

## Seminar at the ASHRAE Winter meeting

A seminar on experimental and CFD benchmark studies of indoor air flow around thermal manikins will take place at the ASHRAE winter meeting in Chicago at the January 25.



Submission Information  
Participant Information

### Experimental and CFD Benchmark Studies of Indoor Air Flow around Thermal Manikins

Your Online Session ID # is 4801

Type: Seminar  
Meeting Site: Chicago  
Expected Attendance: 60  
Program Track: VAD  
Alternative Program Track: IAQ

New Engineers: New Engineers  
Rank: 5  
Technical Committee: 04.10  
Standing Committee:

Co-Sponsoring Committees:

#### Abstract:

Research centres around the world have developed many different configurations to represent a computer simulated person. The variation may reflect the various possibilities in software and different standards for persons from country to country. To support the development of a CFD manikin two benchmark tests for the boundary conditions around a CFD manikin are introduced. One test is for mixing ventilation and another for displacement ventilation. The seminar will show benchmark tests of CFD manikins, and the use of CFD manikins in other applications. Additional work and experiments with CFD manikins will also be presented.

#### Special Instructions:

#### Participants

- Nielsen, Peter V** Chair
- Srebric, Jelena** Speaker 1. *Simplified Physical and Numerical Modeling of Building Occupants*
- Yang, Xudong** Speaker 2. *Description of computer simulated persons (CSP) for simulating local airflow and personal exposure: how simple is too simple?*
- Bell, Brian** Speaker 3. *A Benchmark Study on the Effect of Simplified Representation of Human Figures in Computational Fluid Dynamics (CFD) Simulations.*
- Nilsson, Haakan O** Speaker 4. *Thermal Manikin Simulation Using Experimental Correlations and Clothing Independent Comfort Zone Diagrams*