

Organizers:



Technical Seminar on The Green HVAC Concept – HVAC System Renovation in Existing Buildings

Date : October 12th, 2012 (Friday)
Time : 18:30 – 21:30
Venue : QR403, The Hong Kong Polytechnic University

Background:

Renovation of existing buildings, especially the HVAC systems can have a significant impact on their operational cost and competitiveness. It can also lead to a new concept of designing HVAC systems, which presents great opportunity for energy savings, and leading to a sustainable future. The procedure normally initiated by computer simulation, followed with optimal operation strategies development and full-scale experimental validation.

The presentation highlights the findings obtained and lessons learned from the 200 HVAC systems renovation projects led by Dr. Yang. The procedure includes computer simulation using eQuest in establishing optimal operation strategies for systems with multiple chillers, the VAV and the VAV systems. Also, it will be demonstrated how thermal energy storage air-conditioning systems can be retro-fitted, without replacing its existing chillers, while reviving its cooling capacity simultaneously. Also, procedures in upgrading system performances by implementing the Testing, Adjusting, Balancing and Commissioning (TAB/Cx) procedures recommended by the ASHRAE, with a slight modification and simplification, will be demonstrated.

Honorable Speaker:



Prof. Kuan Hsiung Yang is a professor of Sun Yat-Sen University and a technical consultant of China Engineering Consultants, Incorporated, and Chunghwa Telecom, on Building Energy Conservation and HVAC System Designs. He received his degree in Mechanical Engineering from Lamar University in 1985. He is a member of Technical Committee of Building Science, HVAC systems and Fire-protection Engineering for the Ministry of the Interior, Taiwan.

In the field of HVAC and fire protection, he served as a professor in Mechanical Engineering, both on undergraduate and graduate levels at the National Sun Yat-Sen University in Taiwan for 25 years, and a visiting professor at the Sun Yat-Sen University at Guangzhou, China, serving as Master and Doctoral students thesis advisor concentrating on HVAC and fire protection system designs, simulation and full-scale experimental investigation.

Prof. Yang is a Fellow in the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). He is a recipient of Outstanding Contribution on Building Energy Research Awards, Ministry of the Interior, Taiwan, in 1991, Best Research Award on Building Thermal Energy Storage HVAC Systems, Taiwan Power Company in 1992, Top 10 Engineering Professors Award in Taiwan in 1993, Best Research Award on Centrifugal Chillers under Cycling Operation Modes, National Electrical Power Association in 1994. Ozone Protection and Chiller CFC Refrigerant Conversion Technology Award in 1995, Tunnel Ventilation Award, China Road Congress in 1996, IBC Award on HVAC Engineering Research in 1997, Inclusion in Mcquis Who's Who in the World 2000, Teaching Excellence Awards in NSYSU, College of Engineering, in 2006 and 2008. Outstanding Contribution Award in HVAC Engineering in Taiwan, 2010. He is also the leader in the National program on HVAC System Retrofits (2003-2007 Green HVAC) and the Building Energy Efficiency Upgrade (2007-2011 BeeUp),

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completing 200 buildings energy systems retrofitting and commissioning with a total budget of 30 million USD and realizing energy savings of 22.5% each year.

He is also the author of two (2) books, and published over 200 technical papers in the U.S. and other parts of the world addressing topics on HVAC systems, tunnel ventilation, smoke management and egress analysis, using 3D CFD as a tool followed by full-scale experiments.

Language: English

Fee: Free of charge for members of Organizers
Free of charge for full time students or staff of The Hong Kong Polytechnic University

Remark: 3-hour CPD certificate will be provided.

Application:

This is a joint activity organised by ASHRAE-HKC, CIBSE HK Branch and HKIE-BSD. Registration is opened to all members of the organising institutions. Please complete and return the application form by e-mail on or before 8th October 2012. Number of participants is limited to 50. Places will be allocated on a first-come-first-served basis and will be distributed evenly among the three institutions and HKPU as far as possible. Successful applicants will be informed individually by e-mail.

Application Form:
Technical Seminar on The Green HVAC Concept – HVAC System Renovation in Existing Buildings

Name (Dr./Ir/Mr./Mrs./Ms.)* : (Surname) _____ (Given Name) _____

Membership* : Organization: _____ Membership No.: _____

Company* : _____

Position* : _____

Email Address* : _____

Contact Numbers : (Mobile)*: _____ (Office): _____

* Information must be filled.

Enquires: For enquiry, please contact Mr. Cecil Man at 95033649 (ASHRAE – HKC), Ir. KT Cheuk at 92092155 (HKIE-BSD) or Ir. Stanley CHOW at 91339259 (CIBSE HK Branch). Email enquiries can be sent to cecil@hensen.com.hk.

Registration: Please send the filled application form before 8th October 2012. The applicant may email the above information to cecil@hensen.com.hk for place reservation.

Organizers:



Joint Technical Seminar on The Green HVAC Concept – HVAC System Renovation in Existing Buildings

Date : October 12th, 2012 (Friday)

Time : 18:30 – 21:30

Venue : Room HHB-107, Hong Kong Community College of The Hong Kong Polytechnic University – Hung Hom Bay Campus

(Map: http://www.hkcc-polyu.edu.hk/documents/newcampus/HHBcampus_map.jpg)



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