

Ashley Corrigan



Graduate Institution: University of California San Diego, Scripps Institution of Oceanography

Location: San Diego, CA

Graduate Discipline: Atmospheric Chemistry

Hometown: Foley, MN

Research Interests:

My research interests include understanding the organic composition and structure of aerosol particles; in order to better understand the role aerosols play in Earth's radiative balance. Although climate change research has made great advances in the past decade, aerosols still remain the largest uncertainty in understanding Earth's climate system. Research techniques of interest include aerosol mass spectrometry (AMS), Fourier transform infrared spectrometry (FTIR) for bulk functional group composition, and near edge X-ray absorption fine structure and scanning transmission X-ray microscope spectrometry (NEXAFS-STXM) for organic fraction analysis of single particles.

About me:

I am beginning my second year as a graduate student in Lynn Russell's lab at Scripps Institution of Oceanography, UCSD. My current research includes a collaboration at California Institute of Technology, measuring organic functional groups of secondary organic aerosols generated in laboratory smog chambers with FTIR and NEXAFS-STXM analysis. This collaboration aims to compare the composition of ambient aerosols with those generated in the laboratory. Recently in May 2010, I participated in the CAL-NEX study at California Institute of Technology, where ambient samples were collected for FTIR analysis. Future research plans include studying the chirality and organic composition of biogenic aerosols during the HUMPPA Campaign at the SMEAR II field station in Finland during July 2010. Career goals include becoming a professor at a university that promotes and fosters undergraduate research, similar to what I experienced at the University of San Diego. My free time is spent hiking with my dogs, cycling, swimming, running, training for my first triathlon, practicing yoga, and relaxing at the beach.



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