

**Call for Papers** 

F. Source Apportionment

I. Related Topics (Plenary Sessions)

G. Models & Modeling

H. Policy Implications

# **PM Supersites Program & Related Studies An International Specialty Conference**

An International Specialty Conference Sponsored by the American Association for Aerosol Research

February 7 – 11, 2005 Sheraton Atlanta Hotel Atlanta, Georgia *Conference Chair:* Paul A. Solomon, US EPA solomon.paul@epa.gov

## **General Topic Areas**

- A. Measurement Methods
- B. Emissions
- C. Deposition
- D. Measurements and Characterization
- E. Atmospheric Processes and Chemistry

## INSTRUCTIONS FOR PREPARING AND SUBMITTING AN ABSTRACT

All abstracts MUST be submitted electronically at **www.AAAR.org**. Questions regarding the mechanics of abstract submission should be addressed to:

Louise Yeager University of California, Irvine abstracts@turina3.eng.uci.edu

Department of Mechanical Engineering Irvine, CA 92697 Phone: (949) 824-5406 • Fax: (949) 824-8585

### **Online Submission Process**

Submit abstracts interactively via the internet by accessing the 2005 Supersites Program abstract link through **www.AAAR.org.** 

### **Abstract Procedures**

- 1. Abstract Preparation: Abstracts should not be more than 500 words, in English. Please follow the abstract instructions on the website.
- 2. In addition, you will be asked to include a separate up to 100 word overview of your abstract, which will be used by the reviewers to be sure your abstract is in the correct session.
- 3. All abstracts will be posted on the AAAR website for viewing after the meeting. When submitting your abstract, please be sure to choose oral or poster.

- 4. Co-author Approval: Ensure that all co-authors approve of the abstract submission, publication, and potential presentation.
- 5. Abstract Review: Abstracts will be reviewed by the AAAR Executive Technical Program Committee, along with the conference chair. All presenting authors will be notified by November 2004. Presenting authors are required to attend the conference.
- 6. Changes to Abstracts: If you must make a minor change to your submitted abstract, this may be done by October 22, 2004. Any corrections and/or changes will not be accepted after this date.
- 7. Abstract Receipt Confirmation: You will receive an email confirmation immediately following the submission of your abstract. If you do not receive a confirmation for your abstract within 24 hours, or if you have questions, please contact Louise Yeager at (949) 824-5406 or e-mail abstracts@turina3.eng.uci.edu.

### **DATES TO REMEMBER**

October 22, 2004 - Abstract Submission Deadline November 17, 2004 - Preliminary Program Posted on AAAR Web Site

December 17, 2004 - Early Bird Registration Deadline January 3, 2005 - Final Program Posted on AAAR Web Site January 17, 2005 - Advanced Registration Deadline/Registrations received after this date will be processed at the on-site registration fee January 24, 2005 - Abstracts Posted on AAAR Web Site February 7-11, 2005 - AAAR PM Supersites Program &

Related Studies (Walk-in registrations accepted)



Deadline for Electronic Abstract Submission: October 22, 2004

## **Specific Topic Areas**

Please note you will be asked to indicate your 1st & 2nd preferences for topic areas listed below. You will also be asked to choose from poster or oral presentation.

## A. Measurement Methods

- 1. Integrated Sampling and Analytical Methods for Inorganic Components
- Continuous Methods for Particulate Mass PM2.5 & PMcoarse: Development, Evaluations, and Comparison to FRM or Proposed FRM
- 3. Continuous Methods for Chemical Components of Mass: Development and Evaluations
- 4. Gas Phase Precursor Methods (HNO3, NH3, NO, NO2, CO2, CO, SO2, VOC): Development and Evaluations
- 5. Ultrafine PM: Methods for Mass and Composition
- 6. Size Distribution Methods (number, size, density)
- 7. Carbonaceous Aerosols: Sampling and Analytical Methods and Measurements
  - a. Organic and Elemental Carbon
  - b. Organic Speciation
  - c. Primary and Secondary Organic Aerosols
  - d. Anthropogenic vs Biogenic Organic Aerosols
  - e. Semi-Volatile Components
- 8. Aerosol Water (Methods)
- 9. Methods for Sampling Clouds and Fogs for Composition
- 10. Optical and Remote Sensing Methods and Measurements
- 11. Methods for Toxic Particulate Pollutants
- 12. Particle Mass Spectrometers

## **B.** Emissions

- 1. Emissions Estimates: Methods, Measurements, and Modeling Systems
- 2. Emissions Inventory Verification: Top-down and Bottom-up
- 3. Ammonia Emissions Estimates and Inventories

## C. Deposition

- 1. Deposition of PM and PM Precursors
- 2. Dry Deposition Of Total Nitrogen—Next Steps For Improving Quantification

## D. Measurements & Characterization

- 1. PM Mass Closure: Advances and Assumptions
- 2. Fine and Coarse PM Mass and Composition: Spatial and Temporal Variability
- 3. Local and Regional Aerosols and Their Influence on Rural and Urban PM Levels (or Local Aerosol Concentrations and Influence of Regional Aerosols)
- 4. Ultrafine PM: Spatial and Temporal Variability
- 5. Vertical Distribution of PM and PM Components
- 6. Size Distribution Measurements and Assumptions (number, size, density)
- 7. Aerosol Water (Measurements)
- 8. Comparison of Data Among National Monitoring Networks
- 9. Representativeness of Air Quality and Meteorological Measurements
- 10. Measurements of Toxic Particulate Pollutants

#### E. Atmospheric Processes & Chemistry

- 1. PM Concentrations Influence of Precursors (NOx, SO2, NH3, VOC, & SVOC)
- 2. Role of Oxidants in Aerosol Formation
- 3. Role of Atmospheric Aerosol Acidity in Aerosol Formation
- 4. Ammonia: Role in Atmospheric Processes for PM Formation
- 5. Influence of Fogs and Clouds on PM Concentrations
- 6. Limiting Reagents in the SO2, NO2, and NH3 System (Processes)
- 7. Influence of Meteorology on Accumulation of PM
- 8. Conceptual Models of PM By Geographic Regions

## F. Source Apportionment

- 1. Source Apportionment using Advanced Receptor Methods
- 2. Identifying Diesel Signatures
- 3. Identifying The Impact Of Fires
- 4. Application of Single Particle Methods
- 5. Application of Continuous Methods

## G. Models & Modeling

- 1. Emissions Based Modeling: Performance Evaluation Results and Application
- 2. Limiting Reagents in the SO2, NO2, and NH3 System (Modeling)
- 3. Advances in Modeling Semi-Volatile Components in Atmospheric Aerosols
- 4. Observation Based Modeling Methods and Results
- 5. Regional Transport and the Influence of Boundary Conditions (Modeling)
- 6. Meteorological Modeling: State of the Art Advances

## H. Policy Implications

- 1. Relationship of Ozone, PM, and Regional Haze
- 2. Estimating Uncertainties in Measurements and Modeling Results
- 3. Approaches to Attaining the PM2.5 NAAQS
- 4. Recommendations for state and local monitoring network design to support SIP development
- 5. The relationship of short-term peaks to NAAQS attainment and to SIP development
- 6. Are emissions management strategies providing the expected reductions?
- 7. PM and Visibility/Regional Haze

## I. Related Topics (Plenary Sessions)

- 1. Health Effects (Daniel Greenbaum, Health Effects Institute)
- 2. Regulations (John Bachmann, EPA)
- 3. Global Climate Change (Jeffrey Gaffney, Argonne National Laboratory)

## Purpose and Scope of the Conference

The primary purpose of the conference is to disseminate results from the Particulate Matter (PM) Supersites Program and other air quality methods, measurements, data analysis, and modeling programs that have taken place over the last half decade or so to key stake holders in the public and private sectors. This conference also will provide information that would ultimately reduce uncertainties in our understanding of atmospheric PM accumulation on urban and regional scales and to allow for the development of effective emissions management programs to reduce the impact of PM related pollution on humans and ecosystems.

This is an international conference and while the major focus will be PM Supersites Program & Related Studies in the US and Canada, abstracts from other parts of the world, such as: Europe, Asia and South America are encouraged! Please assist in soliciting papers from your colleagues across the globe.

### **Target Audience**

Air quality managers and scientists at the state, local, regional, and Federal levels, private industry and industrial agencies, academic scientists, and others interested in reducing uncertainties in our understanding of atmospheric PM accumulation in urban and regional environments.

#### Registration

Conference registrations will be accepted on-line at **www.AAAR.org** beginning October 2004.

#### Accommodations/Travel

Hotel and airline information will be available on the AAAR website by September 2004

### **Special Issues**

Presenters are strongly encouraged to submit papers to the special journal issues associated with this conference. The publications committee and publications policy will be posted well in advance of the meeting. Papers for the special issues will be due in April 2005. Currently, four journals are under consideration for special issues:

Aerosol Science & Technology Atmospheric Environment J. Geophysical Research – Atmospheres Journal of Applied Meteorology

#### Executive Technical Program Committee

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### AAAR PM Supersites Conference Sponsors (As of May 2004)

The American Association for Aerosol Research gratefully acknowledges the generous support of the following sponsors of the 2005 AAAR PM Supersites Program & Related Studies Conference.

- Air & Waste Management Association (A&WMA)
- California Air Resources Board
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**October 22, 2004** 

