

Virtual ACOM Seminar

The Chemistry of Biogenic VOC from the Fast Flow Tube to Convective Outflow

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Date: Monday, October 18th, 2021, 3:30pm – 4:30pm

Links: <https://operations.ucar.edu/live-acom>

ABSTRACT

The past decade has brought major advances in our ability to resolve at a molecular level the oxidation chemistry of VOC. In this talk, I will use a combination of laboratory, field, and LES and global modeling studies to evaluate the limits of our current understanding of isoprene and monoterpene chemistry in different environments. In particular, I will evaluate our understanding of isoprene oxidation in the presence of nitrogen oxides as a sink for NO_x and source of aerosol mass, the global-scale importance of monoterpene peroxy radical chemistry for HO_x budgets and aerosol formation and growth, and the transport and fate of isoprene in deep convective events.