

PARTICULARS

Newsletter of the American Association for Aerosol Research

Winter 2004

2004 Annual Conference *Biggest and Best Yet!*

Things are winding down after one of the largest AAAR meetings ever! This year, we had more than 700 conference attendees, 242 oral presentations, 361 poster presentations, and 38 late breaking posters. The high quality of our technical program was mainly the result of the efforts of the technical program committee, which includes the working group and symposium chairs. These hardworking folks did a great job, from promoting the conference to drumming up excellent abstracts, putting together exciting sessions, and, in the home stretch, working with me to minimize gaps in the program. Thanks everyone! We had 421 tutorial attendees, including the student session assistants who attended tutorials in exchange for volunteering their time. Thanks to Mike Bergin for putting together this year's tutorial program! We continue to increase our number of exhibitors, with 25 this year. Thanks to Tom Merrifield for his efforts to boost exhibitor participation. Thanks go also to our plenary speakers. What a way to start the day!

Behind the scenes, the Association Headquarters staff did a great job, and special thanks go to Rebecca Storti, our fearless Meeting Manager as well as Susanne Hering and Donald Dabdub for their efforts to ensure the abstract submission and publication process went smoothly.

The 1-minute poster previews continued this year, and, with the help of our session chairs who gamely took on the responsibility of compiling the files beforehand, and the student session assistants, things ran smoothly for the most part.

The membership committee initiated two activities with the goal of increasing the feeling of 'connectivity' amongst our members: an international-themed dinner, and a discussion session for early career aerosol researchers.

Sponsorship for the conference continues to increase, with the Electric Power Research Institute, Southern Company, the International Society for Aerosols in Medicine, the EPA, Eli Lilly, TSI, NOAA, and Quant Technologies contributing a total of more than \$30,000 towards conference expenses. Their generosity helped to improve the quality of the meeting, while keeping the increase in registration fees to a minimum.

Most importantly, this year as in past years, poster and oral sessions were extremely well-attended, and all available tables and chairs were filled with people involved in animated discussions, (mostly about science), between sessions, at the receptions, during lunch breaks, and into the evenings. This continues to be the premier meeting for those engaged in aerosol research and I am happy to have been a part of it. Best wishes to next year's conference planners! See you in Austin in 2005!

Sheryl Ehrman
2004 Conference Chair



2004 Annual Conference (continued)



*Phil Hopke and 2004 Conference Chair
Sheryl Ehrman*



*Incoming President Sonia Kreidenweis thanks
Phil Hopke for his service as President*



*Plenary Speaker, A.G. (Ted) Russell, presents
"Particulate Matter Modeling and Reconciling
PM Source Apportionment Methods"*



Attendees enjoy the Scientific Sessions



*Tuesday Plenary speaker and ISAM
President Wolfgang Kriewing*



*Plenary Speaker, Michael Zachariah,
presents "Studying the Reactivity of
Nanoaerosols"*

2004 Annual Conference Award Receipts



Friedlander Award recipient Peter Adams



*Award Cmte Chair George Mulholland,
Benjamin Liu and 2004 Liu Award Recipients
John Jayne and Douglas Worsnop*



*Igor Gonda(L), Mercer Joint Prize
Recipient with Jim Blanchard(R), who
nominated Gonda for the Prize*



*Phil Hopke, 2004 Sinclair Award Recipient
and Award Cmte Chair George Mulholland*



*Rodney Weber(L) 2004 Whitby Award
Recipient with Award Cmte Chair
George Mulholland(R)*



*Sheldon Freidlander(L) with 2004
Friedlander Award Recipient Peter Adams(R)*

2005 AAAR International Specialty Conference, Atlanta, GA, February 7-11

By Paul A. Solomon, Conference Chair (solomon.paul@epa.gov)

Planning for the 2005 AAAR PM Supersites Program and Related Studies International Specialty Conference is well underway. I want to thank you for all the great contributions that will help make this conference the landmark PM meeting of the decade. The abstract submission deadline has come and gone and we received over 325 abstracts by that date. However, it is not too late to get your abstract and presentation included in the conference. **LATE BREAKING ABSTRACTS will be accepted though January 6, 2005.** Most will be included as posters. Please remember to submit your abstract via the web at www.AAAR.org.

The conference is being held at the Sheraton Atlanta Hotel in downtown Atlanta, GA. It will begin on Monday February 7, 2005 about 10 AM and conclude at 1 PM on Friday. Five Plenary sessions are planned, one each morning. They will cover related topics to the meeting, but expand beyond PM implementation needs to include talks on Health Effects (Daniel Greenbaum, Health Effects Institute), Regulations (John Bachmann, US EPA), Global Climate Change (Jeffrey Gaffney, Argonne National Laboratory), and a single extended plenary by Supersites Program PIs addressing four of the most relevant science / policy relevant questions associated with the Supersites Program Synthesis to be prepared over the next 1.5 years. The opening plenary session speakers are TBD, and suggestions are welcome at this time. The conference also will include three poster sessions, a vendor's exhibit as is customary at AAAR meetings, and two evening receptions that will be coordinated with additional poster viewing and the exhibit.

I encourage all of you to attend and keep in mind the important registration dates listed below. State and regional personnel are strongly encouraged to attend. This meeting is focused on providing 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 pass this along to your colleagues

across the globe.

Presenters are strongly encouraged to submit papers to the special journal issues associated with this conference. The Publications Policy is posted on the web at www.AAAR.org.

Papers for the special issues will be due in April 2005. Currently, five journals are under consideration for special issues: Aerosol Science & Technology; Atmospheric Environment; Journal of Geophysical Research – Atmospheres; Journal of Applied Meteorology; and Journal of the Air & Waste Management Association.

Dates To Remember:

Early Bird Registration: \$400

(On or before December 24, 2004)

Advance: \$575 (December 25, 2004 - January 17, 2005)

On-site: \$675

Student Early Bird: \$75

(On or before December 24, 2004)

Student Advance: \$150

(December 25, 2004 - January 17, 2005)

Student On-site: \$225

Late Breaking Abstracts Due: January 6, 2005

Hotel Group Rate: Available through Wednesday, January 5, 2005. Limited government rates are available also. Please make reservations directly with the hotel, the Sheraton Atlanta Hotel (1.800.833.8624).

As AAAR continues to move into the 21st Century it is your continued support through your membership with the association and through participation in conferences such as this that will continue to help AAAR grow stronger. I look forward to your participation in the 2005 AAAR PM Supersites Program and Related Studies International Specialty Conference. Please visit www.AAAR.org for additional information on this conference and the association.



Letter from the Editor

By Mike Hannigan, Editor



*Note to Susanne Hering:
Never ask Hannigan to be involved
when there is a chance that he will
eventually become the guy that gets to
write anything he wants.*

WHO WANTS TO READ ANOTHER PARTICLE ARTICLE?

*You know you care
about the air
and the smoke
that makes you choke
and the dust
that may cause rust
and the haze that can put you in a daze.
But, who has the time?
(Wait you don't have time,
not even time for a rhyme?)
You say, "tick, tock
goes the clock."
Bear with me for a few.
Sit back in your pew
cause I get to make a plea
to you and to me.
Don't just measure, model, size and speciate,
Share, talk, and communicate.
Yes, educate!
No, not just each other,
but my brother and your mother.*

We hear, too often, that science and technology scare the public or that the public has lost faith in, or respect for, science. After all, everyone seems to be able to trot out an expert that proves their point. In Science, we are continually reading editorials about the strained connection between our work and decision making. Although these editorials are written about policy makers, the same can often be said of the individual's decision

making. For example, I was speaking to my sister last year about her take on climate change. She is an educated professional that went to college in Boulder, so you might guess what her take was. Sadly, her take was basically that of the average sound byte; "not entirely sure global warming is real." That take is scary, and not simply because it is the opposite of what a large group of climate scientists says, but because it keeps us from discussing the link between our actions and their impacts. We (the readers of this newsletter) all know that if we stopped burning stuff, man-made climate change would stop. But, most of the public does not know that. And, it may take some persistence on our part before the public listens. I am not advocating a 'solution to climate change', but merely the need for us to help the public understand our work. (See [Making the Most of Science](#) for an interesting and short read about these issues.)

So, yes, in my first editorial you are actually getting a pep talk. I know I am not always a great example, but come on, let's build and maintain stronger ties to John Q. Public. How? Ideas come floating down like the snowflakes outside my window. We could do it in an organized manner – say build a public-friendly Aerosols web portal. Can you imagine your seventh grader writing a report about the 'indirect effect' with our help? OK, maybe too ambitious. Certainly we could all maintain public-friendly web sites that describe our work in the broad sense. Certainly we could all offer to give talks to the community, at schools, libraries, retirement communities Or, imagine a poster that qualitatively describes the size distribution and its significance residing in a high school science class room.

OK, I will stop. Please feel free to send me your snowflakes (i.e., ideas about getting our work to the public – see my attempt at metaphor in previous paragraph.) Or, maybe you know of some great, already up-and-running applications that more of us could use. If anybody reads this and actually sends me something, I will use this space in upcoming issues to follow up.

And, don't forget, (oops, slipped back into rhyme, I regret) only you can make this newsletter better.

Sincerely,
Mike Hannigan

PS. (Wait, can you postscript an editorial? HA, HA, I can do anything, I am the editor!) The AAAR International Specialty Conference is going to be awesome – GO!

A Message From The President

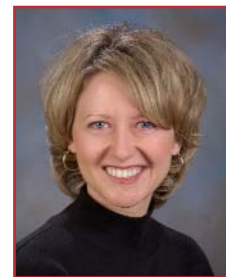
Sonia Kreidenweis • November 2004

I am pleased to write my first message to the membership of the AAAR as your new President. First, I would again like to thank Dr. Phil Hopke for his leadership during the past year. He has worked tirelessly on behalf of AAAR, particularly in strengthening our ties with the International Society for Aerosols in Medicine (ISAM), initiating new fundraising opportunities, and ensuring AAAR continues to closely monitor costs and revenues to bring us back on a sound financial footing. These focus areas are ones I'll be continuing over the coming year, and I am indeed fortunate to be following in Phil's footsteps.

Dr. Beverly Cohen completed her term as Treasurer in October. Under Beverly's capable leadership, AAAR revised our investment strategy and also chose a new investment advisor. I am most appreciative of her efforts on AAAR's behalf, and welcome her successor, Dr. Lara Gundel. Dr. Evan Whitby continues to serve as Secretary of the AAAR. In October, Dr. Tony Wexler moved into the Vice President position, Dr. Pratim Biswas was elected Vice-President-Elect, and Dr. Yung Sung Cheng was elected Secretary-Elect. We thank outgoing Board members Dr. Lynn Russell, Dr. Shelly Miller, and Dr. Yung Sung Cheng for their years of service, and welcome Dr. Kaarle Hameri, Dr. Lupita Montoya, and Dr. Kimberly Prather to the Board. I very much look forward to working with all of you and appreciate the time you volunteer to AAAR!

Indeed, AAAR's greatest strength is the generosity of our membership in donating their time and energy to the Association and its initiatives. In particular, the role of Conference Chair is a time-consuming and critical one. Dr. Sheryl Ehrman did a terrific job ensuring that our 2004 Annual Meeting in Atlanta was an outstanding one. Thanks to Sheryl and her conference team for putting together an excellent program that attracted over 700 registrants and a record number of exhibit booths. Tutorials were also well attended. I extend a special thanks to the students who volunteered as session assistants and provided support to tutorial speakers and session chairs throughout the week. We also are grateful to our staff at Association Headquarters, particularly meeting manager Rebecca Storti and her staff, who worked incredibly hard before and during the meeting to ensure everything ran as smoothly as planned.

The year ahead is an exciting one for AAAR. We are sponsoring two meetings in 2005: the International Specialty Conference on Particulate Matter Supersites Program and Related Studies, to be held February 7-11, 2005 at the Sheraton Atlanta Hotel, in Atlanta, GA. Dr. Paul Solomon is serving as Conference Chair, and late-breaking abstracts are being accepted through January 6. (Please see related articles in this issue for more details.) Our 2005 Annual Meeting will be held at the Hilton Austin in Austin, TX, October 17-21. Chair Dr. Spyros Pandis and his Conference Committee are presently soliciting ideas for special topics and sessions. This is a great time to get involved with one of AAAR's Working Groups if you have not already done so – contact information can be found at <http://www.aaar.org/whoswho.htm>.



AAAR continues to strengthen its ties to ISAM. We have formed a committee charged with examining ways to foster collaborations. In October, AAAR, ISAM, Eli Lilly and the EPA jointly sponsored a special symposium on Microdosimetry & Targeting of Inhaled Particles and Drug Aerosols, organized by Dr. Chong Kim and Dr. James Blanchard. The Symposium was enthusiastically received, and plans are underway for continuing a series of sessions of interest to both AAAR and ISAM members. ISAM's 15th International Congress will be held in Perth, Australia, March 14-18, 2005. The Thomas T. Mercer Joint Prize, co-founded and -sponsored by AAAR and ISAM, will be presented at that meeting. Nominations are being accepted through December 31. Please see <http://www.aaar.org/awards2.htm> for information on how to submit a nomination.

Another first in 2004 was the institution of a formal program of conference sponsorship, implemented by the Board to raise funds to help keep conference registration costs as low as possible. I am very pleased to thank TSI Incorporated (Platinum Sponsor), the National Oceanic and Atmospheric Administration (NOAA) Gold Sponsor, and Quant Technologies (Silver Sponsor) for their generous support. In addition, we thank EPRI, Southern Company, and the EPA for their symposium sponsorships.

Finally, the Board is endeavoring to increase awareness of our Awards Program and the aerosol pioneers that the named awards honor. For the first time in Atlanta, we assembled a display in the Poster and Exhibits Area with highlights from the careers of each honored scientist. In 2004, we chose as a special focus our first-established award, the David Sinclair Award. You may have noticed the chart showing our fundraising goal for 2004 for the Sinclair Award, and I am happy to report that we came very close to meeting this goal though the generous donations of members and matching funds from the Board. We hope over the next few years to increase the funding levels in each award, with a view toward ensuring they will be self-sustaining over the long term, and thereby will continue to be a cherished means of honoring both the early leaders of our field and those who are making significant contributions in the present day.

I am confident that AAAR will continue to move ahead with its mission of promoting and communicating technical advances in the many fields of aerosol research. We are receiving responsive and valued management support from Association Headquarters, and I especially acknowledge and appreciate the efforts of our Executive Director, Amy Williams, our past Executive Director, Libby McDannell, and their assistant, Deanna Bright. Your Board is committed to serving you, our members, and we look forward to working to continue AAAR's tradition of excellence through the coming year.

Sincerely,

Sonia Kreidenweis

Industry News

MSP CORPORATION

Early this year, MSP Corporation announced the promotion of Dr. Daryl Roberts to Vice President from Senior Manager in recognition of his many contributions to the company. Dr. Roberts was instrumental in establishing MSP as the leading producer of products used by pharmaceutical companies world-wide for testing aerosol drug delivery products (metered-dose and dry-powder inhalers) for treatment of asthma and other diseases. Dr. Roberts received his Ph.D. in Chemical Engineering from Caltech under Prof. Sheldon Friedlander, and had many years of contract research experience at SRI International.

With the completion of the Wide-Range Particle Spectrometer (WPSTM) and the new Moudi-II and NanoMoudi-II products, MSP has now established itself as the leading producer of wide-range aerosol instruments. These instruments are used for particle counting and sizing from 10nm to 10,000nm (WPSTM) and for collecting size-fractionated particle samples from 10nm to 18,000nm in diameter (Moudi-II and NanoMoudi-II).

MSP is located in Shoreview, Minnesota.



New Aethalometer™ Module for the TEOM Monitor Measures Black Carbon

Magee Scientific and Rupprecht & Patashnick (R&P) have combined efforts to launch the Aethalometer Module for the TEOM monitor. During the past several years, Magee's Aethalometer technology has become the most popular approach for measuring the black

carbon contained in ambient fine particulate matter (PM). Aethalometer instruments have figured prominently in numerous scientific investigations requiring continuous, high resolution carbon PM data.

The new Aethalometer Module can be used with any newly purchased TEOM monitor, and with any of the 5,000 TEOM ambient particulate monitors in use worldwide. The add-on attaches easily to the bypass flow line of any TEOM monitor that operates at 1 m³/h, and does not require any specialized installation equipment.

Information generated by the Aethalometer Module is integrated into the data handling capabilities of the TEOM monitor. With the module installed, the combined TEOM-Aethalometer system reports and stores black carbon data concurrently with the continuous PM mass concentration data from the TEOM monitor. Please visit the R&P web site at www.rpco.com for further information.

AMS Center Testing New Technology Category

Testing is underway for three rapid polymerase chain reaction (PCR) technologies to evaluate their ability to detect specific biological agents and pathogens in water, which are particularly toxic to humans and can also be susceptible to interferences in some drinking water systems. The technologies being tested were submitted by:

R.A.P.I.D. System

ABI Prism 7000 Sequence Detection System

Agilent Bioanalyzer

The verification test is being conducted by Battelle's Advanced Monitoring Systems Center in collaboration with the US EPA's ETV Program. For further information, contact the ETV Advanced Monitoring Systems (AMS) Center at 614-424-4062.

AAAR would like to hear from you! Industry News is Particulars' latest feature bringing you the latest company news from AAAR members. If you have something you would like to share with Particulars readers like a new product announcement, release, staff change and more, please email Amy at achezem@ahint.com.

Aerosol Monitoring System

AMS - 100

FEATURES

- Graphical Display
Intuitive User
Interface and
12 button keypad.
- Aerosol Dust 1 μ g/m³.
To 3000mg/m³
- TSP, Option for PM10
& PM2.5
- External Temperature
& Humidity, Dew-point
- Power:
Battery or AC,
Software Charger

& Applications

- Inhalation Toxicology
& aerosol research
- Indoor and Outdoor air quality
monitoring
- Remediation
- Visibility and AQI Studies

Aerosol Monitoring System

AMS - 200

FEATURES

- 24/7 Continuous Aerosol
Dust Monitoring.
- Air Humidity controller
- TSP, PM10 & PM2.5
- Air Flow Controller
16.6 LPM flow rate.
- 47 mm Filter Holder
- Wind Speed & Direction
Input Sensors
- Ambient static pressure
- Real Time Data output
And remote control

& Applications

- Roadside Monitoring
- Remediation and boundary
monitoring
- Outdoor Air Monitoring

The AMS-100 is a hand held battery operated survey tool to measure aerosol dust concentrations for indoor and outdoor ambient air. The AMS uses near forward infrared light scattering technique to measure mass concentration.

The AMS has a graphical user interface and a membrane keypad to enable the user to navigate freely through the menu structure and edit various parameters with ease on the instrument.

The AMS-100 and AMS-200 PC software will enable the user to navigate, interrogate, and download data from the instrument by direct serial connection or remotely via GSM or low-power radio.



The AMS-200 is an ambient particulate real time monitoring instrument used for outdoor continuous ambient dust monitoring.

The AMS-200 is ideal for air monitoring groups and construction industries to conduct short term and long-term studies to assess air quality in areas with high concentrations of pollutants

The AMS-200 has an inbuilt humidity and mass airflow controller to maintain a constant 48%RH in the sampling chamber at a constant air flow of 16.67LPM (Both parameters are adjustable).

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MK13 9HB, England.

PPM HAM INSTRUMENT

URGENT:- I require your Help!
PPM Enterprises in Knoxville TN
USA manufactured and sold an
instrument called HAM (Hand
aerosol monitor) can any one
please give me any details on the
history of the HAM instrument and
possibly where I can source the
instrument from. Thank you.

In Case You Missed It...

The National Research Council's Committee on Research Priorities for Airborne Particulate Matter has issued their 4th report. Titled "Continuing Research Progress", it presents progress towards achieving the research goals to support the US Environmental Protection Agency's Particulate Matter Research Program presented in the 1st report (published in 1998). As part of the assessment, several challenging issues that span research disciplines are identified. The resolution of these issues will be critical to reducing scientific uncertainties. These include, for example, the recognition that while much can be gained from studying atmospheric aerosol in isolation, a more full understanding requires its consideration in the context of the larger atmosphere and its ambient chemical and physical properties. All four reports are available from the National Academies Press (<http://www.nap.edu>), and currently can be read on-line; just search for 'particulate matter'.

In October, the US Environmental Protection Agency issued the final version of the Particulate Matter Criteria Document, see <http://cfpub2.epa.gov/ncea/cfm/partmatt.cfm> for more details. This document represents the required five year review of the national ambient air quality standards, specifically for PM. An EPA Staff Paper that summarizes this PM review and suggests possible revisions of the PM standard is in-progress, and should be available for our ('our' meaning the public) comment before the next issue of this newsletter. Stay tuned.

A recent paper in the New England Journal of Medicine reports some of the first results of a long-term study of the lung function of children from 10 – 18 years old from 12 southern California communities with varying ambient air

pollutant concentrations. Throughout the Children's Health Study, poor lung function growth rates were positively correlated with NO₂, acid vapor, elemental carbon and PM_{2.5}. Clinically significant decreases in lung function were observed at 18 years of age with the accompanying increased likelihood of adverse health effects in adulthood. Gauderman et al. (2004), *N Engl J Med*, 351(11), 1057 – 1067.

Prenatal exposure to polycyclic aromatic hydrocarbons and early exposure to environmental tobacco smoke in an urban environment, was shown in a recent study to be associated in the affected children with an increased likelihood of suffering from asthma and other respiratory symptoms, such as wheezing and coughing. Reducing the risk of respiratory problems in young children may need to consider the multiple pollutants in inner cities and routes of exposure. Miller et al. (2004), *Chest*, 126(4), 1071 – 1078.

For those of you doing battle with the incessant noise of a vacuum pump, intermittent whir of a bank of computers, or thudding of students rapping on your office door, check out www.live365.com/stations/trappedinlab/. This e-station is an excellent and humorous sound alternative; focusing primarily on music with science lyrics. Geeks unite and enjoy!

If you have suggestions for interesting highlights that would fit in this section, please send them to Mike Hannigan (hannigan@colorado.edu). AND, let's all thank Pete Raynor, our previous Particulars editor, for adding this section to our newsletter and thus making Particulars more fun to read.

CALENDAR OF EVENTS

January 5-7, 2005

Specialty Conference on the
Indirect Effects of Aerosols on
Climate

Manchester Conference Centre
Manchester, England
www.al.noaa.gov/igac

February 7-11, 2005

AAAR Supersites Conference
Sheraton Atlanta Hotel
Atlanta, Georgia

March 14-18, 2005

International Society for
Aerosols in Medicine 15th
International Congress
Sheraton Perth Hotel
Perth, Australia
www.isam.org

Executive Director's Report

Amy Williams, CAE

I came on board as the Executive Director for AAAR in late July, replacing Libby McDannell who had a baby girl in mid-September. I've enjoyed working with the AAAR staff and board of directors over the past four months and was happy to meet many of you at the Annual Conference.

The conference afforded me the opportunity to see the board and committees of AAAR hard at work. Behind the conference scene, and probably unbeknownst to many of you, each of AAAR's committees met and planned their program of work for 2005. Likewise, the board and executive committee met several times during the conference to plan for 2005 and beyond. The dedication of AAAR's volunteers is impressive and not something I've often seen in my 8 + years of association management experience.

As you'll read elsewhere in this issue, AAAR has a lot going on in early 2005. As Sonia mentions in her article, we are currently accepting nominations for the Thomas T. Mercer Joint Prize, which will be awarded at the ISAM conference in Perth, Australia in March. If you'd like to nominate someone for the award, please submit the required information to the AAAR office by December 30. More information on what is required can be found on the website, www.aaar.org.

The AAAR Membership Directory is currently being compiled and will be mailed to members along with the March issue of AS&T. Special thanks to MSP Corporation, Particle Instruments, Rupprecht & Patashnick Co., Inc. and TSI Incorporated for supporting AAAR through advertising in the directory.



Last, but certainly not least, be sure to check out Paul Solomon's article on the upcoming PM Supersites Program & Related Studies Conference taking place in February. I hope to see you all in Atlanta for the conference.

On behalf of the AAAR staff, I wish you all a wonderful holiday season and a happy New Year.

Warm regards,

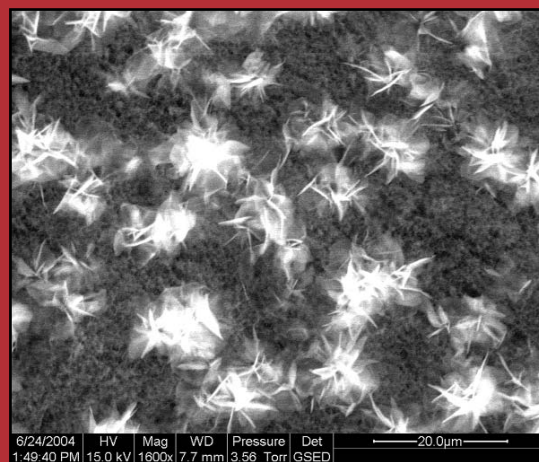
Amy Williams, CAE
Executive Director



Aerosols In The Spotlight

Leucine particles captured on a polypropylene filter and imaged in the environmental scanning electron microscope at Bucknell University. The spider-like crystals were the result of controlled humidity cycling of the particle's environment.

Courtesy of: Tim Raymond, Assistant Professor, Bucknell University, Department of Chemical Engineering





PARTICULARS

Particulars is published by the American Association for Aerosol Research as the primary information source for Association members.

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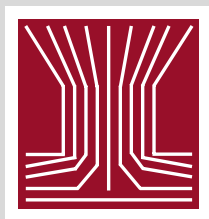
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University of Minnesota*

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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 emails are typically answered within 24 hours.

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Welcome New Members

As of December 6, 2004

Yayne-abeba Aklilu *	Jianjun Chen *	George Farquar	Isabel Cristina Jaramillo *
York University	University Of New	ORNL	University Of Utah
Michael Alexander	Hampshire	Melissa Ann Fink *	Pekka Jarvinev
Pacific Northwest National	Kaiping Chen *	University Of Minnesota	Enprima LTD
Lab	Carnegie Mellon University	Christos Fountoukis *	Ki-Joon Jeon *
Ryan Allen *	Steven Chillrud	Georgia Tech	University Of Florida
University Of Washington	Columbia University	Gregory J. Frost	Jorge Rodrigo Jimenez *
Obatosin Aluko *	Seung-Hyun Cho *	NOAA Aeronomy Lab	Washington State University
Illinois Inst Of Technology	University Of Cincinnati	Evelyn Gehin	Carolyn Jordan
Akua Asa-Awuku *	Hyun-Deok Choi *	Certes University Of Paris XII	University Of New
Georgia Tech	Clarkson University	Marianne Geiser Kamber	Hampshire
Christof Asbach	Nancy Clark Burton	University Of Bern	Navaneethakrishnan
University Of Minnesota	CDC/NIOSH	Corey Gerving	Kandasamy
Jaameem Back *	Keith R. Coffee	United States Military	Southern Company
Georgia Tech	Lawrence Livermore Nat'l	Academy	Bryan Karpowicz *
Elizabeth Bailey	Lab	Eric Gessner *	Georgia Tech
Tennessee Valley Authority	Daniel Cohan *	Clarkson University	Burcak Kaynak *
Richard W. Baldauf	Georgia Tech	Young Sung Ghim	Georgia Tech
US EPA	Laura Cottrell	Korea Inst. -	Lin Ke
Tahlee Baynard	University Of New	Science/Technology	Georgia Tech
NOAA Aeronomy Lab	Hampshire	Ajaya K. Ghimire *	Eric Matthew Kettleson *
Pieter Beckman	Esther Coz *	University Of Minnesota	Washington University
University Of New	CIEMAT	Samuel Victor Glass *	Chan Soo Kim
Hampshire	Jonathan Crosier *	University Of Wisconsin	Hiroshima University
Joseph E. Bester	UMIST	Brad Goodwin *	Joonghyuk Kim *
TSI Incorporated	Manuel Dall'Osto *	Washington University	KAIST
Vladimir Bezprovannykh	University Of Birmingham	Natasha A. Greene *	Myoungwoo Kim *
Dycor Technologies	Brian Dalton	Howard University	Texas A&M University
Subhasis Biswas *	Applikon Analyzers	Andrew Grieshop *	Sang Bok Kim *
University Of Southern	Benjamin J. DeAngelo	Carnegie Mellon University	KAIST
California	US EPA	Gazala Habib *	Yong Jin Kim
Charles Blanchard	Mark J. DeLong	Indian Institute Of	Korea Inst.-
Envair	Alkermes, Inc.	Technology	Machinery/Materials
Troy Boley	Ranil Dhammapala *	Gayle Hagler *	Dr. Kazushi Kimura
Cabot Corporation	Washington State University	Georgia Tech	Koken LTD.
Artur Braun	Bruce Doddridge	Davyda M. Hammond *	Stephanie King *
University Of Kentucky	National Science Foundation	University Of Alabama,	Harvard University
John G. Breen	Neil M. Donahue	Birmingham	Kirsten Koehler *
U.S. Centers for Disease	Carnegie Mellon University	Ryan Han	Colorado State University
Control	D. James Donaldson	TSI Incorporated	Yutaka Kondo
Gregory Brinkman *	University Of Toronto	John Hearn *	University Of Tokyo
University Of Colorado	Sharon Douglas	University Of Georgia	Uwe Kortshagen
Keith Broekhuizen	ICF Consulting/SAI	Katherine Heaton *	University of Minnesota
Chun Soo Bu	Matthew Dreyfus *	University Of Delaware	Margaret Krudysz *
Korea Environ.& Merch.	University Of Delaware	Christopher J. Hennigan *	UCLA School Of Public
Testing Inst.	Hua Du *	Georgia Tech	Health
Pedro A. Bueno *	Atmosp. Sciences Res. Ctr.	Emily Hoffman *	Stefan Laub
University Of Maryland	Rachelle Duvall *	Washington University	Kaiserslautern University
Kerry R. Bullock-Ozkan	University Of Wisconsin	Kathryn Holderness *	Hye Moon Lee *
US EPA	Fritz Ebert	University Of California, San	Hiroshima University
Mevlut Bulut *	Tech University Kaiserslautern	Diego	Jongmin Lee *
University of Alabama,	Jack R. Edwards	Hirooyoshi Honjo	University Of Illinois
Birmingham	NC State University	Tokyo Dylec Co.	Kiyoung Lee
James B. Burkholder	Hazem S. El-Zanan *	Ta-Chih Hsiao *	University Of Kentucky
NOAA	Desert Research Institute	Washington University	Nathan Lee *
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York University	University Of Michigan	3M Company	Young Mee Lee

* signifies student members

Welcome New Members (continued)

As of December 6, 2004

Korea Inst. - Science/Technology	Brian Osmondson TSI Incorporated	Cheryl Schein John Hopkins Applied Physics Lab	Douglas Waldron * Georgia Tech
Martin J. Lehmann Fleetguard Inc.	Alvaro R. Osorino Vargas Ciudad Universitaria	Julie C. Schienker * Harvard University	Bo Wang Georgia Tech
Corinne S. Lengsfeld University Of Denver	Stepanie Palmier * CEA	Dr. Herbert Schloesser JeanClare Seagrave	Hongxia Wang * University Of Cincinnati
Kuo-Jen Liao * Georgia Tech	Guadalupe Paredes-Miranda * Desert Research Institute	Lovelace Respiratory Res Inst James Shartner	Min Wang * University Of Kentucky
Jennifer M. Lobo Nektar Therapeutics	Katherine Patton-Hall Naval Surface Warfare Center	NUCON	Yuhang Wang Georgia Tech
Gang L Environment Canada	Richard E. Peltier * Georgia Tech	Huawei Shi * NC State University	John D. Warhola CTTRANSIT
Mary M. Lynam US EPA	Mark Perry Battelle	Amber H Sinclair * Kaiser Permanente Georgia	Bethany Warren * University of California, Riverside
Amit Marmur * Georgia Tech	Janet Petruska Schering-Plough	Vasanthi Sivaprakasam Naval Research Laboratory	Silke Weimer Gil Weisbrod
Partick Marshall Strat Acuity	Raija Pikku-Pyhalto Tekes, The Finnish Technology Agency	Tim Smith US EPA	Rafael Emily Weitkamp *
Donald Martello US Dept Of Energy	Andre Prevot Paul Scherrer Institute	Eben Spencer Cross * Aerodyne Research, Inc	Carnegie Mellon University
Andrew Martin * University Of Alberta	Owen Price CIIT Ctrs for Health Research	Gerald Spindler Inst. for Tropospheric Research	Victor Willems * Brent J. Williams *
Masashi Matsumura * University of Alabama, Birmingham	Chaolong Qi * Washington University	Alexander Stratmann Palas GmbH	University Of California, Berkeley
Timothy R. McAuley * Clarkson University	Jing Qian * Clarkson University	Ramya Sunder Raman * Clarkson University	Kenneth L. Williams NIOSH/NPPTL
Nicholas Meskhidze Georgia Tech	Youjun Qin Clarkson University	Irra T-Mohana Sundram * Washington State University	Paul H. Wine Georgia Tech
Daniel Mira Salama * Yu Morino *	Yingge Qu * University Of Connecticut	Kazutoshi Suzuki National Institute for Environ. Studies	Bart Wojas * Miami University
University Of Tokyo	Ashish Rai * University Of Maryland	Thomas Szarek * University Of Notre Dame	Kenneth Charles Wright ORNL
Dibyendu Mukherjee * University Of Minnesota	Manish Ranjan * Clarkson University	Junko Takahashi Tokyo Dylec Corporation	Xihong Wu * University Of Florida
Catherine Munger ALCAN Arvida R&D Ctr.	Shanna Ratnesar-Shumate * University Of Florida	Matthew Thomas Discovery Labs	Richard Wyrwas * Georgia Tech
Shane Murphy * Caltech	Daniel Glenn Rauer * Washington University	Rick Thomas * Centre for Ecology & Hydrology	Dritan Xhillari * NYU School Of Medicine
Alexsey Nadykto SUNY At Albany	Danny Raz Rafael	Di Tian * Georgia Tech	Guoyun Xia * York University
Luke P. Naher University Of Georgia	Melissa S. Reinard * University Of Delaware	Troy M. Tillman TSI INC	Bo Yan * Georgia Tech
Sergey Napelenok * Georgia Tech	Patricia Reuther Battelle Memorial Institute	Dennis Tolsma Kaiser Permanente	Wenli Yang * University Of Connecticut
Adam Kent Neer * University Of Missouri-Rolla	Marin Robinson Northern Arizona University	Alan Traylor TSI Corp	Jong-Ik Yoo US EPA/ORTSE
Ayano Niwa * Washington University	Jason Rodrigue * Clarkson University	Oliver Valet Rap.ID Particle Systems	Il Je Yu Center for Occupational Toxicology
Chris Nolte US EPA	Bill Roe Grimm Technologies Inc.	GmbH	Yu Zhang * University Of Alberta
Amanda Northcross * University Of North Carolina	Annette Rohr EPRI	Lisa Van Loon * Ohio State University	Lei Zhu * Georgia Tech
Barbara Noziere University Of Miami/ RSMAS	Mark John Rusyniak Philip Morris	Randy L Vander Wal NCMR-NASA Glenn Res Center	Luke Ziemba * University Of New Hampshire
Gunter Oberdorster University Of Rochester	Andrew Phillip Rutter * University Of Wisconsin- Madison	Roland Von Glasow University Of Heidelberg	Stephen D. Ziman Chevron Texaco Energy Technology Co
Roshan Oberoi * NC State University	Amy Sage * Carnegie Mellon University	Charles Waggoner DIAL/MSU	
David Ogulei * Clarkson University	Jose-Luis Sagripanti Joshua L. Santarpia *	Paul H. Wakabayashi University Of California, Davis	
Kenneth J. Olszyna Tennessee Valley Authority	Texas A&M University		

* signifies student members



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MORE THAN \$5K RAISED FOR AWARD FUNDS

At the recent AAAR Annual Conference, the following members generously donated to the AAAR Award Funds. Almost \$5,700 was raised for the funds, including \$4,455 for this year's targeted Sinclair Award fund. Although we fell a bit short of our goal, the contributions received have put us well on our way towards making the Sinclair Award fund self-sustaining. Thank you to all that contributed!

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CAREER OPPORTUNITIES IN AEROSOL RESEARCH

University of California, Merced
*School of Engineering: Air Pollution
Environmental Engineering Position*

Monell Chemical Senses Center
Faculty positions in chemosensory research

Corus Pharma
Manager, Aerosol Formulation

Cabot Superior MicroPowders (CSMP)
*SCIENTIST: Aerosol Scientist
Flame Technologist
Process Development Engineer*

Battelle Memorial Institute
*Aerosol Specialist (Aerosol Inhalation
Toxicology Studies)*

**The Air Quality Research Center at the
University of California, Davis**
*Postdoctoral Position in Urban / Regional Air
Quality Modeling*

University of Colorado-Boulder
*Postdoctoral Position In Aerosol Mass
Spectrometry (AMS)*

Midwest Research Institute (MRI)
Aerosol Engineering Manager

Please visit <http://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.



International Aerosol Conference 2006

September 10-15, 2006
St. Paul, Minnesota

Sponsored by: **American Association for Aerosol Research (AAAR)**
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Landmark Center

Located in downtown Saint Paul.

IARA welcomes all to participate in the 7th International Aerosol Conference and interact with scientists from all over the world on a broad spectrum of topics related to aerosol science and engineering.

Conference Location: **Radisson Riverfront Hotel, St. Paul, Minnesota**

Located in Downtown St. Paul (State Capitol of Minnesota) on a Mississippi river bend, about 15 minutes from the International Airport (Northwest Airlines headquarter).

There are a first class concert hall, science museums, hockey arena, river paddleboat dock, historical buildings, and shops, all within walking distance. Minnesota is the state of 10,000 lakes, home of Twins baseball, Viking football, Timberwolves basketball, Wild hockey, and the Mall of America. Laboratory tours will be organized to the Particle Technology Laboratory, University of Minnesota, and to local companies with an interest in aerosol technology.

Scientific Program: Tutorials (Sunday), invited plenary lectures, platform and poster presentations, Special Symposia, Fuchs award presentation, and more

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

Conference Co-Chairs:

David Y.H. Pui, University of Minnesota
Gilmore J. Sem, TSI Incorporated

Technical Program Co-Chairs:

Pratim Biswas and Da-Ren Chen,
Washington University in St. Louis

Keeping Informed: Please follow the progress of conference preparation on the AAAR Website: www.aaar.org

Other Useful Websites: Radisson Riverfront Hotel, St. Paul: www.radisson.com/stpaulmn

St. Paul Convention & Visitors Bureau: www.stpaulcvb.org

Mall of America: www.mallofamerica.com



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AAAR 2005 Annual Conference

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Hilton Austin
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