

# SEMINAR

## **Halogen chemistry in the Arctic boundary layer: new chemical insights**

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Reactive halogen chemistry catalytically destroys ozone, oxidizes mercury, and affects the oxidative capacity in the atmosphere. The halogen-induced depletion of surface ozone and mercury in the Arctic boundary layer during springtime has been a focus of research over the past several decades. Using chemical ionization mass spectrometry (CIMS), we are advancing our current understanding of halogen chemistry through measurements of a suite of reactive halogen species, including observations of species for the first time in the atmosphere. Our combined observational and modeling approach is utilized to elucidate multiphase chemical mechanism coupled with the surface snowpack. These new findings provide key insights into the unique chemistry in the cryosphere in the ever changing climate.

**Monday, March 4, 2019, 3:30 p.m**

Refreshments 3:15 p.m

NCAR Foothills Laboratory

3450 Mitchell Lane, Boulder, CO 80301

FL2-1022, large seminar room

Live webcast: <http://ucarconnect.ucar.edu/live>

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