18th Conference on Atmospheric Chemistry, 8th Symposium on Aerosol-Cloud-Climate Interactions, and the Mario J. Molina Symposium - Summaries

The AMS Committee on Atmospheric Chemistry (AC) organized the 18th Conference on Atmospheric Chemistry (18AtChem), the 8th Symposium on Aerosol-Cloud-Climate Interactions (8AeroCloud), and the Mario J. Molina Symposium on 10–14 January 2016, as part of the 95th AMS Annual Meeting in New Orleans, Louisiana. A few joint sessions were organized among 18AtChem, Molina Symposium, and 8AeroCloud. Particularly, 18AtChem hosted a themed-joint session entitled "Greenhouse Gas Emissions: Quantifying Uncertainties in Measurements and Models and Resultant Climate Impacts" across AMS meeting programs, which was very successfully and gained more than 50 participants. Interest in the majority of the sessions was high, with ~ 230 total abstracts submitted to the combined programs.

Following the previous year on the Core Science Lectures, our Core Science speaker of this year was Dr. Garvin A. Heath from National Renewable Energy Laboratory, who presented an interesting lecture on "Environmental Impacts of Electricity Generation Technologies - A review of GHG emissions, water use, and land use, with a focus on oil and gas systems".

As usual, both 18AtChem and 8AeroCloud included competitions for the Best Student Oral and Poster Presentations. In 18AtChem, we had 11 student abstracts participating in the competition with 8 talks and 3 posters (we noticed many students did not participate in the competition this year, possibly due to confusion about the need and method to opt in). We selected 4 oral and 2 poster awards (see details below). For 8AeroCloud, we had 12 talks but no poster entering the award competition. Therefore, four awards for oral talks were selected. We thank all of these students for their participation and their outstanding research contributions in the fields of atmospheric chemistry and aerosol-cloud-climate interactions.

We also thank the session organizers and all of the other judges for their careful and objective evaluations, and for their selfless contributions to the Atmospheric Chemistry committee activities. Participation in this area is growing and we look forward to continued outstanding programs at the 97th Annual Meeting in 2017.

In 18AtChem:

Awards for the best student oral presentations went to:

Jakob Lindaas from Harvard University (now at Colorado State University) for *Empirically constrained estimates of Alaskan regional net ecosystem exchange of CO_2, 2012-2014.* Anna Jaruga at University of Warsaw for *Atmospheric chemistry effects on cloud - representing in-cloud oxidation of sulfur in a particle-based cloud microphysics scheme.*

Yunyao Li at University of Maryland for *Deep convective transoprt in convective systems of three different scales from the DC3 campaign using results from WRF-CHEM simulations with lightning data assimilation*.

Gina Mazzuca at University of Maryland for *Cloud-resolved chemistry simulations of deep convective storms observed during the DISCOVER-AQ campaign.*

Awards for the best student poster presentations went to:

Cory R. Martin of University of Maryland for *Implementing environmental corrections to increase the accuracy of a low-cost CO_2 sensor.*

Caroline Palmer Normile of Pennsylvania State University for *Evaluating sensitivity of simulated atmospheric CO_2 to varied transport model versus prior surface flux.*

In 8AeroCloud:

Awards for the best student oral presentations went to:

Nan Feng from Univ. of Alabama, Huntsville, for "Measurement-Based Estimates of Direct Radiative Effects of Absorbing Aerosols above Low-level Clouds"

Emma Järvinen from Karlsruhe Institute of Technology, Germany, for "In-situ Observations of Ice Crystal Habits, Their Surface Roughness and Light Scattering Properties During ACRIDICON-CHUVA"

Peter J. Marinescu from Colorado State University for "Impacts of Vertically Varying Aerosol Layers on MCS Cold Pool and Precipitation Processes"

Shipeng Zhang from Nanjing University for "On the Characteristics of Aerosol Indirect Effect Based on Dynamic Regimes in Global Climate Models"

The winners received cash awards and award certification from AMS. Congratulations to all the winners!

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AMS Committee on Atmospheric Chemistry
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