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Nitrite Photolysis in 2-Propanol/Water Solution

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Poster Presentation P10

NITRITE PHOTOLYSIS IN 2-PROPANOL/WATER SOLUTION

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Nitrite ion has an important role in atmospheric chemistry because its photodecomposition is a source of hydroxyl radical, one of the most reactive oxidants of the atmosphere. In order to understand better the role of nitrite in the environment, free radicals produced by 366 nm irradiation of nitrite ion in 2-propanol/water solution were investigated. The 2-propanol served as a hydroxyl radical scavenger, reacting to form acetone. This product was quantified after conversion to a 2,4-DNP hydrazone, allowing both nitrite disappearance and hydroxyl radical production to be measured.