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**3** Mandatory CPD hours  
for BEAM Pro / BEAM Affiliate

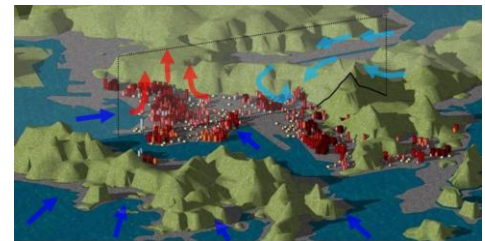
## Technical Seminar on Ventilation – from Neighbourhood to Indoors

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Date : 28 September 2017 (Thursday)  
Time : 9:30am - 12:30pm (Registration will start at 9:15am)  
Venue : Chamber 1b, Innocentre, 72 Tat Chee Avenue, Kowloon Tong

### Background

BEAM Plus Neighbourhood that launched in December 2016, is designed to assess project performance of a development project and help project owners to incorporate a broader framework of urban sustainability principles at the early planning stage for subsequent project implementation. In this assessment tool, outdoor environmental quality is concerned to safeguard the health, comfort or well-being of general public, as well as aspects of performance that improve quality and functionality. Good planning on neighbourhood and building ventilation can reduce the potential increase in urban heat island effect and provide sufficient quality of outdoor air provision for indoor built environment.



On the other hand, energy reduction and sufficient ventilation for indoor environmental quality are also concerned in other BEAM assessment tools (New Buildings, Existing Buildings & Interiors). In this technical seminar, two speakers will share their experiences on building and city ventilation in Hong Kong as well as more energy efficient and healthier approach to demand control ventilation.

### Session 1

## Too Hot? The Challenges and Opportunities of Building and City Ventilation in Hong Kong

Our city differs from those in Europe and Americas, and also in the rest of China or Asia as Hong Kong is one of the most compact and tallest. In the last decade, the high temperature events have occurred more frequently, but the wind in our city being significantly weakening, in addition to the persistent urban haze.

Based on the study on building and city ventilation in the past 17 years, the hypothesis has come that our high-rise and compact city offers not just challenges, but also opportunities to design our building and city climate right. The challenges can also arise from other aspects such as education and land supply. In term of building ventilation and air conditioning, room pressure design, difficulties of full commissioning, need of return to basic physics, and understanding how would our air-conditioned buildings perform in a passive

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mode will be discussed in this session. In term of city ventilation and climate, the importance of right building density and height, urban heat island circulation and how to minimize high temperature events will also be discussed.

### Speaker

## Yuguo Li

Professor and Associate Dean (Research) of Engineering  
The University of Hong Kong



Yuguo Li is a Professor and Associate Dean (research) of Engineering, former Head of Department of Mechanical Engineering, the University of Hong Kong. Li was a Principal Research Scientist and the team leader of indoor environments at CSIRO Australia prior to 2000 when he joined the University. He studied at Shanghai Jiaotong University, Tsinghua University Royal Institute of Technology, Sweden. His research interests are in building environment engineering.

His current research topics include city climate, environment studies of infection and indoor air quality. His work led to the findings of the roles played by airflow in the 2003 Amoy Gardens SARS outbreak. He led and developed the 2009 WHO guidelines on natural ventilation. He has been leading two collaborative research grants in Hong Kong with one on ventilating a high-rise compact city and another on spread of virus in a large city. His work has also been supported by GRC GRF, RFCID, NSFC, WHO, Boeing and Microsoft. He currently also serves as President, Academy of Fellows of International Society of Indoor Air Quality (ISIAQ). He received the Rydberg Gold Medal of SCANVAC in 2014, Honorary Doctor Degree of Aalborg University in 2015 and the Inoue Memorial Award, SHASE, Japan in 2016. He was elected a Fellow of ASHRAE, ISIAQ, HKIE, and IMechE.

### Session 2

## Healthy, Airside Solutions to Significantly Reduce Your Building's Carbon Footprint

In the face of significant energy costs and concerns over global warming, buildings are receiving increasing scrutiny to reduce their carbon footprint and cut their energy expenses while still being sustainable and providing a healthy indoor environment. For many buildings, outside air is the largest single driver of both a building's energy efficiency and its indoor environmental quality however the results of using such approaches as economizers and demand control ventilation to optimize outside air have been mixed at best. This session discusses and presents case studies on a new, more energy efficient and healthier approach to demand control ventilation as well as describes how economizers can be operated more reliably with greater energy efficiency in educational, commercial, and healthcare facilities.

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### Speaker

## **Gordon P. Sharp**

Distinguished Lecturer of ASHRAE



Mr. Sharp is the chairman of Aircuity, Inc. and has over 25 years of wide-ranging entrepreneurial experience and more than 25 U.S. patents in the fields of energy efficiency and laboratory controls. As founder, former president and CEO of Phoenix Controls, he led the development of this world leader in laboratory airflow controls that was acquired by Honeywell in 1998. The technologies invented by Mr. Sharp at Phoenix Controls are today saving over \$1.5 billion annually in energy use. In 2000, Mr. Sharp founded Aircuity, which was spun out of Honeywell and is a smart airside energy efficiency company.

Mr. Sharp is a graduate of MIT with bachelors and masters degrees in electrical engineering. He is Executive Vice President and a member of the board of directors of I2SL (International Institute for Sustainable Laboratories), the nonprofit foundation that operates the Labs21 conference. He is also a member of two important standards on ventilation: the ANSI/AIHA Standard Z9.5 Committee on Laboratory Ventilation and the ASHRAE SSPC 170 Committee on Ventilation of Health Care Facilities. He is also a voting member of ASHRAE technical committee TC9.10: Laboratory Systems and TC9.11: Clean Spaces/Cleanrooms.

Mr. Sharp is a frequent speaker at national and international conferences on the topics of energy efficiency in buildings and indoor environmental quality and has testified before the US Congress on the topics of climate change and energy efficiency.

Fee : HK\$600 (ASHRAE-HKC members, BEAM Pro, BEAM Affiliate & BSL Members)  
HK\$720 (Members of Supporting Organisations)  
HK\$900 (Standard)

Language : English

Deadline for Application : 22 September 2017

### Registration

Number of participants is limited and prior registration is required. Registration will be on a first-come-first-served basis (priority will be given to members of Organizers and Supporting Organisations). For registration, please complete the application form via the following "[On-Line Registration Link](#)". The deadline of application is on 22 September 2017. Successful members will be notified by e-mail on or before 26 September 2017, which has to be presented at the registry of the venue entrance for verification. If the applicants have not received the confirmation e-mail on or before 26 September 2017, their applications will be regarded as not successful.

**Members of Supporting Organisations – kindly note that we only accept registration by original application form and cheque payment. Sorry for any inconvenience caused.**

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The Organisers reserve the right to cancel, postpone or reschedule an event due to unforeseen circumstances, including low enrolment. Should a refund be appropriate, fee paid will be refunded within 30 days.

### Enquiry

For enquiry, please call 3610 5700 or email to [beampro.training@beamsociety.org.hk](mailto:beampro.training@beamsociety.org.hk).

Supporting Organisations:

