

School of Civil and Building Engineering Research Seminar

Building environment and interunit dispersion in multistory buildings

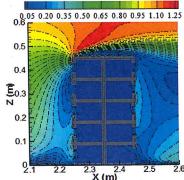
Speaker: Professor Cheuk Ming Mak, Department of Building

Services Engineering, Hong Kong Polytechnic University

Date/Time: **Tuesday 11-Jul-2017, 10.00 — 11.00**

Location: Fire Station (RT.0.25), Sir Frank Gibb Building, Loughborough University

Booking: Book your place at http://bit.ly/2rbuEw1 for refreshment purposes



Prof. Mak will introduce his research on building and urban environments and then focus on a numerical study using computational fluid dynamics (CFD). This study examines interunit dispersion characteristics in multistory buildings under windinduced, single-sided ventilation conditions, under the hypothesis that infectious respiratory aerosols exhausted from a unit can enter another unit in the same building through open windows. Since interunit dispersion was observed in Hong Kong during the 2003 outbreak of Severe Acute Respiratory Syndrome (SARS), it has

begun to attract significant attention. Understanding the mechanisms and routes of interunit dispersion is critically important in developing control measures and ventilation

strategies, especially in an urban environment like Hong Kong.

Biography: A Professor at HKPU and an Honorary Professor of the University of Hong Kong. A fellow of the Hong Kong Institution of Engineers with over 20 years' experience in numerical modelling of building environments. Research interests include acoustics, vibration, natural ventilation, inter-unit dispersion, urban wind comfort, indoor environmental quality, human comfort, CFD and building envelopes.



