

17 August 2016

**BSE Seminar: Ventilation of Residential Buildings in Hong Kong: Issues and Possibilities for Improvement on 12 August 2016**

A CPD seminar, which was supported by the Environment and Conservation Fund (ECF 23/2011) of the Hong Kong Government and the Department of Building Services Engineering (BSE) of The Hong Kong Polytechnic University (PolyU), was held on Friday, 12 August 2016.



**Professionals from building and construction industry joined the seminar**

This seminar has attracted about a hundred of students and professionals from building and construction industry who have interests in building envelope design and ventilation.

Professor MAK Cheuk-ming from the BSE Department and his postdoctoral fellow Dr. AI Zhengtao were responsible for the seminar presentations. The seminar was 1.5-hour long and intensive.

**Seminar Topic:** Ventilation of residential buildings in Hong Kong: issues and possibilities for improvement



**The speakers: Prof. MAK and Dr. AI**

In the seminar, the speakers introduced the importance of indoor air quality and ventilation of residential buildings as well as the objectives of their study. They talked about ventilation in air-conditioned and naturally ventilated residential buildings. Based on their study, several possible ventilation strategies for air-conditioned residential buildings were examined and the short-term mechanical ventilation strategy was recommended. Owing to the moderation of local wind field and the accumulation of traffic related pollutants in street canyons, low ventilation rates and penetration of outdoor pollutants are two key risks involved in naturally ventilated residential buildings. Some opening configurations were evaluated, suggesting that careful envelope design to adapt to the high-density urban environment is one of primary solutions to maximize the utilization of natural ventilation.



**Prof. MAK and Dr. AI shared their valuable insights to professionals**

The seminar has richly inspired professionals to a deeper understanding of building envelope design for ventilation of residential buildings. The results may help arouse professional's awareness of sustainable building design.