

ASHRAE LINK

June 2006

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



ASHARE Night 2006

The ASHRAE Night 2006 was successfully held on 21 February 2006. Over 150 ASHRAE members and non-members not only established closer links but also shared our laughs and tears at that night.

Mr. T.K. Chan, our Chapter President, ringed a bell for the event before delivering his welcoming speech. Afterwards, 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.

Chaired by Dr. Sam Hui, President-Elect, the election of the nominating committee was held. There were Mr. Alan Lam, Mr. Vincent Chu, Dr. Yuguo Li, Mr. Edward Chan and Mr. Calvin Tang. We expect that they will consolidate our great family in coming year.



ASHRAE Night 2006

In recognition of some distinguished members who contributed to the Society, our Chapter in 2005 had 3 members recognized as a superior membership grades including Mr. Dennis Ip (Life Member), Mr. H.M. Lam (Life Associate Member) and Mr. Edmund Lee (Fifty-year Member). Dr. C.Y. Chu, Fellow Member, presented the membership certificates.

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Dr. C.Y. Chu presented membership certificate to Mr. Life Member Mr. Dennis Ip (R to L)



Mr. Edward Tsui, Governor, presented Diamond Award (Degree Level) of Quality Student Project Campaign to Mr. Tsang Man Fung and Dr. Sam Hui, Project Supervisor (R to L)

The most exciting part of the celebration was an award presentation for Quality Student Project Campaign organized by our Chapter. The chair and members of judging panel of this year were Mr. Louis Lo (Chair), Mr. Alan Lam, Mr. Jacob Yiu, Edward Chan, Matthew Ngan and Peter Lam. Amongst those 11 projects submitted from University of Hong Kong (HKU), The Hong Kong Polytechnic University (PolyU), City University of Hong Kong (CityU) and Hong Kong Institute of Vocational Education (IVE), the judging panel unanimously agreed that the Diamond Award for Degree Level and Sub-degree Level of this year went to Mr. Tsang Man Fung, Mechanical Department of HKU (Project Title: Study of Climatic Data for Sustainable Building Design) and Mr. Sze Wai Ching, Building Services Department of PolyU (Project Title: Design Project of HVAC Services), respectively.

Announced by Mr. Louis Lo, Student Activities Chair, the awards were presented by our Mr. Edward Tsui and Mr. Victor Yiu, Governors.



Mr. Victor Yiu, Governor, presented Diamond Award (Sub-degree Level) of Quality Student Project Campaign to Mr. Sze Wai Ching (R to L)



Mr. Alan Lam presented ASHRAE Technology Award 2005 to Mr. Cary Chan (R to L)

In order to appreciate the individuals and companies which supported our Society's research program, our Chapter presented an awards to those who had contributed in 2004-05. The awards were presented by Mr. Tim Cheng, Immediate Past President and chaired by Ms. Gambi Chiang, Research Promotion Chair.

Apart from the above awards, presented by Mr. Alan Lam, Region XIII RVC (Technology Transfer), an honorable mention of ASHRAE Technology Award 2005 was given to Mr. Cary Chan and Dr. Paul Sat in their project of Innovative Chiller Control System at Festival Walk. The awards served as recognition of outstanding achievements by members who have successfully applied innovative building design. This year, 23 projects submitted to Society from worldwide in which 3

projects were received first-place and 6 projects were received honorable mentions. To take this opportunity, Mr. Chan and Dr. Sat provided the enlightening presentation by sharing their experience in the field of their project.

All in all, all of the participants came away with happy memories of an enjoyable and meaningful event. See you next year!



Group photo of Life Member, speakers, Officers, Governors and Working Committees



Group photo helpers from Student Branches, committees of Membership Promotion, and Mr. Jacob Yiu, Membership Promotion Chair



Technical Seminar on Indoor Environment and Energy

By Prof. Bjarne Olsen

On 16 March 2006, the Chapter Program organized a technical workshop on Indoor Environment and Energy Performance in the Hong Kong Polytechnics University and was presented by Professor Bjarne W. Olesan woho is the Director of the International Centre for Indoor Environment and Energy at the Technical University of Denmark. During the seminar, Professor Olesan gave an informative introduction to all participant regarding personal factors and environmental factors affecting the thermal comfort of human's sensation as well as the index used to measure the thermal comfort such as Predicted Mean Vote (PMV). Besides, Professor Olesan also focus on the development of standards at ISO, CEN and ASHRAE for the indoor environment, particularly on the ventilation rate for various type of buildings and occupants such as office building, auditorium, smokers and non-smokers etc,. The seminar was last for 2 hours and all the participants enjoyed such valuable information as delivered by Professor Olesan.

On behalf on all participants, we would like to express gratitude to Professor Olesan for giving this informative seminar.

News from Membership Promotion

Good news to Student Member - Student Advancement Program!!!

During first year after following graduation, any Student Member can enjoy an exceptional annual Society dues and Chapter dues by now. A Student Member can advance from student to regular member status during this first year WITHOUT paying the US\$150.00 dues fee at the time of application. Students therefore are still only required to pay the US\$16.00 annual Society dues only during the membership year of transfer. Surely, the benefits as a student member are still the same such as enjoying Journal, Insights, and The HVAC&R Industry eNewsletter.On than that, student will receive a FREE copy of the latest version of annual Handbook volume (i.e. Fundamental, HVAC Systems and Equipment, HVAC Applications or Refrigeration) in print version or CD version. Student members are encouraged to visit the website to see the details. If you have any inquiry, please feel free to contact us at info@ashrae.or.hk



Chapter Program -



Inter-Institutional Soccer Tournament 2006

With the participation of the Chartered Institution of Building Services Engineers – HK Branch (CIBSE), the Institution of Fire Engineers – HK Branch (IFE), the Hong Kong Institution of Engineers – Building Services Division (HKIE) and the Hong Kong Chapter of American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE), the 11-a-side Inter-Institutional Soccer Tournament 2006 took place with a single 'knock-out' mode at the Disciplined Services Sports and Recreational Centre on 19 and 25 March.

We, the ASHRAE team, met HKIE in the first match. Despite the predominant possession and a number of scoring opportunities, we lost an unpredictable own goal in the

first half. During the start of the second half, our further aggressive attacks rendered a loop-hole in defense, thus losing the second goal. Our team spirit was not then spoiled. Rather, our increasing attacks were eventually rewarded with a nice score just a few minutes later, followed by getting a penalty kick. The latter, however, was unfortunately missed. We ultimately lost with 1:2. The result of the first match had no influence on our performance in the second where we played against the CIBSE team. Regardless of the heavy rain and the thunderstorm warning, we quickly showed our remarkable scoring ability a few minutes from the start. Our



overwhelming attacks rewarded us 6 scores before returning to the changing room. While the bad weather was not improved, we scored 3 more in the second half, with a legendary 9:0 win. This unprecedented victory made us proud to be the 2^{nd} runner-up. Let's wait, and hopefully win the tournament next year!



1st AGM of ASHARE HKUST Student Branch

On the 14th of March 2005, ASHARE Student Branch launched the first and ever AGM for their establishment. The general meeting followed by the solemn speech of speakers was held in a majestical manner. Congratulations dear HKUST

Student fellow members! May we wish you a better success in the coming year!



Right: UST
Student Branch
Committee
Left:
Presentation of
Certificate by
Mr. T.K. Chan





AGM of ASHARE IVE Student Branch

The Annual General Meeting of IVE Student Branch for ASHRAE Hong Kong Chapter was held on 3rd November 2005. At the day, a new student committee group was formed. There were 14 members in the committee group of IVE Student Branch. At the night, the AGM was held for around 2 hours. Then, there were about 50 guests including the representatives from ASHRAE Hong Kong Chapter, the University of Hong Kong, the City University of Hong Kong, the Hong Kong Polytechnic University, the



University of Science & Technology, and the Institute of Vocational Education (Campus of Morrison Hill & Tsing Yi). Before and after the AGM, there were tea reception and refreshment so that the guests are all able to have communication time to share



their experience in the development of ASHRAE, and even the experience of their studies and working experience. After the AGM, a committee group of IVE Student Branch of ASHRAE Hong Kong Chapter was formed. Some activities were organized by the committee for the ASHRAE members and another committee will be formed next year.

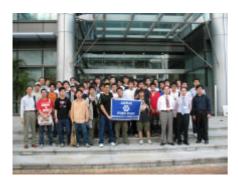
ASHRAE IVE Student Activity-1 (EMSD Site Visit)

The site visit to EMSD Head Quarter was held on 25 March 2006. There were 5 committee members and 25 student members of ASHRAE joining the activities. The representatives of EMSD showed us around the building services related to energy saving in Hong Kong. At ESMD, there were many systems about energy saving installed for testing, performance analyze, and even promotion. They were inclusive of PV system, ice storage system, heat recovery system, control system, wind turbine, etc. Actually, they expressed



the reduction of energy consumptions were very serious nowadays. Therefore, EMSD would lead the users in Hong Kong to achieve the goal of energy saving. Some systems such as PV system were needed to spend for analyzing so that the users are confidence to use. Also, EMSD was dealing with the performance analyzing for applying the ice storage system in Hong Kong. After the day, it was known that energy saving was not very difficult for us and it was very important to solve the energy consumptions in the world.

ASHRAE IVE Student Activity-2 (Hong Kong Science Park Site Visit)



The site visit to Hong Kong Science Park was held on 11 April 2006. There were 40 student members of ASHRAE joining the activities. Hong Kong Science Park is divided into three phases. The fully-equipped Phase 1 was inaugurated in 2004 and is now fully operational. The construction of Phase 2 is scheduled for completion in 2008 with the first two buildings to be ready in early 2007. On completion, the Park provides a total gross floor area of 330,000 square metres. The representatives of the Hong Kong Science Park showed us around the building services related to energy saving in Hong Kong. At Hong Kong Science

Park, there were many systems about energy saving installed for testing, performance analyze, and even promotion. They were inclusive of PV system, control system, etc.

Joint X'mas Party





A joint institution Christmas Party was held on 16/12/2005, CIBSE HKB, AES, IEEE, HKIE, IEE and ASHRAE jointly organize the party. The theme of this Christmas Party is "Join

with Joy, Join with Engineers". YMC of ASHRAE is the third year organizes this kind of function with joint professional institutions with an aim to encourage getting friends from different discipline around the engineering



fields.

There have almost around 100 young members from all of institutions to join the

Party. This Christmas Party was started on 6:30pm, delicious food was provided at the first session, then all young members were enjoyed all the coming sessions of different games, group dancing, live band performance and lucky draw till mid night.



Technical Visit to Guangzhou University City

In the early morning of 4 March 2006., delegates of 32 people from HKIE BSD, CIBSE HKB and ASHRAE HKC gathered in Kowloon Tong. They departed on a coach heading for the north – the Guangzhou University City (GUC). GUC is located at Panyu of the Guangdong province occupying a land of 43 sq. km, which comprises 10 universities with a design capacity to accommodate 400,000 residents including 200,000 students. The delegates were met by the Chief HVAC Engineer Professor Zhong Chao-An from the Architectural Design & Research Institute of the South China University of Technology, who oversees the design of the central cooling systems.

According to Professor Zhong, the central systems include district cooling and ice storage, which result in 100,000 ton of refrigeration, 1 million km of chilled water pipes, covering 280 buildings at a construction cost of 30 billion RMB. The sheer size of the project gives rise to several problems such as the hydraulic balancing of the chilled water system, diversity factor for sizing cooling loads under a resources sharing basis, the criteria for using variable speed pumps, etc. So, what are the merits of putting all 10 universities on one site? The simple answer is: conservation – higher efficiency in space utilization, lower capital cost for power distribution systems, less noise nuisance, better outdoor air quality (all exhaust outlets grouped within an area), etc. Our Chinese counterpart gave a guided tour covering the ice storage cooling plants and the underground tunnel for pipe work. After all, the visit means a very special weekend to our delegates in terms of the "Chinese experience".



The GUC campus



Presentation of souvenir to Professor Wei Hong, the Vice President of the Architectural Design & Research Institute of the South China University of Technology by Mr. TK Chan, President of ASHRAE HKC



The delegates







Group Photo of Representatives of MIE, UMAC and ASHRAE HKC



Souvenirs Presentation between MIE and ASHRAE HKC – Dr. L.M. Tam and Mr. T.K. Chan (R to L)



Souvenirs Presentation between UMAC and ASHRAE HKC – Mr. Scott Ma and Mr. T.K. Chan (R to L)

On 17 February 2006, jointly organized by The Macau Institution of Engineers (MIE) and Faculty of Science and Technology, University of Macau (UMAC), our Chapter paid successfully visit to MIE and UMAC, and met with over 120 professions at STDM Stadium, UM International Library, University of Macau.

The main theme of this visitation was to provide information of our society, our professionals and our technical experiences to Macau's HVAC&R profession, academy and its industry. In addition, the professionals from both sides had a deep and more balance understanding of MIE, UMAC and our Society.

The visitation was divided into 2 parts. Mr. Jacob Yiu, Membership Promotion Chair, briefly introduced our Society and Chapter in the first section. In the second section, Dr. Sam Hui, President-Elect, delivered a seminar – "ASHRAE Standard 90.1 and Its Implications to Worldwide Building Energy Efficiency Codes". This seminar described the key components of the ASHRAE Standard 90.1 and explained the philosophy of setting the control requirements for building energy codes. The characteristics of different versions of 90.1 were examined and the practical experience from the Asian economies was discussed. The participants gave a big clap and this was the end of the event.

This visitation was commenced with an opening speech by Mr. Scott Ma, Deputy Council President, and ended by the closing remarks of Mr. T.K. Chan, our Chapter President. On behalf of the ASHRAE Hong Kong Chapter, we would like to express our gratitude to MIE and UMAC for their kind assistance and hospitality in arranging this visitation.

Membership Renewal

To enjoy the benefits provided by the organization, you can simply renew your ASHRAE membership online and pay dues. Members can access to the dues payment from the members page of the ASHRAE website (www.ashrae.org). You are also kindly requested to update your personal contact information, so update events and journals can be sent to you.

Library Services for Hong Kong Chapter

The Hong Kong Chapter Library is located at Johnson Controls's office. Some selected publications were kept and can be read and borrowed by our members. Details of library service:

ASHRAE Hong Kong Chapter Library

Manager of the library and contact details: Ms. Fanny Fung, Tel: 2590-0012 ext. 252





Interview with Prof. Wilbert F. Stoedcker

What do you think about the research environment for building services in Hong Kong ?

This is the first time for me to visit and to be the speaker of technical seminar like this in Hong Kong. I have not been to Hong Kong for any research purpose before, however I did meet many researchers from Hong Kong around the world. I believe there are lots of intelligent people this field, maybe there are some differences between the natural resources in research comparing Hong Kong and other country, but it will surely be a good chance for me if I could visit this place again for education purpose.



What do you think about Engineering in Hong Kong compare with other countries?

In the field of education, I think students in Hong Kong are more integrated. For engineering students in other counties, like U.S., they work on more specific topics usually. The courses for Building Services in Hong Kong include lots of things, reaching from air conditioning to plumbing or even fire services. You could hardly find students studying courses say only Fire Engineering in Hong Kong.

Do you think engineers in Hong Kong are competitive compare with other countries?

The industry of engineering in is surely formed by a group of highly qualified people. Many engineers in Hong Kong are recognized by different international associations like HKIE, IMECHE, CIBSE. Therefore I believe the engineers in Hong Kong remains competitive.

Have you been doing any consulting for the industry besides concentrating on research of the subject? What do you think between the job nature of consulting and research studies?

Yes, I have been the chief consultant of a company in the field of manufacturing. It was a chemical company, which mainly provides additives for the oil. One of the objectives of the job was to find ways to reduce the carbonized sulphur in the chemicals, so as to enhance the performance of the products and also induce less environmental pollution. We were working as a small team with 2 chemical engineers and 1 mechanical engineer. It was challenging, as in the very beginning people would not think mechanical engineer would probably involve in something which was not so mechanical. I was not a specialist in the field before I taken up the job, but I learn a lot from my colleagues and also from the notes too. For me its challenging, but if you ask about the similarity of being a consultant and being a researcher, I would say, both provide a good chance to learn.

Coming Events

30 June 2006 – 1 July 2006

HKIE-BSD/CIBSE-HKB/ASHRAE-HKC

SICHUAN – Hong Kong Joint Symposium 2006

For detals please refer to the following web site

http://www.hkiebsd.org/event/20060630/Sichung-HK-Symp06-Cal-for-Paper.pdf

Visit our web site for more information:

http://www.ashrae.org.hk



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