PARTICULARS

Newsletter of the American Association for Aerosol Research Spring 2005

2005 AAAR PM Supersites Conference

February 7-11, 2005 was an exciting time for AAAR as the Association continued to move forward into the 21st century with its second International Specialty Conference. The conference, held in Atlanta, Ga. was entitled "PM Supersites Program and Related Studies." The meeting was very successful with AAAR hosting nearly 400 scientists, air quality managers and policy makers from a wide range of key stakeholders. They included representatives from state, local, regional and federal agencies; academia; the private sector and others interested in reducing uncertainties in our understanding of atmospheric PM accumulation in urban and regional environments. Meeting attendees came from 19 countries including South America, Asia, India, Canada, and Mexico. The 340 presentations were split between platform (2/3) and poster (1/3). The scope of the presentations was broad. It included the first part of the NRC paradigm covering the fate of aerosols and related species from source-to-receptor through modeling and data analysis, and completing the cycle by tying concentrations observed at receptors back to their source contributions. A major theme was the policy implications of these results, as well.

The meeting included five plenary sessions, one each morning of the conference. Mr. John Bachmann of the U.S. EPA, Office of Air Quality Planning and Standards (OAQPS), opened the meeting with the history of nearly everything. Beginning with the Big Bang, Mr. Bachmann made it to about 1995 when he ran out of time. Next, Mr. Jeff Holmstead, Assistant Administrator for the Office of Air and Radiation (OAR), provided an EPA perspective to air quality management in the U.S. and discussed how the efforts conducted through the Supersites Program and related programs support these efforts. Mr. Dan Greenbaum, President of the Health Effects Institute, provided a historical perspective on progress that has been made since 1997 with understanding PM and health effects. Mr. Greenbaum indicated there appears to be no single PM component adversely impacting health, and therefore, we must continue to look at all of the components of the entire mixture. Dr. Jeff Gaffney then related aerosols and global climate change indicating the shift in viewpoint from single city pollution (e.g., Los Angeles, Calif.) to regional smog to global smog as populations grow and cities move from isolated urban centers to mega-cities. Finally, four of the Supersites Program principal investigators provided preliminary answers to four of the science/policy relevant questions being addressed in the Supersites Program and Related Studies Key and Policy Relevant Findings Synthesis. The meeting was rounded out with an exhibition that included 11 of the key aerosol measurement companies in the U.S.

Several key themes ran through the meeting from the results that were presented:

1. Time resolved mass, and chemical and physical characteristics of PM: Measurements of mass, particle density, aerosol water, major and minor chemical components in the bulk aerosol, and size distribution data including chemical components are all now possible with averaging times ranging for a few seconds for some to hourly averages. The development and thorough evaluation of these methods over the last half-decade or so and their application in major research efforts have provided significant advances to our understanding of atmospheric processes and source-receptor relationships. The continuous measurement of nearly artifact-free aerosol mass now appears possible and likely ready for use in routine monitoring networks.

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

2005 AAAR PM Supersites (continued from page 1)

2. Particle Mass Spectrometers: This is a special class of continuous methods that has advanced significantly over the last 5-10 years. Single particle mass spectrometers are providing detailed chemical data of single particles from 3 nm to 2 um in diameter, now almost routinely in research studies. Aerosol mass spectrometers (AMS) provide detailed quantitative size and composition information on very short time scales and are becoming widely applied in research studies. Results from both types of instruments provide key pieces of data for understanding processes and evaluating air quality models and have given us for the first time a clear picture of ultrafine particles and associated chemistry.

3. Size Distribution Measurements: Measurements of size distributions from 3 nm to 10 µm are now available by methods that appear to be ready for use in routine monitoring networks. While not providing chemical data as given by the particle mass spectrometers, they are cost effective and provide additional information on sources and atmospheric processing of aerosols. Applications also include the measurement of aerosol water.

4. Speciation of Organic Carbon: Methods are advancing for the sampling and analysis of the individual organic carbon species in aerosols. Advances include measurements of polar organic compounds, use of smaller sample sizes and faster throughput, the potential measurement by particle mass spectrometers, and expansion of the number of species measured and available for use in receptor type modeling efforts and for evaluating emissions based models.

5. Modeling: Evaluation and application of both Chemical Transport Models and their modules and receptor models were described. Advances over the last half-decade include receptor models that use ambient data to identify sources without the need for emissions data from each source type, and the importance of additional tracer species that allow for the apportionment of a variety of sources, including a clear separation of gas and diesel source impacts.

Five of the top atmospheric science journals have been chosen for special journal issues to support the publication of results from this international conference. Tentative titles and authors' lists were due in March, and papers must be submitted by April 27, 2005. Late papers will be considered but must catch up with papers submitted on time to be included in the special issues. All journals will follow their standard submission and peer-review process. Please see the publications policy listed at the top of the opening page at www.AAAR.org.

AAAR would like to thank participation from the following vendors whose involvement in the meeting allowed attendees to examine hands-on the latest and greatest aerosol measurement equipment available on the market today:

BGI Incorporated
Grimm Technologies Inc.
Magee Scientific Co.
Met One Instruments
New Star Environmental
Particle Instruments LLC
RJ Lee Group Inc.
Rupprecht & Patashnick Co. Inc.
Thermo Electron Corp.
Tisch Environmental Inc.
TSI Incorporated

AAAR would also like to thank the generous support from the following sponsors. Many of the special touches at the meeting would not have been realized without their support, including the low registration fee; travel grants, a number of which went to students; the special journal issues that are in process; and the sumptuous food that always seemed to be available.

- **Air Quality Processes Research Division, Meteorological Service of Canada**
- **American Petroleum Institute**
- **California Air Resources Board (CARB)**
- **Department of Energy, National Energy Technology Laboratory (NETL)**
- **Electric Power Research Institute (EPRI)**
- **Mid-Atlantic Regional Air Management Association (MARAMA)**
- **NARSTO**
- **National Oceanic and Atmospheric Administration (NOAA)**
- **National Science Foundation, Atmospheric Chemistry Program (NSF)**
- **New York State Energy Research and Development Authority (NYSERDA)**
- **Oak Ridge Associated Universities (ORAU)**
- **Pacific Northwest National Laboratory (PNNL)**
- **Southern Company**
- **U.S. Environmental Protection Agency (EPA), OAQPS and ORD**

As Conference Chair, I would personally like to thank the Executive Steering Committee, Executive Technical

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2005 Annual Conference

The 24th annual AAAR conference will be held from October 17 to October 21, 2005 at the Hilton Hotel in Austin, Texas. The conference will begin with a day of tutorials, covering basic aerosol science and a range of specialized cutting edge topics. In addition to the regular technical and plenary sessions, six specialty symposia are planned:

- International Consortium for Atmospheric Research on Transport and Transformation (ICARTT) study
- Delivery and biological effects of inhaled particles
- Combining multiple data sources and models to create an accurate, global-scale aerosol picture
- Aviation emissions-Aircraft Particulate Emissions Experiment (APEX) and related studies
- Aerosols and homeland security
- Aerosols in-cabin and in other micro-environments

Abstracts are due on **April 25** and can be submitted electronically from the AAAR Web site (www.AAAR.org). Late breaking posters will be accepted until September 2.

The Hilton Austin is located in downtown Austin, four blocks from the riverfront. The hotel is next to the entertainment district (6th Street and Warehouse District) and a number of attractions like the Capitol Building, the Texas Historical Museum, and the Lyndon Johnson Presidential Library. Hilton Austin has 800 rooms each equipped with high speed and wireless Internet service, two restaurants, and a coffee shop. Room reservations must be made by **September 16**.

Austin has a temperate year-round climate and 300 days of sunshine a year. It is located at the center of the Lone Star State, next to the Texas Hill Country and the Highland Lakes. Nature trails, parks, and wilderness preserves are part of the center of the city. Town Lake (four blocks from Hilton Austin) bisects the center of downtown and is bordered by 10 miles of hike-and-bike trails. For a unique experience one can visit the Congress Avenue Bridge where approximately 1.5 million Mexican free-tail bats live. The view of the nocturnal creatures emerging from beneath the bridge after sunset is truly memorable.

The most important aspect of every AAAR conference is your participation in the event. I would like to encourage you to submit your aerosol-related work for presentation at this meeting. I hope that you will extend this invitation to others who work in related topics but might not have previously attended our conference. I look forward to seeing you in Austin!

Spyros Pandis, Conference Chair

2005 AAAR PM Supersites (continued from page 2)

Program Committee, and the General Technical Program Committee for their support in planning and implementing the conference. I also would like to thank the staff of Association Headquarters for helping make this a great meeting. A few individuals deserve special notice as their efforts were key to the success of this conference. These individuals include: Tony Wexler, conference liaison; Phil Hopke, 2004 AAAR President; Sonia Kreidenweis, 2005 AAAR President; Susanne Hering and Donald Dabdub for organizing the abstract submission process to the final program and abstract books (available online at www.AAAR.org); and the chairs of the Student Assistant and Exhibit Committees, Tony Miguel and Tom Merrifield, respectively. The Publications Committee is now in place and future appreciation is given to their upcoming efforts in assisting with the special journal issues. The lead guest editors on the publications committee include Beth Wittig (AE), Charlie Stanier (JGR), Michael Geller (AS&T), Judy Chow (JAWMA), and Paul Solomon (JAM). The Supersites Program PIs also played key roles throughout the process and their efforts are appreciated. Finally, I thank all of those that attended the meeting and gave excellent presentations, for this meeting was about you and for you, and you are the ones who truly made it a success.

Paul A. Solomon
Conference Chair

Letter from the Editor

By Mike Hannigan, Editor

After receiving little response to my previous editorial, which will be referred to as "The Poetic Call to Arms" from this point forward, I promised to throw that idea in the editorial trashcan. The problem is … I spent last Thursday judging the Boulder Valley School District Science Fair. I know that several of you have spent time judging at your offspring's school science fair, so you know the range of impressions: "Wow, his parents spent a lot of time on that!"; "How can a 10-year old figure out the math describing why tire spokes sometimes appear to be rotating backwards on TV?"; "Not another trebuchet!"; "I wish I understood circuits half as well as this 13-yr old!"

At that age, I was thinking about playing soccer or tormenting my siblings. I enjoyed math and science classes, but there was no way that I actually wanted to do any of it outside of class. These young scientists, mathematicians, and engineers are many steps beyond where we were at their age. They are using computational tools that some of us can't use now, and they have incredible access to informational resources. SO, what's my point? Wouldn't you love to walk into your daughter's school science fair and happen across a project titled, "Particles Cool the Planet," which measured the absorbance of aerosols generated from combustion of different types of stuff? Information about aerosol origins, impacts, and characterization exist, but a public-friendly clearing house would really help connect our work to those who are impacted by aerosols (i.e., everyone). We should be the leaders in such an activity. So, why only two responses to "The Poetic Call to Arms?" I see three possibilities.

Possibility 1. You (the reader) are already spending 60 hours/week studying aerosols, and you can't imagine finding more time. After all, you have your own public (kids, spouses, significant others, cats, dogs, iguanas, etc…) to worry about.
Possibility 2. You don't care about reaching out to Joe Q. Public. You are studying aerosols only because they are cool, and you don't have any interest in connecting to those scary neighbors across the street (their dog only goes in your yard, so who wants to help them).
Possibility 3. Nobody reads the Letter to the Editor in Particulars.

Even though **Possibility 2** is likely true for some, I reject it for most of us. "The Poetic Call to Arms" was not directed to those folks, but meant to give them some helpers. After all, some folks are out there connecting our aerosol work to the public. Let me give two brief examples, and I know there must be more. Susanne Herring spent an inordinate amount of time writing parts to the EPA PM Criteria document, which serves to inform public policy – this is a thankless task. Toni Miguel is going to spend a good chunk of his summer in Hong Kong teaching a course about aerosols, specifically the U.S. experiences in understanding the health impacts and mitigation.

Possibility 1 is definitely a serious possibility. The solution to not having enough time is … change the rotation rate of the planet. No, the solution is … generate resources that will enable us to provide this connection to the public as part of our daily workload. This is feasible, and is happening (for example, those who work at NCAR are asked to make this 'outreach' part of their mission). I would love to hear from any of you with ideas about outreach resources.

Truly, the most likely is **Possibility 3**. That puts the work back on me – I have to step up to the plate. So how do we (the editorial staff) increase readership? On this front, well, we are at least trying to produce a newsletter worth reading. Advertising – except by word-of-mouth – isn't an option given our editorial staff budget ($0). We could throw a contest. Yeah, right. Hey, wait a minute – that is a great idea…Let's have a contest; something fun, something easy, and something that doesn't take much time. I got it – let's have a limerick contest! SO, to the seven of you actually reading this, could you please spread the word about the 2005 Aerosol Limerick Contest? Read on for details.

The 2005 Aerosol Limerick Contest.

Winner:
The winner, and two runner-ups, will get their limerick published (in the Summer 2005 issue of Particulars)! AND, I will personally buy the winner a drink of their choice at the 2005 Annual Conference in Austin.
Rules:
(a) You must write a limerick that has something to do with aerosols.
(b) You can submit up to 3 limericks.
(c) Limericks are due June 21.
(d) A team of 5 judges will evaluate the limericks based on format, content, and humor.

Limerick Format:
Every limerick consists of 5 lines. Lines 1, 2, and 5 rhyme, and each has 8 or 9 syllables. Lines 3 and 4 rhyme, and each has 6 syllables.

Example (my first entry):
If You Please
Bioaerosols make me wheeze.
You can find them on every breeze.
From the flu to pollen,
They're comin' callin'.
So cover your mouth when you sneeze.

Send all entries to me via e-mail (hannigan@colorado.edu). I am looking forward to reading some quality work (and generating a few more of my own). So go for it!

Sincerely,
Mike Hannigan

A Message From The President

Sonia Kreidenweis • 2004 - 2005

I am pleased to report to you a number of significant milestones since our last issue.

First, we had a very stimulating and successful Spring Meeting in Atlanta in early February. Congratulations and thanks to Dr. Paul Solomon and his Organizing Committee for excellent technical sessions, great opportunities for scientific and social interactions, and an all-around superb meeting. Many thanks also to Association Headquarters for their support, especially their tireless efforts to ensure everything ran smoothly.

Second, although we are still awaiting our final annual audit for 2004, our current records indicate that AAAR is operating well in the black, and we're making good progress toward our financial reserve goals. I thank Treasurer Lara Gundel, past Treasurer Beverly Cohen, and their Finance Committees for their diligence in helping AAAR maintain a sound financial footing.

Third, as you will note from a related article, I am pleased to report that the AAAR-ISAM Thomas Mercer Joint Prize is the recipient of a generous contribution from the Mercer Family Foundation. Starting this year, the family of Thomas Mercer will be contributing annually towards the prize amount, helping ensure its continuity and prestige. We thank the Mercer Family Foundation most sincerely for their generosity!

Looking ahead, Dr. Spyros Pandis has been working hard behind the scenes in early preparations for the 2005 meeting. As you'll see, there are a number of exciting symposia planned to complement our usual broad-ranging program areas. Please mark your calendars for October 17-21, and don't forget to submit your abstract on our Web site www.AAAR.org! I look forward to seeing you in October.

2nd International Symposium on Nanotechnology

AAAR is co-sponsoring the 2nd International Symposium on Nanotechnology and Occupational Health, Radisson Hotel Metrodome, Minneapolis, MN, October 3-6, 2005. The Symposium will be the premier global meeting of 2005 addressing the potential implications and applications of nanotechnologies in the workplace. The first day of the Symposium will be dedicated to tutorials, the second and the third day to platform and poster sessions for submitted abstracts, and the fourth day to an industrial forum addressing issues of practical interest to the nanotechnology industry at large. The deadline for early registration is August 1, 2005. Please check www.cce.umn.edu/nanotechnology for Symposium details.

David Y.H. Pui and Andrew Maynard
Conference Co-Chairs

2nd International Symposium on Nanotechnology and Occupational Health

Industry News

Thermo Electron

In late January of this year, Thermo Electron Corporation announced the launch of its iSeries line of gaseous pollutant analyzers. This line, with monitoring capabilities for a broad range of gaseous pollutants, was introduced to enhance the capabilities of Thermo's cSeries line of analyzers and to respond to compliance-related needs.

The rapid industrialization of developing nations has placed an increased emphasis on the necessity to monitor global air quality which insures the well being of both people and the environment. Furthermore, via the Kyoto Protocol, climatologists and international government bodies are working to promote the reduction of harmful emissions, otherwise known as greenhouse gases, in the atmosphere. By providing accurate and reliable measurements for both urban air quality monitoring and stack gas emissions monitoring, the iSeries is the first line of defense in this global challenge to improve air quality.

Thermo Electron has been serving the regulatory and industrial safety communities with dependable monitoring solutions since 1970, and dating back to the original Clean Air Act. Deriving from a wealth of experience and customer input, Thermo's new line of products combine rugged, plant-proven components, advanced electronics, and operator friendly software with a flexible, easy-to-service package that establishes a new benchmark for gas analysis instrumentation. With added features like Ethernet Connectivity, Flash Memory, Programmable Soft Keys and Captive Thumbscrew Component Mounting, the iSeries is now easier to interface, easier to maintain and easier to use.

Key enhancements made to the iSeries line of analyzers include:

New Ethernet Port – Built-in Ethernet connectivity enables easy networking with existing control and data management systems, as well as convenient remote access allowing for system status review from any Internet connection.

Product Commonality – The new analyzers contain fewer parts and, from one gas to another, share a similar design, user interface and many common components making them easier to service and easier to train. Once a user becomes familiar with a single instrument, system conformity allows for familiarity with the entire line.

Easier User Interaction – A larger, more intuitive display and redesigned interface results in easier operation. With fast, intuitive navigation and simple, menu-driven programming, the software is easy to learn, even for inexperienced operators.

Enhanced I/O functionality - New connectivity capabilities make it easy to integrate iSeries instruments into various plant operations and data management systems. The new line of instruments are also compatible with Thermo's earlier generation analyzers allowing for easy fit into current monitoring systems.

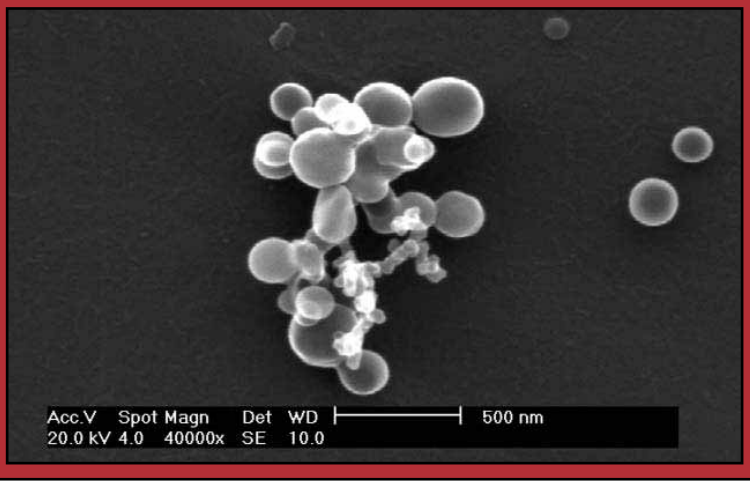
For more information on the iSeries gaseous pollutant analyzers or any other Thermo air quality instruments, please visit www.thermo.com/iseries.

Aerosols In The Spotlight

SEM image of tar balls (amorphous carbon spheres) aggregated with a soot (small spherical agglomerate) chain. Sample taken during a biomass burning event from the 2002 Yosemite Aerosol Characterization Study.

Courtesy of: Jenny Hand (CSU), Alex Laskin (PNNL), and Bill Malm (NPS)

Colorado State University, Pacific Northwest National Lab, National Park Service



"Frontiers in Aerosol Dosimetry Research"

A Two-Day Conference Emphasizing
Smoking Products, Nanoparticles, Complex Aerosols &
Computational Fluid Dynamic Modeling Approaches

Call for Papers

Purpose of the Conference

Significant advances have been made in estimating internal doses from inhaled aerosol particles and gases. Such advances include the sophistication of predictive mathematical models, the application of computational fluid dynamics (CFD) approaches to aerosol dosimetry, and the introduction of biomarkers of exposure. Yet, many aspects of aerosol dosimetry research require further development and improvement. Complex and new aerosol systems have not been well examined; validation of CFD predictions are lagging; extrapolations between laboratory models and environmental exposures require new advances; and the interpretation of biomarkers of exposure is still uncertain. This two-day conference will address these issues by bringing together specialists from diverse disciplines. The topics to be addressed are varied, but each is related to advancing the understanding of doses received from inhaled aerosols.

October 24 & 25, 2005
The Beckman Center of the National Academies
Irvine, California
(2 miles from the John Wayne, SNA Airport)

Sample Paper Topics Include:

- Tobacco Smoke Chemistry, Inhalation & Internal Distribution
- Potential Reduced Exposure Tobacco Products
- In Vitro & Animal Model Dose Extrapolations
- Biomarkers of Aerosol Inhalation Exposure
- Target Tissues for Inhaled Aerosols
- Nanoparticle Characteristics, Inhalation & Translocation
- Physical & Chemical Behavior of Complex Aerosols
- Highly Concentrated/Complex Aerosol Inhalation
- Computational Fluid Dynamics Model Development & Validation

The Conference Program Committee is now accepting abstracts for consideration for inclusion in the Program. Abstracts should be 200-300 words in length. Include a title and all authors with their affiliations. Provide corresponding author's address, email, phone and fax. Word or PDF files with 12 pt font are preferable. Send abstracts to rfphalen@uci.edu as soon as possible, but no later than **June 24, 2005**. Full papers for peer review will be due six weeks after the conference.

For advance registration ($175 USD) details, contact Conference Administrator, Susan Akhavan (sakhavan@uci.edu).

Program Committee: Robert Phalen & Michael Oldham (UC Irvine); Christopher Coggins (Carson Watts Consulting); Donald Gardner (Journal of *Inhalation Toxicology*); Lara Gundel (Lawrence Berkeley National Lab); William Hinds (UCLA); Mark Hoover (NIOSH); Ted Martonen (U.S. EPA); Michael Schum (California EPA); Bruce Westerberg (Battelle Science & Technology International).

Sponsors: University of California Tobacco-Related Disease Research Program; National Institute for Occupational Safety and Health; others pending.

11/30/04

In Case You Missed It...

In mid-December 2004, the U.S. Environmental Protection Agency released the first $PM_{2.5}$ air quality standard attainment/non-attainment designations. While ambient fine particle levels have improved recently, approximately one third of all Americans still live in non-attainment areas for the new standard. As for review of this standard, the EPA Staff Paper summarizing the PM Criteria Document is in the revision phase; hopefully, we will have some news by the next newsletter. Further information and related links are available at www.epa.gov/pmdesignations/.

Could the residential combustion of biofuels really be globally important source of aerosol black carbon? In a recent paper in *Science*, Venkataraman and colleagues answer, "Yes." An analysis of the emissions from residential biofuel combustion showed that these emissions contain relatively more BC than other biomass combustion sources like wildfires. Combining their measured emission factors with estimates of residential biofuel, the authors show that residential biofuel combustion is the largest source of BC in India (Venkataraman et al (4 March 2005). *Science*, **307**, 1454 – 1456.).

In January 2005, the Interim Report on the Committee on Changes in New Source Review Programs for Stationary Sources of Air Pollutants was released on the National Academy of Science's Web site (www.nap.edu/catalog/11208.html). This report includes an overview of relevant background information and describes the methodology that will be used by the Committee to evaluate recently proposed changes in the New Source Review program in their final report (scheduled for the end of 2005).

A recent study conducted in the Boston area suggests that two drugs normally taken for some heart problems and high blood pressure – calcium channel-blockers and beta-blockers – can at least partially mitigate the association of elevated O_3 and $PM_{2.5}$ ambient concentrations with adverse changes in heart rate variability (Park *et al* (2005). *Environmental Health Perspectives*, **113**(3), 304 – 309. Available online at http://ehp.niehs.nih.gov/members/2004/7447/7447.html).

What component (or which source) of $PM_{2.5}$ is causing the observed adverse health effects? We may be trying to answer this one for a while. A review article that focused specifically on addressing our current state of knowledge with regard to one $PM_{2.5}$ component, sulfate, was published in January. It sounds like we will be hearing a lot about this topic in the not-so-distant future (Grahame and Schlesinger (2005) *Inhalation Toxicology*, **17**, 15-27.).

The 2005 Aerosol Limerick Contest is underway. Check out the Letter to the Editor in this issue of *Particulars* for more details.

If you have suggestions for interesting highlights that would fit in this section, please send them to Mike Hannigan (hannigan@colorado.edu).

Calendar of Events

April 19-21, 2005
Symposium on Air Quality Measurement Methods and Technology
San Francisco, California
www.awma.org/events/confs/Measurements/default3.asp

May 21-26, 2005
AIHce 2005 - Celebrating Innovation
The Premier Conference and Exposition for OEHS Professionals
Co-Sponsored by AIHA and ACGIH(r)
Anaheim, California
www.aiha.org/aihce.htm

July 12-14, 2005
Third TICs and TIMs Symposium
Richmond Convention Center,
Richmond, Virginia
www.ticsandtims.com

August 13-16, 2005
Particles 2005 Conference on Surface Modification in Particle Technology
San Francisco, California
nanoparticles.org/Particles2005/

August 28 - September 2, 2005
European Aerosol Conference 2005 (EAC 2005)
Ghent, Belgium
www.EAC2005.be

October 3-6, 2005
2nd International Symposium on Nanotechnology and Occupational Health
Minneapolis, MN
www.cce.umn.edu/nanotechnology

October 17-21, 2005
Annual Conference
Austin, TX
www.aaar.org

International Aerosol Conference Planning in Full Swing (AAAR will turn 25!)

The 7th International Aerosol Conference will be held in St. Paul, Minn. between September 10 to 15, 2006. AAAR (www.aaar.org) will be sponsoring and hosting the Conference on behalf of the International Aerosol Research Assembly (www.iara.org). Planning for the Conference is in full swing by members of the Advisory, Organizational, and Technical Program Committees who come from AAAR, and several member nations of the IARA. The Technical Program Committee, consisting of 36 members, will soon start discussions about a Conference Technical Program that will highlight the broad spectrum of fundamentals and application areas of aerosol science and engineering. There will be tutorials on topical areas presented by noted scientists, plenary lectures, special symposia, and poster and platform sessions.

Landmark Center
Located in downtown Saint Paul.

This is a very special year for AAAR – it will mark our 25th Anniversary, and will be the 25th Annual Conference that will be organized. Hence, we hope to organize some activities that will mark the Silver Jubilee of AAAR. Please mark your calendars and look out for updated information on the AAAR Web site.

Key dates:
1. Call for Papers: September 1, 2005
2. Abstracts Due: February 1, 2006
3. Notification to Authors: May 1, 2006
4. Early Bird Registration Deadline: June 15, 2006
5. 7th International Aerosol Conference, September 10-15, 2006

David Y.H. Pui, University of Minnesota, Conference Co-Chair

Gilmore J. Sem, TSI Incorporated, Conference Co-Chair

Pratim Biswas, Washington University in St. Louis, Technical Program Co-Chair

Da-Ren Chen, Washington University in St. Louis, Technical Program Co-Chai

* Globe courtesy of NASA/JPL-Caltech

PARTICULARS

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Who's Who at the AAAR Office

AAAR staff is here to help with any and all questions you may have on the association, benefits, dues, the annual conference and more. Office hours are Monday - Friday 8:30 AM – 5:00 PM (EST). Phone calls and e-mails are typically answered within 24 hours.

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AAAR 2004-2005 BOARD OF DIRECTORS

CAREER OPPORTUNITIES IN AEROSOL RESEARCH

S. C. Johnson & Son, Inc.
Post Doctoral Fellow, Research Development & Engineering Division

Department of Medicine at the New Jersey Medical School-UMDNJ
Post Doctoral Fellow, The Center for Emerging and Re-Emerging Pathogens

Midwest Research Institute
Aerosol Engineering Manager

Quantum Resources
Post Doctoral Research Fellow Aerosol Research

Please visit **www.aaar.org/career.htm** for a complete description of these postings and more.

To post a job opening on the AAAR website (and a short version in the newsletter), please submit a description of the job electronically by e-mail or in an ACSII text file to AAAR (e-mail: info@aaar.org). The price is $150 U.S. for a maximum of 200 words. The posting will remain as long as needed, up to six months. Please send a check (payable to the AAAR) to AAAR, Attn: Deanna Bright, 17000 Commerce Parkway, Suite C, Mt. Laurel, NJ 08054, and note that this is payment for a job posting on the AAAR Web Site. Sorry, we are not able to accept resumes.

Welcome New Members

As of March 15, 2005

Aynul Bari, MD. *
University Of Stuttgart, (IVD)

Michael Barna
National Park Services

Martin Fierz
Fachhochschule Aargua
Institut Fuer Sensoren Und Signale

Dr. Amy E. Gildemeister
Clarkson University

Brittany Goodenow
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Ontario Ministry Of Environment

Mr. William Lindsley
NIOSH

Michael Potter
Hach Homeland Security Technologies

Patricia Reuther
Battelle Memorial Institute

Rick D. Saylor
Atmospheric Research & Analysis, Inc.

James Stutler
JHU APL

George Talbert
Texas Air Research Center

Chao Wei *
University Of Iowa

Kenneth J. Welch
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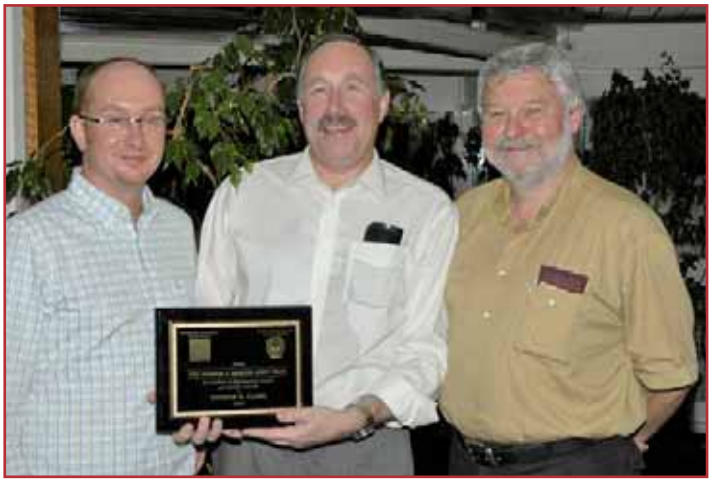
** signifies student members*

A "Merciful" Addition

The American Association for Aerosol Research (AAAR) and the International Society for Aerosols in Medicine (ISAM) are pleased to announce an exciting change in the Thomas T. Mercer Joint Prize. The award honors the legacy of Thomas T. Mercer, an outstanding researcher and author whose work encompassed aerosol physics and chemistry as well as inhalation toxicology, industrial hygiene, and health physics. Thanks to generous support by the Mercer Family Foundation, the award amount for the Mercer Prize has been substantially increased beginning with the award made at the ISAM meeting in Perth, Australia, March 14-18, 2005.

As the recipient of the 2005 award, Dr. Andrew Clark was chosen as a result of his work as an accomplished scientist with extensive experience in the fields of aerosol science and pharmaceutical inhalation science. He has headed pharmaceutical research and development groups at Fison Pharmaceuticals, Genentech, and Nektar Therapeutics, where he currently acts as a Senior Fellow and Chief Scientist. Dr. Clark has been characterized as someone who is extremely fast at deducing problems and solutions, very practical, and quite talented at leading research teams.

Thomas Mercer was born in Victoria, British Columbia, Canada in 1920. He received a degree in Physics and Chemistry after World War II from San Jose College and became an Instructor at the University of Washington. In 1955, he started his graduate studies at the Industrial Hygiene-Health Physics Program at the University of Rochester, during which he worked in the laboratory of Dr. C. N. Davies in London. He returned to Rochester to complete his Ph.D. in 1957, authoring several papers on particle charging and precipitation and on airborne decay products of radon. Dr. Mercer then served as head of the Radiation Dosimetry Section of the U.S. Naval Radiological Defense Laboratory until 1960. In 1960, Dr. Mercer was appointed head of the Department of Aerosol



Left to right: Johannes Wildhaber (Chairman ISAM Awards Committee), Andy Clark (winner of the 2005 Mercer Award) and Wolfgang Kreyling (President ISAM Board) at the ISAM meeting in Perth, Australia

Physics at the Lovelace Foundation in Albuquerque. He returned to Rochester in 1965 and published numerous additional papers and the 1973 monograph Aerosol Technology in Hazard Evaluation. Dr. Mercer "personified the laboratory scientist," undertaking "efficient, quantitative experiments" to characterize instruments used in biomedical aerosol research including cascade impactors and nebulizers (Dahneke and Morrow, JAS 24: 705, 1993.). Dr. Mercer was known for his pragmatism, modesty, and dry wit. The Thomas T. Mercer Joint Prize was established in 1993 to recognize excellence in the areas of medicinal aerosols and inhalable materials. The descendants of Thomas T. Mercer have recently founded a charitable foundation, the Mercer Family Foundation, which will be funding the increases in the award amount on an annual basis.