

Joel A. Thornton

Department of Atmospheric Sciences
408 ATG Building, Box 351640
University of Washington, Seattle
Seattle, WA 98195-1640

Email: thornton@atmos.uwashington.edu
Phone/fax: 206-543-4010

Education

- 2002 Ph.D., Department of Chemistry, University of California, Berkeley
- 1996 B.A., Dartmouth College; Magna Cum Laude, Honors in Chemistry

PhD Dissertation Title

Nitrogen Dioxide, Peroxynitrates, and the Chemistry of Tropospheric Ozone Production

Employment

- 2004 – present Assistant Professor, Department of Atmospheric Sciences,
University of Washington, Seattle
- 2002 – 2004 Postdoctoral Research Fellow, Department of Chemistry,
University of Toronto

Awards and Achievements

- 2008 NSF CAREER Award
- 2008 NASA Group Achievement Award for INTEX-B Campaign
- 2008 UW Student Technology Fee Award for Student Machine Shop
- 2005 UW Curriculum Development Award
- 2003 Atmospheric Chemistry Colloquium for Emerging Senior Scientists
- 2002 University of California Club of San Francisco Fellowship
- 2000 Teaching Effectiveness Award (UC, Berkeley)
- 1999-2002 NASA Earth Systems Science Fellow

- 1999 Outstanding Graduate Student Instructor (UC, Berkeley)
- 1996 American Chemical Society Award for Excellence in Analytical Chemistry

University of Washington Service

- 2007 – present Undergraduate Curriculum Committee
- 2007 – present Alternate Graduate Program Coordinator
- 2006 – present Machine Shop Committee (Co-chair as of Dec. 2008)
- 2007 Faculty Search Committee
- 2004 – present Graduate School Representative on 6 exam committees
- 2004 – present Member, 10 graduate student thesis committees
- 2004 – present Committee Chair or primary supervisor of 5 graduate students

Professional Society Memberships

American Chemical Society, American Geophysical Union, European Geosciences Union

Professional Activities and Service

- 2006 – present Co-Editor of the journal *Atmospheric Chemistry and Physics*
- 2006 – present Pacific Northwest National Laboratory Aerosol Climate Initiative Panel
- 2008 Co-Chair *Physical Chemistry of Atmospheric Processes*, a weeklong session at the American Chemical Society Spring Meeting
- 2006 Co-Chair *Tropospheric Heterogeneous Chemistry and Aerosol Phase Transitions*, American Geophysical Union Fall Meeting
- 2005 Pacific Northwest National Laboratory Environmental Molecular Sciences Laboratory Recapitalization Workshop/Panel
- 2004 Co-Chair *Tropospheric Chemistry*, American Geophysical Union Spring Meeting

2003 – present Regular peer reviewer for following journals: *Atmospheric Chemistry and Physics*, *Environmental Science and Technology*, *Geophysical Research Letters*, *Journal of Aerosol Science*, *Journal of Geophysical Research*, *Journal of Physical Chemistry*, *Physical Chemistry and Chemical Physics*

Atmospheric Chemistry Field Campaigns and Science Teams:

- 2009 Activation of Continental Chloride by Reactive Oxides of Nitrogen in winter time: Boulder, Co, February 2009 (UW –NOAA ESRL collaboration)
- 2008 Nitrogen Oxide Reactivity on Ambient Aerosols: Boulder, Co and Seattle, WA, July – August 2008 (UW –NOAA ESRL –NOAA PMEL Collaboration)
- 2007 – present VAMOS Ocean-Cloud-Land Study: Deployment at Paposo Land Site September – November 2008
- 2007 – present International Chemistry Experiment in the Arctic Lower Troposphere (Part of International Polar Year): March – April 2008 on the Research Vessel *Knorr*
- 2007 – present Biosphere Effects on Aerosols and Photochemistry Experiment: Blodgett Forest, CA, July - Oct 2007 and June – July 2009
- 2006 Intercontinental Transport Experiment –B: Deployment at Mt. Bachelor Observatory April - May 2006
- 2000 Texas Air Quality Study: Houston, TX, August – September, 2000
- 2000 Tropospheric Ozone Production about the Spring Equinox: aboard NCAR C-130 aircraft January – May, 2000
- 1999 Southern Oxidants Study: Nashville, TN June 15 – July 15, 1999

Teaching and Mentoring Activities

2004-current **Courses Taught:** *Global Atmospheric Chemistry*, *Fundamentals of Atmospheric Chemistry*, *Atmospheric Aerosols and Multiphase Chemistry*, *Climate and Climate Change*

Research Advising (cumulative) 4 undergraduates, 5 graduate students, and 3 postdoctoral fellows

1996-1999 **Graduate Student Instructor, UC, Berkeley**, Acted as teaching assistant for three undergraduate level courses in the Dept. of Chemistry

Publications: see separate pages