

Iodine speciation in atmospheric aerosols and rainwater

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The determination of iodine speciation in the atmosphere is complicated by the existence of a large number of inorganic and organic species, in several oxidation states, partitioned between the gaseous and particulate phases. Interaction between iodine and ozone chemistry, including formation of new aerosol particles, makes its speciation both interesting and environmentally significant. The techniques used to probe iodine speciation in the atmosphere include gas and liquid phase spectroscopies, electrochemistry, gas and ion chromatography, solution and aerosol mass spectrometry and neutron activation analysis. This presentation will discuss some of these techniques and explore the outlook for future developments in the field.