

Seminar on Simulation and Optimization of HVAC&R Appliances on 30 August 2012

The Department of Building Services Engineering (BSE) of The Hong Kong Polytechnic University (PolyU) organized a CPD Seminar on 30 August 2012. BSE invited Professor DING Guoliang from Shanghai Jiao Tong University to speak on "Simulation and Optimization of HVAC&R Appliances". The seminar attracted a full house of participants.



Brief introduction by Prof. DENG



Prof. DING from Shanghai Jiao Tong University speaking at the seminar

First of all, Professor Ding was welcomed and introduced by Professor Simon DENG from BSE, Professor DING started his talk by outlining how simulation has been widely used for performance prediction and optimum design of refrigeration systems. During the seminar, Professor DING shared his valuable insights on Simulation and Optimization of Heat Exchangers and Simulation of Refrigeration Systems. He explained how Graph Theory is used and illustrated the method of linking components of a refrigeration appliance into a system based on the parameter coupling among these components. Moreover, Professor DING revealed how Model-Based Intelligent Simulation could simulate the actual complex systems. Professor DING also covered the calculation method for refrigerant thermodynamics in Refrigeration System Simulation. Finally, how noise level could be reduced by Noise Simulation was also discussed before the end of the seminar.

Professor DING Guoliang got his degrees (BEng in 1987, MEng in 1990 and PhD in 1993) in Refrigeration and Cryogenics from Shanghai Jiao Tong University. He was promoted to associate professor and professor in 1994 and 1998. He had been appointed as the head of the Department of Power and Energy Engineering, Shanghai Jiao Tong University for 8 years since February 2002. He is the president of Shanghai Society of Refrigeration.

He worked as a post-doctorate in University Karlsruhe, Germany during May 1996 to July 1997; as a visiting professor in University Karlsruhe, Germany during January 2000 to April 2000, and February 2004 to April 2004; and as a visiting professor in University of Tokyo, Japan during May 2007 to August 2007.

Professor DING has published 11 books, 100 domestic journal papers, and 80 international journal papers. These publications have collectively received over 2000 citations. He owns 30 Chinese patents and 5 international patents. His major contributions are simulation and optimization techniques for refrigeration and air conditioning systems. The simulation and optimization techniques developed in his research group have been implemented with significant economic impacts in a lot of top refrigeration and air conditioning companies in the world.



Attentive participation for the seminar



Prof. DING on the stage delivering his talk



Questions and Answers Session



Prof. DENG presenting souvenir to Prof. DING

5 September 2012