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The Photochemistry of Nitrous Acid

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Poster Presentation 34

THE PHOTOCHEMISTRY OF NITROUS ACID

Michael Davis, and Tim Rettich*, Department of Chemistry, IWU

A model system of a photochemically active aerosol is proposed. The system includes a thin layer of aqueous nitrous acid over a solid silica gel surface. Benzene, a known radical scavenger, is added to the aqueous layer. Thermal and photochemical decomposition studies show the presence of one (or more) product(s) in the photolysate that is (are) not present in the thermal decomposition. The solid appears to influence the rate of both the destruction of nitrous acid and the formation of product(s) in the presence of a radical scavenger.