

Organizers:



**ASHRAE Distinguished Lecture Series:**  
**Burj Khalifa – The Tallest Building in the World**

Date : 7 Apr 2017 (Fri)  
Time : 7:00pm – 9:00pm (Registration will start at 6:30pm)  
Venue : N003, The Hong Kong Polytechnic University, Hung Hom

**Free of charge!**

**Seminar Highlights:**

This talk will focus on the design, construction, and post-occupancy of Burj Khalifa, the tallest building in the world. The tower’s design optimizes performance by anticipating how environmental factors change both in the desert climate and at different elevations. Special attention was paid to materials selection, how creep and shrinkage impacts water risers, etc. The tower features many innovative systems. Select systems include: a 460 psi chilled water system; an ice storage chilled water system; one of the world’s largest condensate recovery systems; stack effect monitoring and control; post-occupancy measurement of air contaminant levels; special balcony door sensors that inform occupants when air quality is ideal for opening the door; and a first-of-its-kind “lifeboat” elevator system that can provide controlled evacuation, among others.

**Honorable Speaker:**



**Luke Leung, P.E.**  
**Distinguished Lecturer of ASHRAE**  
**Director**  
**Skidmore, Owings & Merrill, United States**

Luke is a LEED (Leadership in Energy and Environmental Design) Fellow; He is also a Centennial Fellow from The Pennsylvania State University Architectural Engineering Department; Board of Directors for USGBC (United State Green Building Council), Illinois; Chairman of the ASHRAE (American Society of Heating, Refrigeration and Air Conditioning) Committee on “Tall Buildings”; Chairman of the Building Pressure Committee, Chicago Committee on High Rise Buildings; Sustainable Committee with Council on Tall Buildings and Urban Habitat; Part Time Professor at IIT; Member of the Chicago Sister Cities Program with China; MBA from University of Chicago, MS and BAE from Architectural Engineering at Penn State University.

Luke Leung is a Director of the Sustainability Engineering Studio for Skidmore, Owings and Merrill LLP. His work includes Burj Khalifa, the world’s current tallest man-made structure; Multiple times “Excellence in Engineering” award from the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE); 2 awards from National Institute of Building Sciences, among others. Selected projects also include Pertamina

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Tower (Net Zero Supertall), General Motors Global Headquarters, Roche Diagnostic in Indianapolis, Beijing Finance Street, Embassy of Ottawa in Canada, Embassy in Beijing, Lakeside – 55 million sq. ft. low energy development, a LEED Platinum building with the first large scale horizontal wind turbine in the city of Chicago; etc., and has served as a member of the editorial team for the CTBUH guide Natural Ventilation in High-Rise Office Buildings, ASHRAE “Design Guide for Tall, Supertall, Mega tall Building Systems”, among other publications.

Language: English

Fee: Free of charge

Remark: 2-hour CPD certificate will be provided.

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### Registration & Enquiry:

Open to all interested persons, but priority will be given to members of organizers. Number of participants is limited and prior registration is required. For registration, please complete Registration Form in the following "[On-Line Registration Link](#)". Only the applications from the members of Organizer will be accepted. The deadline of application is on 5 April 2017. Successful members will be notified by e-mail on or before 6 April 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 6 April 2017, their applications will be regarded as not successful.

If typhoon signal no. 8 or black rainstorm signal is in force and still hoisted after 5:00 pm of 7 April 2016, the talk would be cancelled without further arrangement or notification. For enquiry, please send e-mail to [patrick.huang@arup.com](mailto:patrick.huang@arup.com).

For enquiry, please contact Mr. Patrick Huang at 6077-2053 or email to [patrick.huang@arup.com](mailto:patrick.huang@arup.com)