside North America enhances

our knowledge base," Kent Peterson, ASHRAE President, said. "One way we can share that knowledge is by bringing members together via chapters, which allows them to work together, share ideas, and advance the standards of practice to improve the built environment. We see our chapter program as a way to build the community of HVAC&R."

ASHRAE's continued growth is part of its overall strategic plan, which calls for the Society to be a global leader in the HVAC&R community. In addition to chapters in the USA, Puerto Rico, Canada and Mexico, ASHRAE has chapters in Brazil, Argentina, Singapore, Hong Kong, Malaysia, Taiwan, Philippines, Thailand, India, Saudi Arabia, Egypt, Lebanon, Kuwait, Greece, Sri Lanka, Pakistan, the United Arab Emirates, Portugal, Romania, Poland, Bahrain, Spain and Indonesia. ASHRAE formed its first non-U.S. chapter in Toronto in 1922. The first chapter outside North America was formed in Singapore in 1984.

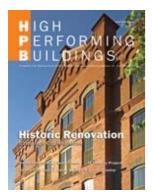
## **Advanced Energy Design Guides Free Download**

The Advanced Energy Design Guide series provides a sensible approach to easily achieve advanced levels of energy savings without having to resort to detailed calculations or analysis. The four-color guides offer contractors designers the tools. recommendations for practical products and off-the-shelf technology, needed for achieving a 30% energy savings compared to buildings that requirements the minimum ANSI/ASHRAE/IESNA Standard 90.1-1999. The energy savings target of 30% is the first step in the process toward achieving a net-zero energy building, which is defined as a building that, on an annual basis, draws from outside resources equal or less energy than it provides using on-site renewable energy sources.



These guides have been developed through the collaboration of ASHRAE, the American Institute of Architects (AIA), the Illuminating Engineering Society of North America (IESNA), and the U.S. Green Building Council (USGBC), with support from the Department of Energy (DOE), to help meet all of an owner's energy performance requirements. In an effort to promote building energy efficiency, ASHRAE and its partners have made these guides available for download (PDF) at no charge. Further information can be found on "www.ashrae.org/freeaedg". At present, there are 4 design guides available for download. The book version of the guide may be purchased through ASHRAE headquarters.

- Advanced Energy Design Guide for Small Warehouses and Self-Storage Buildings
- Advanced Energy Design Guide for Small Office Buildings
- Advanced Energy Design Guide for Small Retail Buildings
- Advanced Energy Design Guide for K-12 School Buildings



## **High Performing Buildings Magazine**

This new quarterly magazine is published by ASHRAE and distributed to building owners, facility managers, architects, contractors and engineers. Our mission is to help decision makers in the building community learn about the benefits of innovative technologies and energy-efficient design and operation. We'll be doing this with case studies of exemplary buildings, developed through the support of leading practitioners in the sustainability movement.

High Performing Buildings is available in digital form at no cost. Please visit the website <a href="https://www.hpbmagazine.org">www.hpbmagazine.org</a> to download the files and get subscription.

### Free Research Reports for ASHRAE Members

We are pleased to announce that free member access to all ASHRAE Research Reports has now been enabled on the ASHRAE web site. From the home page, click on "Research Reports" from the "Member Central" box on the left-hand side of the ASHRAE home web page (www.ashrae.org). You will be asked to log into the web site. Once you log in you are taken to the Research Reports home page where you can search for specific reports or browse report titles. When you click on a title, you are taken to page which allows you to download the report for free.



Please note that there are about 750 research reports in the ASHRAE portfolio. Some 450 are now available online. The remaining 300 have been scanned and ASHRAE headquarters is in the process of setting up each report as a product in the netForum system. They anticipate that the remaining 300 will be online and available for download very soon. For easy and convenient reading, descriptive abstracts of the reports are also provided.

Please use best use of this new member benefit. Remember that the ASHRAE members pay for this research through Research Promotion (RP) contributions, so this is a way for members to have direct access to the research their RP contributions support.

## **ASHRAE Dues Program for Developing Countries**



To encourage continued membership and participation in ASHRAE by engineers outside North America, the Society has launched a program that provides a decreased dues structure option for Member and Associate grades to members who reside in countries categorized as developing countries by the World Bank List of Economies statistics. Examples of the eligible economies are mainland China, Indonesia, Philippines and Thailand. Hong Kong is not under such category.

By offering more affordable dues to members in developing countries, ASHRAE is fully engaging members globally to help expand our reach into countries that can contribute

to and benefit from the technology and information sharing in the society. Below are some questions that you may have about the new program. If you have any other questions, please contact "membership@ashrae.org".

### Who is eligible for the program?

Members who reside in countries categorized as developing countries by the World Bank List of Economies statistics are eligible. Visit the World Bank's Web site for a list of low income /lower middle income countries.

### What are the cost and benefits of this dues program?

The cost is \$90 USD per year for members in eligible countries. The benefits of the new program will include: electronic-only monthly access to the ASHRAE Journal and ASHRAE Insights, and the annual ASHRAE Handbook in CD format. Members can also pay \$165 (USD) per year and receive the print copies of the ASHRAE Journal and the print copy of the annual ASHRAE Handbook.

### When will the program be available?

Current members: current members with an anniversary date of 1 July 2008 or later will be eligible once the annual dues bills are mailed in March 2008. New members: The program opens for new members on 1 June 2008.

### **AGM and Annual Dinner**

The Annual General Meeting (AGM) and Annual Dinner of our Chapter will be held on 23 May 2008 and 12 June 2008, respectively. This is a good opportunity to meet the Chapter Officers, Governors and committee chairs and members for social gathering and networking. A technical seminar will be organised at the AGM day to exchange ideas on latest HVAC&R technology development. Please show your support to the Chapter and develop yourself through the ASHRAE community. Further information can be found on the chapter website <a href="https://www.ashrae.org.hk">www.ashrae.org.hk</a>.

23 May 2008 (Fri): Annual General Meeting, FJ302, PolyU
• Technical Seminar: Zero-Energy Building: What Does it Mean?

12 Jun 2008 (Fri): Annual Dinner, Hong Kong Jockey Club Clubhouse, Happy Valley



## **Henan-HK Joint Symposium 2008**

The 11th China-Hong Kong Joint Symposium will be held on 30 Jun – 1 Jul 2008 (Mon-Tue) at Zhengzhou (鄭州), the capital city of Henan (河南) Province. Zhengzhou has a long history, the site having been continuously settled for more than 8,000 years. Nearby is the Birthplace of the Emperor Huangdi (黃帝), the first Emperor of China. Zhengzhou is also an important railway hub on the Beijing-Guangzhou and Xian-Shanghai rail lines. Interesting places around Zhengzhou include Mt. Songshan, Shaolin Temple, Luoyang, Central Mountain Temple and Yellow River Scenic Area.

If you would like to join the Symposium as a participant, please download the registration form from our Chapter website (www.ashrae.org.hk) and send the completed form and fee to the organizer before 2 June 2008. Places are limited. If you have any questions, please contact us at <a href="mailto:info@ashrae.org.hk">info@ashrae.org.hk</a>.

## CRC 2008, Manila, Philippines

The 12th ASHRAE Region XIII Chapters Regional Conference (CRC) will be held on 29-30 Aug 2008 (Fri-Sat) in Manila, Philippines. Our Chapter will form a delegation to attend this conference and promote exchanges with other Region XIII Chapters including Indonesia, Malaysia, Philippines, Singapore, Taiwan and Thailand (see "www.ashrae-region13.org" for more info). The ASHRAE President and some key staff will also attend. It is a good opportunity to know more about the latest developments of 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 <a href="mailto:crc@ashrae.org.hk">crc@ashrae.org.hk</a>.





## 25th Anniversary Functions

ASHRAE Hong Kong Chapter will celebrate its 25th Anniversary in 2008-2009 and a series of events will be organized to promote the awareness of sustainability in HVAC&R. We are preparing to publish a historical book on the development of HVAC&R in Hong Kong. This book will carry important messages from leading professionals and selected projects will be featured to document the evolution of HVAC in Hong Kong. We believe this book will provide very useful information to our younger generations and also serves as an ovation to the engineers who have

contributed their professionalism in creating a better environment for the people of Hong Kong.

A major event of 25th Anniversary functions is the Jubilee Dinner which will be held in Spring 2009. Further information will be provided soon.

### ASHRAE Handbook Donation Scheme

Our Chapter organizes this function with the aim to collect copies of ASHRAE Handbooks from our members and distribute them to the student members and young graduates who might need them. We believe that regular ASHRAE members receive a set of four ASHRAE Handbooks every four years. Old handbooks become not very useful to them.



Your kind support to this scheme is very important. We will appreciate if our members can actively support this scheme. The application form of the scheme can be found on our Chapter website <a href="www.ashrae.org.hk">www.ashrae.org.hk</a>. For enquiry, please contact us by email at "donation@ashrae.org.hk".

## Sustainability Column

### **High-Performance Building Design Professional Certification**

ASHRAE's second certification program, the High-Performance Building Design Professional (HBDP), will launch this summer (previously, it was known as Sustainability Design Certification). ASHRAE has developed the HBDP program in collaboration with the U.S. Green Building Council (USGBC) and the Green Building Initiative (GBI). Candidates who earn the HBDP certification will have demonstrated a well-rounded understanding and knowledge of how HVAC&R design is integrated into high performing buildings to achieve the overall goal of producing a sustainable HVAC&R design.



The HBDP examination is designed to increase awareness of environmentally friendly HVAC&R design in new and existing buildings. The first administration of the HBDP examination will take place the morning of Wednesday, 25 June 2008 in Salt Lake City, UT, in conjunction with ASHRAE's Annual Meeting. This first exam will be a pencil-and-paper test. Approximately two months after the first administration, the exam will be available on computer at testing centers worldwide. The HBDP examination is \$275 for ASHRAE members and \$395 for non-members. Persons who sign up and apply by 28 May 2008 for the Salt Lake City examination can get half off the regular price (the examination is \$137.50 for members and \$197.50 for non-members).

ASHRAE's certification programs are developed by industry practitioners who understand the knowledge and experience that are expected for superior building design and system operation. Earning an ASHRAE certification assures employers and clients that the certificant has mastered the body of knowledge associated with the respective field. An ASHRAE certification also serves as a springboard for continued professional development. Certification programs that have been started or will be launched soon are shown below.

- Healthcare facility HVAC&R design
- High-performance building (Launching 25 Jun 2008 in Salt Lake City Annual Meeting)
- Building operations and maintenance (Launching 28 Jan 2009, in Chicago Winter Meeting and AHR Expo)
- Commissioning process management (Launching 24 June 2009, in Louisville Annual Meeting)

## **Green Building Functions**

Our Chapter has designed the following functions with the aim to promote better understanding of sustainable and green building design. Please seize the opportunity to enhance your knowledge and awareness.

- 2 Jun 2008: Technical Seminar on Green Buildings, LEED and the ASHRAE Standard 189 (by Dr. Thomas M. Lawrence, ASHRAE Distinguished Lecturer)
- 4-5 Jun 2008: Building Services Technical Seminars of Asian Building Technologies 2008, HK Convention & Exhibition Centre [www.asianbuildtech.com/ev summary bsts.html]. Presentation topics include:
  - Mechanical design for green buildings
  - Preparing to meet the real challenges to sustainable building
  - Development of building energy labels in Hong Kong
  - Beijing Parkview Green Plaza: sustainable design and implementation
  - Green roof and heat island effect
  - Proposed mandatory implementation of the building energy codes in Hong Kong
  - Refrigeration side energy solution for air conditioning
  - Optimization control and operation strategy for chilled water plant
- Aug 2008: Technical Workshop on Sustainable and Green Building Design (re-scheduled)

## Philippines Study Tour on HVAC&R Technology



In August 2008, the ASHRAE Region XIII Chapters Regional Conference will be held in Manila, Philippines. This study tour is arranged to allow the students in Hong Kong to attend the conference and to carry out technical and academic visits and exchanges. Successful study tours to Malaysia and Taiwan were organized in 2006 and 2007. Eligible persons to join this study tour are 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 26 May 2008 (Mon). For more information, please visit the website "www.ashrae.org.hk/studytour".

### **Student Branch Presidents 2007-2008**

Being a Student Branch President is good training for leadership and professional development. We appreciate the following persons who have devoted their time to serve as the President of our Student Branches.

- PolyU Mr Lo Siu On Andy
- CityU Ms Lui Wun Vicky
- HKU Mr Chow Chiu Fai Kevin
- IVE Mr Leung Sze Chun Shawn
- HKUST Ms Lam Siu Ling Yolanda



**Coming Events** 

Visit www.ashrae.org.hk for details

### 8-10 Apr 2008 (Tue-Thu)

China Refrigeration Expo 2008, Shanghai

### 16 Apr 2008 (Wed)

ASHRAE Satellite Broadcast/Webcast: Integrated Building Design [www.ashrae.org/ibdbroadcast]

### 24 Apr 2008 (Thu)

Technical Talk: Fire engineering from structural engineers' perspective

### 28 Apr 2008 (Mon)

Technical Seminar: Selection of air filtration systems to achieve indoor air quality goals and for the control of environmental tobacco smoke

### 3 May 2008 (Sat)

Technical Visit: Hong Kong Airport Terminal 2 (SkyPlaza)

### 17 May 2008 (Sat)

Technical Visit: One Island East

### 17-18 May 2008 (Sat-Sun)

ASHRAE Region XIII Regional Planning Meeting, Bangkok, Thailand

### 23 May 2008 (Fri)

Annual General Meeting, FJ302, PolyU

• Technical Seminar: Zero-Energy Building: What Does it Mean?

### 2 Jun 2008 (Mon)

Technical Seminar: ASHRAE Green Guide; Green Buildings, LEED and ASHRAE Standard 189

### 4-6 Jun 2008 (Wed-Fri)

Asian Building Technologies 2008. HK Convention & Exhibition Centre [www.asianbuildtech.com]

• 4-5 Jun 2008 : Building Services Technical Seminars [www.asianbuildtech.com/ev\_summary\_bsts.html]

### 12 Jun 2008 (Fri)

Annual Dinner, Hong Kong Jockey Club Clubhouse, Happy Valley

### 21-25 Jun 2008 (Sat-Wed)

ASHRAE Annual Meeting, Salt Lake City, UT

### 30 Jun - 1 Jul 2008 (Mon-Tue)

Henan-HK Joint Symposium 2008, Zhengzhou, Henan

### 25-31 Aug 2008 (Mon-Sun)

Philippines Study Tour on HVAC&R Technology [www.ashrae.org.hk/studytour]

### 29-30 Aug 2008 (Fri-Sat)

ASHRAE Region XIII Chapters Regional Conference (CRC), Manila, Philippines

### 18 Nov 2008 (Tue)

Joint Symposium 2008, Kowloon Shangri-la Hotel, Hong Kong