



Laboratory Redox Kinetic and Product Studies of Selected Mercury Species

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Mercury is a global pollutant, and it is amongst the most toxic elements in nature. Mercury species can be bio-accumulated and bio-magnified in the food chain. In this paper, we present selected novel kinetic and product studies involving the oxidation of gaseous elemental mercury with halogens, at various atmospheric conditions. We will also present some organic-assisted redox reactions at snow-air/water-air interface. We herein discuss the implication of our results in the chemistry of atmospheric mercury and its potential implications in the biogeochemical cycling of mercury.