

SEMINAR

Chemistry of organic reduced nitrogen in a rural environment

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Organic nitrogen is a ubiquitous atmospheric component that affects biogeochemistry, air quality, and climate. Assessing the impact of organic nitrogen on these processes remains challenging because traditional measurement techniques have lacked the sensitivity and chemical resolution to characterize the speciation and chemistry of organic nitrogen. Here, we discuss measurements made with protonated ethanol cluster chemical ionization time-of-flight mass spectrometry during the Holistic Interactions of Shallow Clouds, Aerosols, and Land-Ecosystems (HI-SCALE) campaign at the Southern Great Plains research station in Lamont, Oklahoma. As the site is located in an agricultural region, reduced nitrogen compounds are prevalent. We present measurements of ammonia, amines, amides, imides, urea, and other reduced nitrogen-containing compounds. We use these measurements to discuss the atmospheric sources and transformation of organic nitrogen compounds at this site.

Monday, August 31, 2020, 3:30 p.m (MST)

Virtual refreshment 3:15 p.m

Online registration: <https://forms.gle/BD72VXQcWZahNJgr9>