



# Amber Marie Ortega

**Graduate Institution:** University of Colorado at Boulder

**Graduate Discipline:** Atmospheric Science, Chemistry focus

**Hometown:** Camp Hill, PA

**Relevant SC Research:** Biological and Environmental Research

## Research Interest:

Atmospheric chemistry instrumentation and ambient measurements investigating the interface of air quality and climate change. Specific research interests include secondary organic aerosol formation, environmental chamber experiments, applying laboratory instrumentation to field measurements, and aerosol processing from different source emissions. Deployment of instrumentation, such as an Aerodyne High-Resolution Time-of-Flight Aerosol Mass Spectrometer (HR-ToF-AMS), Proton-Transfer-Reaction Ion-Trap Mass Spectrometer (PIT-MS), and Potential Aerosol Mass (PAM) reactor, in the field to take ambient measurements of Volatile Organic Compounds (VOCs) and sub-micron non-refractory aerosols to study secondary processes that govern organic aerosol formation, processing, and evolution in the atmosphere.

## About Me:

As a Ph.D. student in the Atmospheric and Oceanic Sciences Department at the University of Colorado at Boulder, I have participated in five field campaigns, including: (1) Campaign for Identifying the Origin of Atmospheric Aerosols in Urban and Rural Environments of Spain (DAURE) in Barcelona and Montsej, Spain during Spring 2009, (2) Study of Houston Atmospheric Radical Precursors (SHARP) in Houston, Texas during Spring 2009, (3) Fire Laboratory at Missoula Experiment (FLAME-III), at the USDA

Fire Sciences Laboratory in Missoula, Montana, during Fall 2009, (4) Research at the Nexus of Air Quality and Climate Change (CalNex-LA), in Pasadena, California during Summer 2010, and (5) Bio-hydro-atmosphere interactions of Energy, Aerosols, Carbon, H<sub>2</sub>O, Organics & Nitrogen - Rocky Mountain Biogenic Aerosol Study (BEACHON-RoMBAS), at the Manitou Forest Observatory near Colorado Springs, CO, in Summer 2011. My thesis focus is investigating formation potential of secondary organic aerosol from different sources and ambient environments using measurements from each of the field projects listed above.

Currently, I am the Atmospheric and Oceanic Sciences Department representative to the Cooperative Institute for Research in Environmental Sciences (CIRES) graduate student council. I am the student representative of the Atmospheric Science section of the American Geophysical Union (AGU). While attending Penn State University obtaining my M.S. in Meteorology, I was an active participant in Women in the Sciences and Engineering (WISE) Institute events and graduated from the Ronald E. McNair Post-Baccalaureate Achievement Program (McNair Scholars Program).

In my free time, I am an avid yoga practitioner and enjoy activities such as biking, hiking, gardening, homeopathy, home brewing and wine making.



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