

# CMAS ENVIRONMENT

NEWSLETTER OF THE COMMUNITY MODELING AND ANALYSIS SYSTEM

## UPCOMING EVENTS

### 2017 Trainings

#### **CMAQ:**

April 20-21, 2017  
October 26-27, 2017

#### **SMOKE:**

June 19-23, 2017 (*Online*)  
October 18-20, 2017

### CMAS Conference

**16<sup>th</sup> Annual CMAS Conference**  
October 23-25, 2017

#### *Can't come to us for trainings?*

Have CMAS training courses taught on-site at your location. See <http://www.cmascenter.org/training/classes.cfm> or email [cmas@unc.edu](mailto:cmas@unc.edu) for more information.

## Newsletter Staff

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## 2016 CMAS Conference Summary

The 15th annual CMAS Conference was held in the Friday Center of the University of North Carolina at Chapel Hill on October 24-26, 2016. Parallel sessions were conducted during the three days of the conference. More than 300 participants attended the three-day conference. Dr. Larry Band, Director of the UNC Institute for the Environment gave the opening remarks. This year, Dr. Rohit Mathur and Dr. Jon Pleim of the US EPA chaired a special plenary session on the topic of "Emerging Issues in Air Quality Modeling" with invited speakers from the US EPA, NOAA, Penn State, UC Davis, and NCAR/UCAR.

The user/developer community forum, led by Tom Moore of WESTAR/WRAP, was conducted during the third day of the CMAS Conference on the topic of "Alternative Future Realities: Considerations for Modeling."

### *Reception Celebrating 15th CMAS Conference*

On the second day of the conference, the CMAS Center hosted a reception to celebrate the 15th anniversary of the CMAS conference at the UNC Botanical Garden. The Center Director, Dr. Adel Hanna, gave a short speech thanking the CMAS Center staff and larger air quality community for their work and commitment to air quality research.



Mark your calendars for the 16<sup>th</sup> annual CMAS Conference, hosted by the CMAS Center at the Friday Center in Chapel Hill, NC (October 23 -25, 2017). The call for papers will be issued in early April. In addition to the scientific and technical sessions, this year's conference will invite key speakers to present recent advancements on the following topics:

- Background Ozone
- Source Apportionment
- Wildfire impacts on air quality and climate
- Urban Scale Modeling
- Data Assimilation for atmospheric Chemistry models

There will also be a special session on the topic "Improving the Characterization of the Ambient NOy Budget."

### ***Winners of the Student Poster Competition***

The CMAS External Advisory Committee (EAC) evaluated 28 posters for this year's student poster competition. Each poster received scores based on the following metrics: originality, clarity and visual quality, presentation, conclusions drawn, and presenter's response to questions. Congratulations to the three winners, shown below. They will receive free registration for the 2017 CMAS Conference (October 23-25, 2017). Links to all posters and presentations are available on the CMAS Conference live agenda ([cmascenter.org](http://cmascenter.org)).

#### ***2016 Student Poster Winners***

*Incomplete sulfate aerosol neutralization despite excess ammonia in the eastern US: a possible role of organic aerosol*

Rachel F. Silvern (Harvard University)

*Prediction of harmful water quality parameters combining weather, air quality and ecosystem models with in-situ measurements*

Catherine Nowakowski (University of Connecticut)

*Improving Cloud Prediction in WRF Through the use of GOES Satellite Observations for SIP Modeling*  
Andrew T. White, University of Alabama, Huntsville



## **3<sup>rd</sup> CMAS South America Conference**

The 3<sup>rd</sup> CMAS South America Conference, to be held from August 28–31, 2017 in Vitória, Espírito Santo, Brazil. The conference is organized by the Federal University of Espírito Santo in co-operation with the University of São Paulo and the Federal University of Minas Gerais.

The conference will provide an opportunity to broaden the discussions about micro and Meso-scale air quality modeling applications in the southern hemisphere.

Topics of focus at the 3<sup>rd</sup> CMAS South America Conference include the following:

- Air Quality Modeling and Applications
- Model Development
- Model Evaluation and Analysis
- Regulatory Modeling and Applications
- Air Quality Measurements and Observational Studies
- Air Pollution Meteorology
- Emissions Inventories
- Policy and Decision Support

The CMAS South America Conference is currently accepting oral and poster presentations for the conference. Authors with accepted presentations will be notified via e-mail by May 1, 2017. All presenters (oral and poster) need to provide an extended abstract to be submitted by June 17, 2017. Participants can register for the conference and submit an abstract online at [www.cmasconference.com.br](http://www.cmasconference.com.br).

Selected presentations will have the opportunity to submit a full paper to a special issue in a peer-reviewed journal (currently under negotiation).

For more information on the South America conference, please contact Dr. Taciana Albuquerque at [acianatoledo26@gmail.com](mailto:acianatoledo26@gmail.com).

## CMAS Webinar Series

CMAS launched a new CMAS service, starting February 2017. CMAS will be running monthly webinars to keep the community informed of new developments and interesting science breakthroughs going on in the CMAS community.

Webinars will be held on the last Thursday of the month at 2:00 pm Eastern. We will promote briefs on recent software releases during each webinar. Dr. BH Baek gave the first webinar on February 23, covering the new SMOKE 4.0 release. CMAS will hold webinars for all new CMAS software releases, including upcoming and recent releases of CLINE/CPORT, VERDI, Spatial Allocator, and AMET within a month or two of their release. Outside of these software webinars, CMAS is looking for input on research and applications topics in the community.

The webinars will be about 40-45 minutes in length, with 20+/- minutes dedicated to a presentation and the rest for Q&A. We will host and facilitate the webinar using WebEx, recording and archiving the series on a new CMAS webinars webpage.

### Upcoming Webinars:

March 30, 2017 at 2:00 PM (Eastern): CMAQv5.2 release

April 27, 2017 at 2:00 PM (Eastern): Spatial Allocator 4.3 release and recent updates

## New CMAS Model and Tool Releases

During the past few months, CMAS – in collaboration with the US EPA – released a number of models and tools, including: SMOKE 4.0, C-PORT 3.0 Beta, and Speciation Tool 4.0.

CMAS, in collaboration with the EPA, is planning to release the new version of the CMAQ model CMAQ 5.2 Beta, and a new version of VERDI (VERDI 1.6).

CMAS Support Tool Description/Purpose	URL
Central web portal to the CMAS Center	<a href="http://www.cmascenter.org">http://www.cmascenter.org</a>
Air quality modeling	<a href="http://www.cmaq-model.org">http://www.cmaq-model.org</a>
Emissions processing	<a href="http://www.smoke-model.org">http://www.smoke-model.org</a>
Economic and health impact modeling	<a href="http://www.benmap-model.org">http://www.benmap-model.org</a>
Visualization and graphics	<a href="http://www.verdi-tool.org">http://www.verdi-tool.org</a>
E-mail-based technical support	<a href="http://bugz.unc.edu">http://bugz.unc.edu</a>
Model development wiki	<a href="http://cmas.wikidot.com">http://cmas.wikidot.com</a>
E-mail forum for technical support	<a href="mailto:m3user@listserv.unc.edu">m3user@listserv.unc.edu</a>
E-mail forum for announcements	<a href="mailto:m3list@listserv.unc.edu">m3list@listserv.unc.edu</a>