# **CURRICULUM VITAE**

### Nicole S. Lovenduski

Department of Atmospheric Science Colorado State University

**E-mail**: nikki@atmos.colostate.edu Web: http://www.atmos.colostate.edu/~nikki

#### Education

- Ph.D. Atmospheric and Oceanic Sciences, University of California at Los Angeles, 2007.
- M.S. Atmospheric and Oceanic Sciences, University of California at Los Angeles, 2003.
- B.A. Earth and Planetary Sciences, Washington University in St. Louis, 2001.

## Professional Experience

- Postdoctoral Research Fellow, Department of Atmospheric Science, Colorado State University, 2007-current.
- Graduate Student Researcher, Biogeochemistry Group, University of California at Los Angeles, 2002-2007.
- Undergraduate Research Assistant, Atmospheric Sciences Division, NASA Langley Research Center, 2000.
- Undergraduate Research Assistant, Earth and Planetary Remote Sensing Laboratory, Washington University in St. Louis, 1999-2001.

### **Publications**

- **Lovenduski, N. S.**, and T. Ito, submitted: The future evolution of the Southern Ocean  $CO_2$  sink, J. Mar. Res.
- **Lovenduski, N. S.**, N. Gruber, and S. C. Doney, 2008: Toward a mechanistic understanding of the decadal trends in the Southern Ocean carbon sink. Global Biogeochem. Cycles, 22, GB3016, doi:10.1029/2007GB003139.
- **Lovenduski, N. S.**, N. Gruber, S. C. Doney, and I. D. Lima, 2007: Enhanced CO<sub>2</sub> outgassing in the Southern Ocean from a positive phase of the Southern Annular Mode. Global Biogeochem. Cycles, 21, GB2026, doi:10.1029/2006GB002900.
- **Lovenduski, N. S.**, and N. Gruber, 2005: Impact of the Southern Annular Mode on Southern Ocean circulation and biology. Geophys. Res. Lett., 32, L11603, doi:10.1029/2005GL022727.
- Ehlmann, B. L., R. E. Arvidson, B. L. Jolliff, S. S. Johnson, B. Ebel, **N. Lovenduski**, J. D. Morris, J. A. Byers, N. O. Snider, and R. E. Criss, 2005: Hydrologic and Isotopic Modeling of Alpine Lake Waiau, Mauna Kea, Hawai'i. Pacific Science, 59(1), 1-15.

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#### Fellowships and Honors

NOAA Climate and Global Change Postdoctoral Fellowship, 2007-current.

Bjerknes Memorial Award, DAOS, UCLA, 2006.

NASA Graduate Student Fellowship in Earth System Science, 2005-2007.

Brian Lance Bosart Memorial Award, DAOS, UCLA, 2004.

Eugene Cota Robles Fellowship, University of California, 2001.

College Honors, Washington University in St. Louis, 2001.

Hewlett Honors Program in Environmental Sustainability, WUSTL, 1997-2001.

#### Invited Talks

Linking the Present to the Past: The Importance of the Southern Hemisphere Storm Track for Southern Ocean CO<sub>2</sub> Uptake, AGU Fall Meeting, San Francisco, CA, December 2008.

The future evolution of the Southern Ocean CO<sub>2</sub> Sink, Rosenstiel School of Marine and Atmospheric Science, Miami, FL, November 2008.

Long-term Changes in the Southern Ocean Carbon Dioxide Sink, California Institute of Technology, Pasadena, CA, October 2008.

Variability and Trends in the Southern Ocean CO<sub>2</sub> Sink, Lamont-Doherty Earth Observatory, Palisades, NY, July 2008.

Impact of the Southern Annular Mode on Southern Ocean biogeochemistry, Gordon Research Conference on Polar Marine Sciences, Ventura, CA, March 2007.

Impact of the SAM on the Southern Ocean Carbon Cycle, Dynamics and Impacts of the Southern Annular Mode (SAM) Workshop, Adelaide, Australia, February 2007.

#### Funded Proposals

NOAA Climate and Global Change Postdoctoral Research Fellowship, Determining the future behavior of the Southern Ocean CO<sub>2</sub> sink, 2007-2009, \$112,000.

NASA Graduate Student Fellowship in Earth Systems Science, Impact of the Southern Annular Mode on Southern Ocean Circulation and Biogeochemistry, 2005-2007, \$48,000.

### Teaching Experience

Teaching Assistant, Introduction to Physical Oceanography, Department of Atmospheric and Oceanic Sciences, University of California at Los Angeles, 2004.

Lecture: Light and Ocean Color, Introduction to Physical Oceanography, 2004.

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# Academic Service

Reviewer: Science, Deep-Sea Research II, Journal of Climate, Biogeosciences, Geophysical Research Letters, National Science Foundation.

- Expert Group on Ecosystem Models: Scientific Committee of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), invited.
- Convener: AGU Fall Meeting 2008, Ocean Carbon Cycle: Decadal Trends in the Global Ocean and Autonomous Observations of the North Atlantic Spring Bloom, Session OS24.
- Steering Committee: Southern Ocean Scoping Workshop 2009, Ocean Carbon and Biogeochemistry Program.
- Science Theme Committee: IPY-Oslo Science Conference 2010, Linkages between Polar Regions and global systems, invited.

## Courses, Symposia, and Fieldwork

New-Generation Polar Research Symposium, Colorado Springs, CO, May 2008.

- Dissertations Symposium on Chemical Oceanography (DISCO) XX, Honolulu, HI, October 2006.
- CLIVAR A16N Repeat Hydrography Cruise, NOAA R/V Ronald H. Brown, CTD Watch, O<sub>2</sub> and salinity sampling, 2003.
- SOLAS International Summer School on Surface Ocean-Lower Atmosphere Study, Cargese, France, 2003.

Field Studies in Geology, Biosphere 2, Columbia University, 2001.

Interdisciplinary Field Studies, Lake Waiau, Mauna Kea, Hawai'i, 2000.

#### Society Membership

American Geophysical Union, Member, 2002-current.

- UCLA Chapter of Chi Epsilon Pi, a national meteorological honor society, President, 2001-2004, Member, 2001-2007.
- Earth Science Women's Network, a peer-mentoring network of women in the Earth Sciences, Member, 2006-current.