THE 21ST ANNUAL HAROLD I. SCHIFF LECTURE FACULTY OF SCIENCE AND ENGINEERING

Presented by:

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Atmospheric Trace Gas Degradation and Secondary Pollutant Formation: New Insights from Process Studies

Friday, December 2nd, 2011 2:00 p.m. Senate Chamber, N940, Ross Building York University

Abstract: OH radicals play a central role in the chemistry of the troposphere. They are mainly responsible for the chemical degradation of many trace gases and they initiate chemical reactions that may eventually lead to photochemical formation or depletion of tropospheric ozone. Recent field measurements of the key radicals (OH, HO₂) and measurements of the turnover rates, which determine the radical recycling, are underestimated significantly by current atmospheric chemistry models. At high load of anthropogenic and biogenic VOCs and low NO a significant OH source is missing. The challenging questions are: Which kind of reactions causes such efficient OH cycling? What does it mean to our understanding of the trace gas degradation and photochemical ozone production which is normally linked with radical cycling through NO reactions?

Organized by the York University Centre for Atmospheric Chemistry. Email: cac@yorku.ca



