PAH PHOTOCHEMISTRY - ATMOSPHERIC AND AQUEOUS. **M. E. Sigman** R. T. Dabestani, Chemical and Analytical Sciences Division, Oak Ridge National Laboratory, P.O. Box 2008, MS 6100, Oak Ridge, TN, 37831-6100

Polycyclic aromatic hydrocarbons (PAH) are widespread in the environment as the result of multiple anthropogenic and natural sources. Studies of the photochemical transformations and environmental fates of these compounds are important in relation to human exposure and health issues, and even to the genesis of life on earth. The photochemistry of numerous PAH has been studied in water, in/on ice, on soils, and on atmsopheric particulates and simulants. The atmospheric and aqueous photochemistry of PAH will be discussed with an emphasis on transformation products and mechanisms. This research was sponsored by the Division of Chemical Sciences, Geosciences, and Biosciences, Office of Basic Energy Sciences, US Department of Energy under Contract DE-AC05-00OR22725 with Oak Rkdge National Laboratory, managed and operated by UT-Battelle, LLC.