

## **2.007 Effect of condensed-phase photochemistry on the mass, composition, and properties of organic aerosols.**

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Abstract:

Organic compounds in atmospheric aerosols are readily accessible to solar radiation and can participate in complex photochemical reactions occurring on surfaces and inside aerosol particles. This paper will discuss recent our results and on-going experiments on photochemical aging of organic aerosols. The specific topics will include: i) mass loss from organic particles driven by photodegradation processes; ii) the effect of UV radiation on absorption and fluorescence spectra of organic compounds in aerosols; iii) the effect of UV radiation on viscosity and volatility distribution of organics; iv) change in molecular composition of particles in response to UV irradiation. These projects involve multiple collaborators who will be acknowledged during the presentation.