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U.S. Environmental Protection Agency



New York Indoor Environmental Quality Center, Inc.

Agenda

Monday October 27, 2003 Morning

7:30 AM REGISTRATION & CONTINENTAL BREAKFAST

8:15 AM WELCOME AND OPENING

Edward Bogucz, Dean, College of Engineering & Computer Science, Syracuse University

U.S. Rep. James Walsh

Russell Bessette, Director, New York State Office of Science, Technology and Academic Research (NYSTAR)

9:30 AM BREAK

9:40 AM SESSION 1: BUILT ENVIRONMENTAL SYSTEMS

Chair: Ezzat Khalifa, Environmental Quality Systems STAR Center, Syracuse University

9:40 AM **Environmental Control Challenges in Human Space Flight**

Christopher Poythress, Hamilton Sundstrand Space, Land & Sea

10:10 AM **Intelligent Control of Built Environmental Systems for Optimal Evacuation Planning**

Jianshun Zhang, Syracuse University

10:30 AM **Cold Plasma - An Exciting New Air Filtration Technology**

Alan Hedge, Cornell University & Czeslaw Golkowski, Super-Pulse

10:50 AM **Back to the Future: CO₂ HVAC Systems**

Tobias Sienel, United Technologies Research Center

11:10 AM **Active Building Envelope Technologies**

Steven Van Dessel, Rensselaer Polytechnic Institute

11:30 AM **Current Industry Protocols for Assessing and Mitigating Microbial Problems in Buildings**

Robert Krell, IAQ Technologies, Inc.

11:50 AM BOX LUNCH – *pick up lunch and return*

boards available for poster displays

Monday October 27, 2003 Afternoon

12:20 PM SESSION 2: HUMAN HEALTH AND PERFORMANCE

Chair: Kenneth Barker, Upstate Medical University

12:20 PM Health Effects of an Urban Disaster - The World Trade Center Attack

Robin Herbert, Mount Sinai School of Medicine

12:50 PM Cardiovascular Effects of Occupational and Environmental Particulate Exposure

Shannon Magari, Colden Corporation / Harvard University

1:10 PM The Syracuse AUDIT Study: Assessment of Urban Dwellings for Indoor Toxics: Overview and Update

Jerrold Abraham, Upstate Medical University

1:20 PM Assessment of Exposure to Indoor Environmental Factors for an Infant Cohort at Risk for Asthma

Catharine Catranis, SUNY - College of Environmental Science and Forestry

1:32 PM Exposure to Indoor Particulate Matter (PM) and Environmental Tobacco Smoke (ETS) During the First Year of Life for a Birth Cohort at Risk for Asthma Development

Andrew Hunt, Upstate New York Specialist Environmental Consulting

1:55 PM Respirable Insulation Fibers in Lung Tissue: 6-Dimensional Analysis by Confocal Microscopy and Spectroscopy

Robert Baier, University at Buffalo

2:15 PM SESSION 3: EXPOSURE AND RISK ASSESSMENT

Chair: Philip Goodrum, Syracuse Research Corporation

2:15 PM Risk-based Vulnerability Assessment of Commercial Buildings to Intentional Introduction of Chemical and Biological Agents

Swiatoslav Kaczmar, O'Brien & Gere Companies

2:35 PM Practical Management Strategies for Reducing Risks of Exposure to Indoor Air Pollutants

Joseph Laquatra, Cornell University

2:55 PM Comparison of Biological Activity of Size-Segregated Aerosol Samples

Lupita Montoya, Rensselaer Polytechnic Institute

3:15 PM An Examination of Aerobiological Pathways of Indoor Allergen Inhalation Exposure

James Freihaut, The Pennsylvania State University

3:35 PM Contributions to the Personal Cloud in Indoor Residential Environments

Andrea Ferro, Clarkson University

3:55 PM BREAK

4:05 PM SESSION 4: URBAN ECOSYSTEMS

Chair: Philip Hopke, Clarkson University

4:05 PM An Introduction to the Ambient Monitoring Strategy

Richard Scheffe, U.S. Environmental Protection Agency

4:35 PM Characterization of PM_{2.5} Air Quality and Sources in New York

Kenneth Demerjian, University at Albany

4:55 PM Effect of Suburban Development on Water Quality in the Croton Watershed of New York

Myron Mitchell, SUNY - College of Environmental Science and Forestry

5:15 PM Nitrogen Pollution in the Northeastern United States: Sources, Effects and Management Options

Charles Driscoll, Syracuse University

5:35 PM SHAARQ - A Buoy-Deployable System for Real-Time Sensing and Time-Resolved Sampling of Chemical Contaminants in Water

John Hassett, SUNY - College of Environmental Science and Forestry

6:00 PM COCKTAIL RECEPTION - RESEARCH POSTERS & INDUSTRY DISPLAYS

7:00 PM DINNER

EPA Indoor Environments Research Needs

Frank Princiotta, Director

Air Pollution Prevention and Control Division, U.S. Environmental Protection Agency

8:30 PM ADJOURN DAY ONE

Tuesday October 28, 2003

7:30 AM LATE REGISTRATION & CONTINENTAL BREAKFAST

8:00 AM SESSION 5: ENERGY AND EFFICIENCY

Chair: Eric Spina, Syracuse University

8:00 AM Molten Carbonate Fuel Cell Demonstration and Research at the SUNY - College of Environmental Science and Forestry

Cornelius Murphy, SUNY - College of Environmental Science and Forestry

8:20 AM Waste Heat Power Recovery Using Refrigeration Equipment

Joost Brasz, Carrier Corporation

8:40 AM Cooling, Heating and Power (CHP) Systems: High-Efficiency, Low-Emissions Alternatives to Grid Power

Timothy Wagner, United Technologies Research Center

9:00 AM Measured Performance for a Supermarket Combined Heat and Power System

Hugh Henderson, CDH Energy Corporation

9:20 AM SESSION 6: EXPERIMENTAL AND ANALYTICAL METHODS

Chair: Mark Glauser, Syracuse University

9:20 AM A Miniature Aerosol Sizing Instrument for Diesel Particle Measurements

Suresh Dhaniyala, Clarkson University

9:40 AM A Study of Air Flow and Emission Transport in Street Canyons

Goodarz Ahmadi, Clarkson University

10:00 AM Development of Chemical Sensors for Harsh Environments

Michael Carpenter, University at Albany

10:20 AM On Velocity Measurements in the Breathing Zone of a Thermal Breathing Manikin

David Marr, Syracuse University

10:40 AM A Centralized Source of Measured Indoor Air Pollutant Concentrations and Supporting Information

Steven Swarts, Syracuse Research Corporation

11:00 AM BREAK

11:10 AM SESSION 7: COMMERCIALIZATION

Chair: John Vasselli, NYIEQ

11:10 AM Overview of NYIEQ Technology Transfer and Commercialization Initiatives

John Vasselli, NYIEQ

11:40 AM Commercializing PCR-Based Mold Detection

Richard Kopp, Galson Laboratories

12 :00 AM Findings and Progress Related to the Commercialization of a Patented Air Safety Process

Paul Chirayath, FailSafe Air Safety Systems Corporation

12:20 AM Commercialization Assistance Program (CAP) III Announcement

William Magnarelli, New York State Assemblyman

12:30 PM LUNCHEON

New Visions for Green Buildings: Biomimicry and Biophilia

William Browning, Principal and Founder

Green Development Services, Rocky Mountain Institute

2:00 PM REFLECTIONS

Edward Bogucz, Syracuse University

2:15 PM ADJOURN DAY TWO