

International Exchange Meeting on Contaminant Dispersion around Human Scale to Building Scale

Hosted by : Wind Engineering Research Center, Tokyo Polytechnic University and IGSES, Kyushu University
Venue : Chikushi Campus, IGSES Kyushu University
Date : February 23-25, 2014

Objective

This international exchange meeting will provide an opportunity for the discussion of most recent scientific results on the contaminant dispersion around human body to building scale. The indoor environment can play a significant role in the transmission of and exposure to various contaminants. In the case of some emerging airborne transmission, such as those caused by influenza virus and tuberculosis virus, the airborne route of transmission is considered to be critically important for evaluating the health risk associated with exposure to contaminants. Thus, this international exchange meeting will provide a place for translating scientific evidence into strategies to direct future research. This international exchange meeting will cover a wide variety of major research topics- related contaminant dispersion. Topics include indoor and outdoor air pollution, computer simulated person, numerical modeling, theory and urban climatology.

Program

February 23, 2014

16:00 – 22:00 Ice Breaker & Discussion

February 24, 2014

10:00 – 10:40 Kazuhide Ito (Kyushu University, Japan)

Exposure Assessment based on Multi-Nesting Simulation Connecting Virtual Manikin with Respiratory Tract Model

10:40 – 11:20 Sangjin Kim (Jeonju University, Korea)

Basic Survey for Climate Map

11:20 – 12:00 Ryu-ichiro Yoshie (Tokyo Polytechnic University, Japan)

Reproduction of occurrence frequencies and vertical profiles of wind velocity by WRF calculation

12:00 – 13:00 Lunch break

13:00 – 13:40 Taeyeon Kim (Yonsei University, Korea)

Application of coupled simulation between BES-CFD for naturally ventilated residential buildings

13:40 – 14:20 Doosam Song (Sung kyun kwan University, Korea)

Introduction of Building Technology Research Unit

14:20 – 15:00 Coffee break

- 15:00 – 15:40 Tatsuya Hayashi (Chiba University, Japan)
Outline of CASBEE -Comprehensive Assessment System for Built Environment Efficiency-
- 15:40 – 16:20 Jeong Hoon Yang (Yeungnam University, Korea)
Measurement of Airflow of Air-Conditioning in a Car with PIV
- 16:20 – 17:00 Yasuyuki Shiraishi (The University of Kitakyushu, Japan)
Energy-Saving Effect of a Hybrid Air-Conditioning System Using Natural Ventilation in an Office Building with Flow Control Inlets and Outlets
- 17:00 – 18:30 Dinner break
- 18:30 – 19:10 Naoki Ikegaya (Kyushu University, Japan)
Wind-tunnel experiments for the modelling of scalar transfer from urban-like surfaces
- 19:10 – 19:50 Sung-Jun Yoo (Kyushu University, Japan)
Development of Computer Simulated Person with Thermo-Regulation and Numerical Airway Model
- 19:50 – 20:50 Discussion

February 25, 2014
Lab tour & Free