

Multiplexed Synchrotron Photoionization Mass Spectrometric Characterization of Fuel Oxidation Reactions

Monday, 29 September 2014 10:30 (25 minutes)

Multiplexed Synchrotron Photoionization Mass Spectrometry has been demonstrated to be a powerful experimental technique for the observation and characterization of important reaction intermediates, such as peroxy radicals in combustion and Criegee intermediates in atmospheric chemistry, and fuels reaction pathways. In this talk the oxidation reactions, carried out at the Chemical Dynamics Beamline of the Advanced Light Source of Lawrence Berkeley National Laboratory, of a naphthenic and an aromatic fuel will be presented showing how different information, such as reaction mechanism steps, reaction species identification, and branching fractions can be gained.

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