Welcome to the 7th Annual AMS Users Meeting

University of Minnesota
Minneapolis, Minnesota
Saturday 9/16/06 – Monday 9/18/06

Details

• This year’s AMS Users Meeting is hosted by Dr. Peter McMurry and Dabrina Dutcher-Stolzenburg at the University of Minnesota in the Digital Technology Center on the 4th floor of Walter Library.

• Cameron Martin (Executive Assistant to the Director of the Center for Aerosol and Cloud Chemistry) has officially taken over the organization of the AMS Users Meeting specifically and Aerodyne’s CACC group in general.

• Logistics
  – Internet Access
  – Food
  – Hotel
  – AMS Community and Resources
  – AMS Meeting Schedule
  – Next year’s meeting

• Meeting Program
Internet Access

Select the DTC Wireless option from your available network list.
• You should receive a log-in prompt when you attempt to open a browser window.

• Username: dtcvisitor
• Password: dtcvisitor

Food

• Food provided at this meeting:
  – 60 minute coffee breaks during morning and afternoon.
  – 60 minute lunch breaks (box lunches provided).
  – Sunday dinner hosted by Aerodyne at local Italian Restaurant in Minneapolis (*Need a reasonable head-count by noon today!*)

• Food NOT provided at this meeting:
  – Breakfasts (at hotel)
  – Saturday dinner
Dinner on Sunday Night will be at Amore Victoria there is a hand out with menu choices

Please let me know by noon today if you are able to join us!

Available Information

• There are instructions for internet usage

• There is a listing of the local restaurants available

• There are directions to and from the hotel available
AERODYNE INFORMATION

NAME Extension Email address@aerodyne.com
Manjula Canagaratna 285 mrcana
John Jayne 233 jayne
Joel Kimmel jkimmel
Jesse Kroll kroll
Cameron Martin 207 cmartin
Tim Onasch 279 onasch
Donna Sueper donna
Achim Trimborn 472 trimborn
Dagmar Trimborn 241 dtrimborn
Leah Williams 421 williams
Doug Worsnop 225 worsnop

45 Manning Road
Billerica, MA 01821
978-663-9500 phone
978-663-4918 fax

AMS Users Community

CONCEPT:
- Open community to share experiences, ideas, and technology to advance our understanding of aerosols and atmospheric science.

RESOURCES:
- AMS Annual Users Meeting
- AMS email lists (ams-users, ams-igor, tofamsusers)
- AMS Review Paper
- AMS FTP site (ftp://username:password@ftp.aerodyne.com/AMSIncoming)
- Jose’s AMS website (http://cires.colorado.edu/~jjose)
- James Allan’s AMS website (http://cloudbase.phy.umist.ac.uk/people/allan/igor.htm)
- ARI’s website (http://www.aerodyne.com/)
Community Growth

AMS Users Email Lists

AMS Users List
- General AMS information
- AMS Users Meeting information
- Forum for AMS User-specific science and technical discussions

AMS IGOR List
- AMS IGOR-based data analysis issues (software and technical topics)
- Forum for AMS User-specific IGOR discussions

TOF AMS Users List
- TOF AMS information
- Forum for TOF AMS User-specific science and technical discussions

*Note: These lists have been designed to separate the general issues of AMS users from the more specific concerns of only a few users. Please address questions/comments to the appropriate list.

To post to a list, send your email to:
ams-users@aerodyne.com, ams-igor@aerodyne.com, or tofamsusers@aerodyne.com

General information about the mailing lists:
https://mailman.aerodyne.com/mailman/listinfo/

TO REQUEST SPECIFIC AMS SOFTWARE/HARDWARE SUPPORT:
Send an email detailing the issue to ams-support@aerodyne.com, which is sent to ALL appropriate Aerodyne personnel.
AMS Review Paper

Table of Contents:
I. Introduction
   A. Why do we care about atmospheric particles?
   B. The scientific challenge of characterizing atmospheric PM
   C. Real-time atmospheric PM instrumentation
II. Measurement Approach used in the AMS
   A. Instrument Overview
   B. Aerosol Mass and Preconcentrating Particle Beams
   C. Particle Sorting
   D. Data Interpretation
III. Characterization of Particle Properties with the AMS
   A. Determination of Aerosol Chemical Composition
   B. Quantification of Chemically Speciated Aerosol Mass
      1. Instrument Efficiency
      2. Collection Efficiency
      3. Instrument Intercomparison
   C. Aerosol Size Distributions
   D. Aerosol Morphology and Density
   E. Light Scattering
IV. Example applications of the AMS
   A. Lab studies
   B. Source Characterization
   C. Field studies
V. Analysis of Organic Species
VI. Environmental and Process Controls
    A. ToF-AMS
    B. Retricle
    C. Tof-Inx
VII. Troubleshooting and Utilities
VIII. Acknowledgments
IX. References

Aerodyne Website
http://www.aerodyne.com/

ARI FTP site

AMS DAQ Software
- AMSIncoming\AMSUsers\
  ALLUsers\AMSSoftware

AMS Users Folders
- Obtain user name and password from Aerodyne (Tim and/or Manjula).
- Personal folders are secure.
- Contents of personal folders are the responsibility of users.
- Username and passwords are case sensitive.

ftp://username:password@ftp.aerodyne.com/AMSIncoming
James’ Website

- QAMS Igor Web Page
  - Data analysis routines

http://cloudbase.phy.umist.ac.uk/people/allan/igor.html

Jose’s Website

Aerosol Mass Spectrometry Web Page
- Aerodyne Aerosol Mass Spectrometer (AMS)
  - Meeting summaries
  - Component manuals
  - AMS technical specifics
  - General aerosol and MS information and links
- AMS Journal Papers (by all groups)
- Aerodyne AMS Users’ Meetings

http://cires.colorado.edu/jimenez/ams.html
QAMS website

- QAMS resource site
- Acquisition Software
- Downloads
- Manuals

Password Protected

http://cires.colorado.edu/jimenez-group/QAMSResources/

TOF website

- TOFAMS resource site
- Acquisition and Analysis Software
- Downloads

Password Protected

- Get username and passwords through tofuser@aerodyne.com email list server

http://cires.colorado.edu/jimenez-group/ToFAMSResources/
AMS Users Meeting

Provides Forum to

- Get to know each other
- Learn from each other’s experiences
- Pool resources as a community
- Provide feedback to Aerodyne for continued development
- Divide outstanding problems among users to be solved quickly
- Avoid repeating work that others have already accomplished
- Putting our results together into the bigger scientific picture

**Bottom-line:**
By pooling resources the AMS Users Group has successfully expanded and rapidly become an important and influential force within the aerosol community!!

Objectives of Meeting

- Address quantification issues of the AMS
- Improve our data analysis procedures and understanding
- Provide updates on AMS hardware and acquisition and analysis software
- Expand the applications of AMS technology to address new scientific and technical questions and issues

★ ToF-AMS ★
Today – All AMS Focus

SEVENTH AMS USERS MEETING – PROGRAM
U of Minnesota, Minneapolis, Sat. Sept. 15 (9 AM) to Mon. Sept. 18 (4 PM) 2006

Room 492 Digital Technology Center (4th Floor Walter Library)

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Sunday

Sunday/9/17/06

TOFAMS Issues
- Calibrations (IE)
- Data Analysis
Monday

Data analysis tutorial
  • Squirrel
  • “W” analysis software

End of 7th Annual AMS Users Meeting

Archiving Details From Meeting

• Collection of presentations for website publishing –
  Ingrid Ulbrich (Jose Jimenez group)

  Ingrid.Ulbrich@colorado.edu

• Note takers for meeting?
Next Year… 2007

• AAAR – Reno, NV
  September 24-28, 2007
  (Potential host, Pat Arnott at DRI?)

• EAC 2007 - Salzburg, Austria
  September 9-14, 2007
  (Potential host, Frank Drewnick, Max Planck Institute, Mainz?)

Summary

• This is an informal meeting.
• We are here to get to know each other, share information, and discuss issues.
• We are always interested in feedback and will be passing out a questionnaire at the end of the meeting.

Participate!