

2004 SYRACUSE SYMPOSIUM
ON ENVIRONMENTAL
AND ENERGY SYSTEMS

OCTOBER 25-26, 2004

SUNDAY, OCTOBER 24, 2004

6:00pm Reception at The Erie Canal Museum 318 Erie Boulevard East, Syracuse

MONDAY, OCTOBER 25, 2004

All events at The Marx Hotel, 701 E. Genesee St., Syracuse

7:30am Registration and continental breakfast

8:15am Welcome Edward A. Bogucz, Syracuse CoE

8:30am Build green: Everyone profits

S. Richard Fedrizzi, US Green Building Council

9:15am Emerging technologies for high-performance buildings

Stephen Selkowitz, Lawrence Berkeley National Laboratory

10:15am Break

10:30am Oral synopses of poster presentations (see separate program)

12:00pm Poster Session and Lunch

1:30pm The Solaire and beyond: Green building at Battery Park City

Jim Cavanaugh, Hugh L. Carey Battery Park City Authority

1:55pm Costs and financial benefits of green buildings

Greg Kats, Capital E

2:20pm Discussion: Market demand for high-performance green buildings

2:45pm EPA program needs for indoor environment research

John Girman, US Environmental Protection Agency

3:30pm Break

3:45pm Oral synopses of poster presentations (see separate program)

Introduced by Michael Relyea, NYSTAR

5:20pm Poster Session and Reception

7:00pm Dinner (Horizons Room, top floor of main hotel)

7:45pm University as Public Good:

Opportunities for the Syracuse Center of Excellence

Nancy Cantor, Syracuse University

TUESDAY, OCTOBER 26, 2004

All events at The Marx Hotel, 701 E. Genesee St., Syracuse

7:30am Continental breakfast

8:15am Opening comments John J. Vasselli, NYIEQ Center

8:30am High-performance green buildings on a budget: Case studies

John Boecker, L. Robert Kimball & Associates

9:30am One Bryant Park: Case study

Robert Fox, Cook + Fox

10:15am Break

10:30am High-performance residential buildings

Steven Winter, Steven Winter Associates

11:15am Panel discussion: Visions for the Syracuse CoE Headquarters

12:00pm Lunch (Horizons Room, top floor of main hotel)

1:30pm NYIEQ Center Industry Roundtable: Green Winter™ Design—Unique aspects of high-performance buildings for cold climate environments

PROGRAM FOR ORAL SYNOPSES OF POSTER PRESENTATIONS: MORNING SESSION, OCT. 25

POSTERS DISPLAYED IN THE FAYETTEVILLE ROOM:

- 10:30am** **Intelligent Solar Facade System**
Anna Dyson, *Rensselaer Polytechnic Institute*
- 10:36am** **The Cornell University Solar Decathlon**
Stephanie T. Horowitz & Timothy Fu, *Cornell University*
- 10:42am** **Healthy and Quiet Classroom of the Future**
David Ashley, *Ashley McGraw Architects*
- 10:48am** **IEQ and Energy Benefits with an Enhanced Energy Recovery Ventilator**
Norberto Lemcoff, Frederick Cogswell, James A. Davies, Gregory Dobbs, *United Technologies Research Center*
- 10:54am** **Optimization of Comfort and Energy in Buildings**
Ian Cosden, Seckin Ari, H. Ezzat Khalifa, *Syracuse University*

POSTERS DISPLAYED IN THE POMPEY ROOM:

- 11:00am** **Measuring the Impact of Uncontrolled Air Flows (UAFs) in Commercial Buildings in NYS**
Hugh Henderson, *CDH Energy Corporation*, & Miao Yang, *Syracuse University*
- 11:06am** **Measurements and Modeling of VOC Emissions from a Large Wall Assembly of Typical Wood-Framed Residential Walls**
Hui Li, *Syracuse University*
- 11:12am** **Comparison Testing of Air Cleaners for Removing Multiple-Volatile Organic Compounds in Indoor Air**
Wenhao Chen, Jianshun S. Zhang, Zhibin Zhang, *Syracuse University*
- 11:18am** **"Q" Air Terminal Design Concept**
James Miller, *NuClimate Air Quality Systems, Inc.*
- 11:24am** **Ultrafine Particle Counter for Indoor Air Monitoring**
Jeffrey Ambs, *Rupprecht & Patashnick Company, Inc.*

POSTERS DISPLAYED IN THE DEWITT ROOM:

- 11:30am** **All-Optical Chemical Sensors for Harsh Environments**
Michael Carpenter, *University at Albany—SUNY*
- 11:36am** **Contaminant Alert System (CAS) Employing OrthoSwitch™ Biosensors**
Mark McPike, Bruce Hudson, *OrthoSystems, Inc.*
- 11:42am** **Development of Natural Abundance Stable Isotope Molecular Techniques to Trace Biological and Chemical Processes in Ecosystems**
Mark Teece, David Kiebe, *SUNY College of Environmental Science & Forestry*
- 11:48am** **Developing Sustainable Willow Biomass Crops for Bioproducts and Bioenergy**
Timothy Volk, L. Abrahamson, L. Smart, E. White, T. Amidon, A. Stipanovic, J. Nakas, *SUNY College of Environmental Science and Forestry*
- 11:54am** **Genetic Improvement of Shrub Willow (Salix) Crops for Bioenergy, Biofuels, and Bioproducts**
Lawrence Smart, Juan Lin, Richard Kopp, Ingrid Phillips, Kimberly Cameron, Timothy Volk, Lawrence Abrahamson, *SUNY College of Environmental Science and Forestry*

PROGRAM FOR ORAL SYNOPSES OF POSTER PRESENTATIONS: AFTERNOON SESSION, OCT. 25

POSTERS DISPLAYED IN THE FAYETTEVILLE ROOM:

- 3:48pm** **The Syracuse AUDIT Study of Risk Factors for Wheezing in the First Year of Life: Study Design and Preliminary Analysis of Outcomes**
J. Abraham, M. Czerwinski, J. Crawford, G. Hall, T. Hargrave, A. Hunt, S.D. Lane, CC. Liu, D. Naishadham, P. Rosenbaum, N. Webster
SUNY Upstate Medical University
- 3:54pm** **Survey of Fungi Found in the Syracuse AUDIT Homes**
S.E. Anagnost, C.M. Catranis, C.J.K. Wang, L. Zhang, A. Fernando, S. Morey, P. DeStefano, C. Garback, M. LaMoy, G. Hall, J.A. Crawford, D. Naishadham, A. Hunt, & J. Abraham, *SUNY College of Environmental Science and Forestry*
- 4:00pm** **Geographic Patterns of Lead and Zinc in House Dusts and Surface Soils of Syracuse, NY, USA** D. Johnson, J. Brooks, H. Stella Levinsohn, A. Hunt, S. Blount, S. Ellsworth, A. Lanciki, S. Lee, D.A. Griffith, *SUNY College of Environmental Science and Forestry*
- 4:06pm** **Development of a Microbial Risk Assessment Center of Excellence (MRACE) at Syracuse Research Corp. (SRC)**
Peg Coleman, Pat McGinnis, Mary Ann Tyszko, *Syracuse Research Corp.*
- 4:12pm** **Economic Analysis for Energy Recovery Ventilators (ERVs) in the United States and France** John Dannenhoffer, Pierre Graveleau, Olivier Heudre, H. Ezzat Khalifa, *Syracuse University*

POSTERS DISPLAYED IN THE POMPEY ROOM:

- 4:18pm** **Particulate Pollutant Transport in Indoor Air**
Kambiz Nazridous, Goodarz Ahmadi, *Clarkson University*
- 4:24pm** **Validation and Verification of CFD for the Personal Microenvironment: Benchmark Tests for a Computer Simulated Person**
Chris Sideroff, *Syracuse University*
- 4:30pm** **Exposure Control Using Low-dimensional Techniques Using PIV Measurement in the Breathing Zone** David Marr, *Syracuse University*
- 4:36pm** **On-Line Recording and *in situ* Verification Sampling of an "Allergy Friendly Room" Treatment Protocol** John (Jack) Barrett, Robert Baier, Robert Forsberg, & Prashant Nagathan, *University at Buffalo—SUNY*
- 4:42pm** **Event-Segmented Collection and Identification of Bioaerosols in a Busy Dental Clinic** Robert Forsberg, Robert Baier, Lance Ortman, Harvey Patashnick, William Rogers, *University at Buffalo—SUNY*
- 4:48pm** **Fugitive Particulates Dispersed with Hospital Medical Air**
Prashant Nagathan, R. Baier, R. Forsberg, T. Brown, B. Kanegsberg, E. Kanegsberg, *University at Buffalo—SUNY*
- 4:54pm** **Hospital Environmental Control Unit** Larry Wetzel, *Air Innovations*

POSTERS DISPLAYED IN THE DEWITT ROOM:

- 5:00pm** **Improving the Efficiency of Small Wind Turbines**
Ken Visser, *Clarkson University*
- 5:06pm** **Balancing Urban River Restoration for Ecologic and Flood Control Functions** Theodore Endreny, Donald Leopold, *SUNY College of Environ. Sci. and Forestry*
- 5:12pm** **New York's Near-Real-Time Surface Water Quality Monitoring Network** Steven Effler, David O'Donnell, *Upstate Freshwater Institute*