

PARTICULARS

Newsletter of the American Association for Aerosol Research

Summer 2006

2006 International Aerosol Conference

By David Y. H. Pui

Dear colleagues:

We hope by now you have already registered for the 7th International Aerosol Conference in Saint Paul, Minnesota's capital city, on the banks of the Mississippi River. If not, please register as soon as possible. This IAC will bring together about 1,200 of the worldwide aerosol research community to share the results of recent research. You may learn about many details of the IAC on the conference Web site under www.aaar.org.

On Sunday, September 10, we will enjoy a choice of 16 tutorials taught by experts in the field. The conference itself begins on Monday, September 11, and continues through late afternoon on Friday, September 15, with a full schedule of 1,170 oral and poster papers covering a wide variety of aerosol topics.

All five mornings begin with a plenary lecture on a current or emerging topic of aerosol science. Plenary speakers will be:

Richard W. Siegel – Assembling Materials and Devices from Nanoscale Building Blocks

Lidia Morawska – Indoor Aerosols: Do We Need More Data or More Science?

Richard C. Flagan – Reinventing the Wheel: New Vistas for Aerosol Measurement

Bret Brunekreef – Health Effects of Ambient Particulate Matter

Urs Baltensperger – Primary Versus Secondary and Biogenic Versus Anthropogenic Organic Aerosol: Grand Challenges in Atmospheric Aerosol Research

We received 1,200 high-quality abstracts on the latest aerosol science and technology. About 30 of the abstracts are for a special Third Symposium on the History of Aerosol Science to be held in the same hotel on Friday and Saturday, September 8-9. The history symposium requires separate registration, including an additional registration fee. This is the third in a series of symposia on aerosol history; the first in Vienna in 1999; the second in Portland



in 2001. Each resulted in a peer-reviewed proceedings book available for purchase on the AAAR Web site. We plan to publish another peer-reviewed proceedings book as a result of this year's symposium.

The technical program co-chairs, Professors Pratim Biswas and DaRen Chen, have put together an exciting program of oral platform papers and posters. We will focus on each poster paper twice during the conference, once during a session in parallel with platform papers and once during a separate poster session. In this way, we hope to increase the visibility of and the attention paid to poster papers.

IAC participants may tour local areas of interest, such as the Science Museum of Minnesota, University of Minnesota's Particle Technology Laboratory, TSI, Donaldson Company, MSP Corporation, 3M, and the Mall of America. On Wednesday evening, most of us will enjoy a conference dinner on a riverboat on the Mississippi. The riverboat can only accommodate the first 700 who register and pay an extra fee for the conference dinner, so don't procrastinate! Also, the rooms in the conference hotel, the Crowne Plaza, are going quickly. Please book your rooms soon in order to stay in the conference hotel.

Continued on page 2



Editor's Letter

By: Cynthia Twohy

Well, it's my last letter as editor, and I'm thinking about what to do next for AAAR. Did you know that there are many, many ways that you can volunteer your time to help the organization? This is also a terrific way to network and get to know your colleagues better.

First, get your feet wet by attending the Working Group Meeting in your technical sub-field at the annual conference. There are several different areas, including aerosol chemistry, aerosol physics, atmospheric aerosols, combustion and nanoparticle synthesis, control technology, health-related aerosols, history of aerosol science, indoor aerosols, and instrumentation (see www.aaar.org/WGMission.htm#1 for more information). Meetings are usually held after the regular sessions, with meeting times listed in your conference program. Working Group members exchange ideas, recommend tutorial and plenary speakers, and plan technical symposia.

If you want to step into the water a bit further, join an AAAR committee, where you can help and participate throughout the year. Committees include Awards, Bylaws, Conference, Development, Education, Finance, Internet Communications, Long-Range Planning, Membership, Newsletter, Nominating, Program, Publications, and Student Liaison. Members and their chairs are listed at www.aaar.org/whoswho.htm. If you're interested in one of these areas, contact the chair to see if they need new members. Now you're dog-paddling!

Volunteers are critical to growth and success of AAAR. Come on, jump in! Before you know it, you could be swimming like a sailfish, the world's fastest fish, as a conference chair, board member, or AAAR officer!

Continued from page 1

A special event, featuring remarks by Sheldon Friedlander, will mark the 25th Annual Conference of the American Association for Aerosol Research. As is done every four years at the IAC, the Fuchs Award will be made to an individual for his/her lifetime achievements in the field of aerosol science. The first Fissan/Pui/TSI Award will recognize excellence in intercontinental cooperation in the field of aerosol science and technology. The Smoluchowski Award and International Aerosol Fellow Award will also be made.

A small number of participants will enjoy a very special activity for several days before the IAC begins. Tyler Beck will lead a small group on a trip to the Boundary Waters Canoe Area Wilderness near the border between Minnesota and Canada. It is a remote area with many lakes and forests and very few people. By paying the fee, all camping supplies, tents, canoes, food, and necessary equipment will be provided. All you need to provide is your personal effects and clothing. Those who participate will never forget this very special event!

Minnesota is easy to get to, with direct non-stop flights from Tokyo, Amsterdam, London, and over 150 cities in the North America. The conference hotel is a short 15-minute ride from the airport. When planning your trip, remember that the conference continues until late on Friday afternoon.

September is a very pleasant time of the year, with comfortable daytime temperatures and cool evenings. Those of us who live here think Minnesota is one of the most beautiful places in the world. Come and see for yourself if we know what we are talking about!

Your participation at this important conference is very important to its success. We look forward to seeing you in September!

Sincerely,

David Y. H. Pui
Gilmore J. Sem
Conference Co-Chairs

CALL FOR AEROSOLS IN THE SPOTLIGHT



Do you have an interesting image related to aerosols, not published elsewhere, to feature in the "Aerosols in the Spotlight" section? If so, please share your find with like-minded aerosol enthusiasts in a future issue of *Particulars*. Please send an image, along with a brief caption (no more than 50 words) to the editor, Cynthia Twohy, at twohy@coas.oregonstate.edu.

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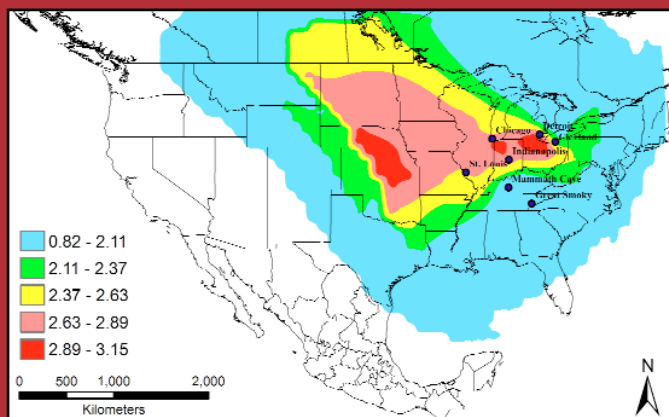
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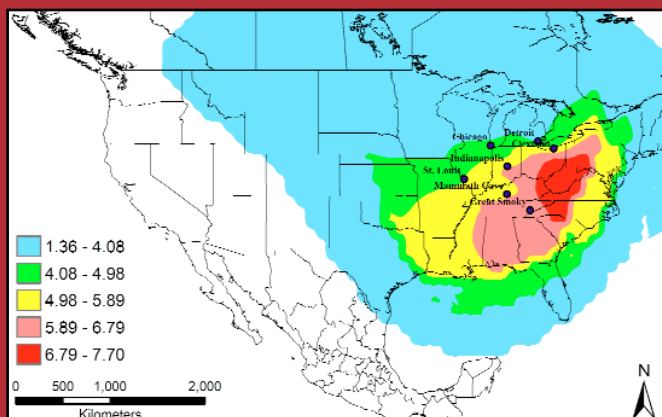
AEROSOLS IN THE SPOTLIGHT

The spatial distributions of US sulfate (Figure 1) and nitrate (Figure 2) source areas derived using simplified quantitative trajectory bias analysis (QTBA) on the data from five urban STN sites (Indianapolis, St. Louis, Chicago, Cleveland and Detroit) and two rural IMPROVE sites (the Great Smoky Mountain National Park and the Mammoth Cave National Park) for all seasons. Coal-fired power plants are associated with the sulfate features, and ammonia emissions influence the nitrate distribution on par with NO_x.

Images courtesy of Prof. P. Hopke and Weixiang Zhao/Clarkson University.



(Figure 1)



(Figure 2)

“In Case You Missed It”

Magic Nano: Consumer Product Nanoparticle Scare

Just a few days after reports of numerous cases of acute pulmonary disorders after use of a household product thought to contain nanoparticles, the German Federal Institute for Risk Assessment (BfR) issued product warnings and the manufacturer withdrew the 'Magic Nano' household glass and ceramic sealant sprays. The BfR subsequently concluded that nanoparticles were not the causal agent for the toxic responses as the products do not contain ultrafine or nanoparticles (rather, “nano” in the product name refers to the thin surface film formed by the sprays). The German agency is currently conducting tests on the other product ingredients and the aerosolized delivery of the product to identify the cause of the toxicity to over 100 consumers. For more information see: www.bfr.bund.de/cms5w/sixcms/detail.php/7842. Two related nanotechnology/health links are:

Project on Emerging Nanotechnologies. The first public inventory of consumer products claimed to be made using nanomaterials or via nanotechnology is available online at www.nanotechproject.org/inventories.

International Council On Nanotechnology (ICON). Based at Rice University under the Center for Biological and Environmental Nanotechnology (CBEN), ICON is a coalition of academic, industrial, governmental, and civil society organizations with a mission to examine and disseminate information on the societal, environmental, and health risks and benefits of nanotechnology. <http://icon.rice.edu/>.

Welcome New Members

Marile Colon-Robles*, University of Illinois at Urbana-Champaign
Edward Heller, Battelle MREF
Rory Macarthur, Chevron ETC

Elizabeth Stone*, University of Wisconsin-Madison
Scot Wayne*, University of Texas at Austin

**denotes a student member*

President's Message

By Tony Wexler

Back in June, my wife and I freed up our calendars and signed up for the boundary waters canoe trip scheduled just before the International Aerosol Conference. I've heard so many wonderful things about the boundary waters – it will be like a dream to finally paddle there. Of course, the boundary between dreams and nightmares is about as thin as the one between the U.S. and Canada, which brings me to mosquitoes. They say that Minnesota has nine months of winter, one day of spring, and then the mosquitoes come out and it's summer. Let's hope that they've had their fill before we arrive and aren't still carrying away small animals and children to feast on. I'm leaving my kids at home.

In my last column, I talked about prestidigitational in-sourced retrodigitization. If you missed that column, you can still catch it at www.aaar.org/NEWS/NEWS/Particulars_Spring06.pdf. Unless the Web site has completely changed, check out the last paragraph of this column. I am still negotiating the new contract with Taylor and Francis, publisher of *Aerosol Science and Technology*, but I hope we'll have all the back issues of AS&T on the Web (where you already found the post-retrodigitization issues) by the IAC meeting.

Speaking of the Web, we have all seen journals embracing the Web in a big way. Now, publishers of reference books have also joined the lemmings. Knovel is a company that has obtained Web publication rights to a huge number of technical reference volumes. Some universities and societies have subscribed; others have not, or not yet anyway. A few AAAR committees are considering whether AAAR should subscribe to Knovel references that are relevant to aerosols. If you've had any good or bad experiences with Knovel, please let me know (aswexler@ucdavis.edu).

Remember Wide Area Information Servers (WAIS), Gopher, Mosaic? No? Yikes, I guess I'm showing my age. Well, these were the Web browsers before the Web was called the Web. I tried out WAIS back in the day and thought "wow, this would be cool if a lot of people established sites." Then along came Gopher, which wasn't as good as WAIS but caught on fast because it was easy, and then Mosaic, invented at the University of Illinois by a graduate student who is probably rolling in dough now, which really launched the Web revolution. Well the AAAR Web site was designed a long time ago (in relation to Web time scales anyway) before frames were made part of the hypertext language, so you see something looking very linear down the

screen. The AAAR Internet Committee is working with staff at Association Headquarters (the folks who take care of AAAR business) to redesign the site. The committee has selected the new look and feel, a mock-up has been drafted, and the content is being transformed into the new site. Look for the new site soon on a browser near you.

The IAC organizers have done a great job pulling everything together. It'll be a great meeting. See you at the IAC – with an ocean of calamine lotion in hand.

CALENDAR OF EVENTS

September 10 – 15, 2006 International Aerosol Conference

*Radisson Riverfront Hotel
St. Paul, Minnesota
www.aaar.org/meetings/IAC2006/index.htm*

September 16 – 19, 2006 PCIH 2006 – Do You Know the Way to OEHS Excellence?

*Professional Conference on Industrial Hygiene
Sponsored by AIHA's Academy
San Jose, California
www.aiha.org/TheAcademy/html/pcih.htm*

September 20 – 22, 2006 1st Biological Sampling and Detection Symposium

*Richmond, VA
www.biosampleanddetect.com*

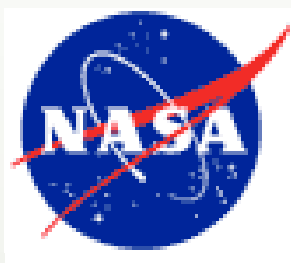
August 26 – 29, 2007 2007 – 5th Asian Aerosol Conference

*The Splendor Kaohsiung
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www.aac2007.org*

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Without their support the International Aerosol Conference would not be possible!

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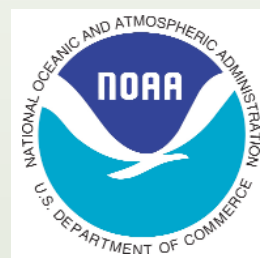


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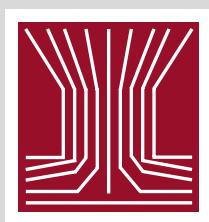
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AAAR staff is here to help with any and all questions you may have on the association, benefits, dues, the annual conference and more. Office hours are Monday - Friday 8:30 AM - 5:00 PM (EST). Phone calls and e-mails are typically answered within 24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

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AAAR JOB POSTINGS

Career Opportunities in Aerosol Research

To post a job opening on the AAAR Web site (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, 15000 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.

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