

ASHRAE Hong Kong Chapter

P.O. Box 35612, King's Road Post Office, North Point, Hong Kong

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美國供暖製冷及空調工程師學會 香港分會

地址：香港英皇道郵政局 郵政信箱 35612 號

電郵：info@ashrae.org.hk 網站：<http://ashrae.org.hk> 傳真：(852) 30198334

Technical Workshop

Title: **Fundamentals of HVAC Control Systems**

Date/Time: 18, 19, 25, 26 April 2007 (Wed, Thu), 6:30 pm – 9:30 pm

Venue: AG206 (18 and 24 April, Wed), TU103 (19 and 26 April, Thu), PolyU, Hung Hom, Kowloon

Description: **What You Will Learn**

You will develop an understanding of the basic concepts and common types of HVAC control systems. You will also learn the practical considerations and applications for various types of controls including electric controls, pneumatic controls, self-powered controls, analog electric controls and digital controls.

After completing the workshop, you should know:

- Why controls are necessary in HVAC systems.
- Basic concepts of controls, electrical circuits, control diagram and control sequence.
- How to select and size control valves and dampers.
- How different types of sensors and auxiliary devices operate.
- Various types of controls and their major characteristics.
- Practical considerations and applications of HVAC control systems.

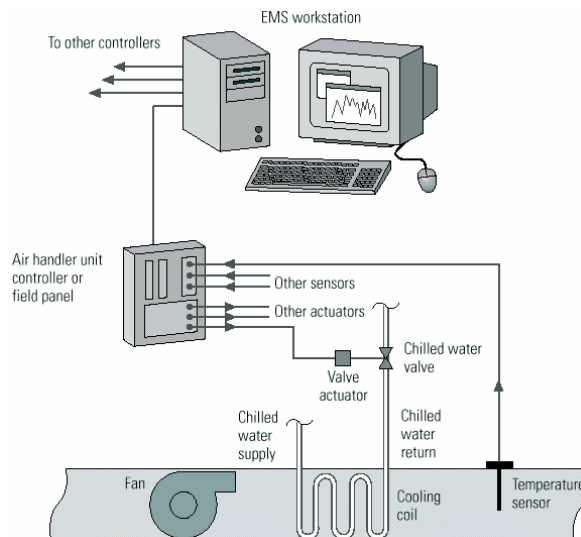
Course Content

Part One – Basic Concepts

- Introduction to HVAC Control Systems
- Basic of Electricity
- Control Valves and Dampers
- Sensors and Auxiliary Devices
- Control Diagrams and Sequences
- Practical Considerations

Part Two – Types of Controls

- Self-Powered Controls
- Electric Controls
- Pneumatic Controls
- Analog Electronic Controls
- Digital Controls
- Practical Applications

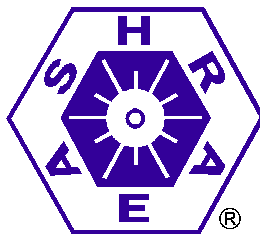


Who Should Attend

This workshop is recommended for:

- engineering graduates working in the HVAC&R industry, control industry and related fields;
- experienced engineers entered the HVAC&R industry from other engineering fields;
- other professionals who want to increase their knowledge of HVAC control systems; or
- engineering students who are interested in the topic.

A study guide “*Fundamentals of HVAC Control Systems*” from ASHRAE, list price at US\$150, will be given to the participants (included in the fee). Certificate of attendance will be issued to each participant at the end of the workshop. Light refreshments will also be provided.



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Speakers:

Dr. Sam C. M. Hui

PhD, BEng(Hons), CEng, CEM, MCIBSE, MHKIE, MASHRAE, MIESNA, LifeMAEE, Assoc AIA

Dr. Hui is a Teaching Consultant and an Honorary Assistant Professor of the Department of Mechanical Engineering, The University of Hong Kong. He has a strong technical background in the study of energy efficiency in buildings and has carried out teaching, research and consultancy studies in Hong Kong, Mainland China, Germany, Japan, USA and Thailand. He has published more than 50 technical articles in academic/professional journals and conferences and is active in promoting interdisciplinary building energy and environmental research studies that integrate architectural design and sustainable building technology. He is currently the President of the ASHRAE Hong Kong Chapter.



Mr. William Yick

PE, RPE, BSc, MCIBSE, MHKIE

Mr. Yick is the Business Development Director of Johnson Controls, responsible for developing business plans for energy saving and IAQ solutions. A 30-plus year industry veteran, he joined Johnson Controls from Landis and Gyr, where he was general manager of Siemens Building Technologies from 1990 to 2001. During that time, he was responsible for managing the company's operations in Hong Kong and mainland China. Prior to joining Landis and Gyr, Mr. Yick held senior service management positions at both Honeywell Hong Kong and Honeywell Asia Pacific and was responsible for establishing the company's service operations in the region. Prior to joining Honeywell in 1980, he spent two years as a plant engineer at REF Automation, responsible for factory automation design and implementation. His first two years after graduation worked as a technical representative at Simplex. He holds a BSc in mechanical engineering from the University of Toronto and registered as a Professional Engineer of Ontario in 1978.



Language: English (supplemented with Cantonese)

Application: Open to all interested persons, but priority will be given to ASHRAE members. Please complete and return the application form by e-mail/post and send the crossed cheque via post before **4 April 2007**. Number of participants is limited. Places will be allocated on a first-come-first-served basis. Successful applicants will be informed individually by e-mail / phone.

Application Form: Technical Workshop on Fundamentals of HVAC Control Systems

Name (Dr/Mr/Mrs/Ms/Ir) : _____

ASHRAE Membership : Class: _____ No.: _____

Company/School Name : _____

Contact Address : _____

E-mail Address : (Required) _____

Contact Numbers : (Tel/Mobile) _____ (Fax) _____

Course Fee (Member of ASHRAE) - \$1,200 x _____ person (cheque no.: _____)

Course Fee (Student Member) - \$ 600 x _____ person (cheque no.: _____)

Course Fee (Non-Member) - \$1,600 x _____ person (cheque no.: _____)

Enquiries: For inquiries, please contact us at email info@ashrae.org.hk

Registration: The application form and crossed cheque with appropriate payment in Hong Kong dollars payable to "**ASHRAE Hong Kong Chapter**" shall be sent to **P.O. Box 35612, King's Road Post Office, North Point, Hong Kong**, before **4 April 2007**. The applicant may e-mail the above information to apply@ashrae.org.hk for place reservation and then followed by cheque payment via mail.