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The Photochemistry of Nitrous Acid in an Aqueous Matrix

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Poster Presentation P35

**THE PHOTOCHEMISTRY OF NITROUS ACID IN
AN AQUEOUS MATRIX**

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The thermal and photochemical decomposition of aqueous solutions of nitrous acid and nitrite ion were studied, with a focus on the production and subsequent reaction of hydroxyl radicals. The production of these radicals in aqueous solution may be determined indirectly by disappearance of nitrous acid, or more directly by their interaction with a radical scavenger. Benzene was used to scavenge hydroxyl radical and the products of reactions with hydroxyl radical as well as nitrous acid were characterized. The role of temperature, pH, and dissolved gases were also examined.