DEPARTMENT OF MECHANICAL ENGINEERING

SEMINAR

Co-Sponsored by ASHRAE Hong Kong Chapter

Title: SECONDARY IMPLICATIONS OF IN-DUCT AIR CLEANING:

A MORE HOLISTIC APPROACH

Speaker: Dr. Jeffrey Siegel

Associate Professor

J. Neils Thompson Centennial Teaching Fellow in Civil Engineering Department of Civil, Architectural and Environmental Engineering

The University of Texas at Austin

U.S.A.

Date: 12 March, 2012 (Monday)

Time: 11:00 a.m.

Venue: HW7-37, Haking Wong Building, HKU

As engineers who try and improve the indoor environment, we tend to have a hyperfocus on the efficiency, clean air delivery rate, capacity, and other performance metrics for air cleaning devices. Often, the secondary consequences are just as important as primary impacts and allow for more nuanced distinctions between air cleaners. In this talk, I focus on three recent and ongoing explorations of secondary impacts of HVAC in-duct air cleaning devices: the first focuses on the energy consequences of filters, the second focuses on ozone emission from electrically-connected air cleaners, and the third focuses on using DNA extracted from HVAC filters as a way to investigate the indoor microbiome. These projects are tied together by the idea that in order to have truly sustainable buildings, we should consider a more holistic approach to assessing air-cleaning devices.

ALL INTERESTED ARE WELCOME

For further information, please contact Prof. Y.G. Li at 2859 2625.