

CORA EINTERZ RANDALL

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Education

B.A. / Chemistry. State University of New York, College at Purchase. 1982.
M.S. / Chemistry. University of California at Santa Cruz. 1983.
Ph.D. / Chemistry. University of California at Santa Cruz. 1985.

Professional Experience

2010 – present Professor, University of Colorado Boulder (CU) Department of Atmospheric and Oceanic Sciences (ATOC) and Laboratory for Atmospheric and Space Physics (LASP)
2012 – 2017 Chair, CU ATOC
2006 – 2010 Associate Professor, CU ATOC and LASP
1989 – 2005 Research Scientist, CU LASP
1987 – 1989 Research Scientist, University of California (UC), Santa Cruz
1986 – 1987 Post-doctoral Research Scientist, Carnegie Mellon University
1985 – 1986 Post-doctoral Research Scientist, UC Santa Cruz
1985 (Fall) Lecturer, Physical Chemistry (quantum mechanics/kinetics), UC Santa Cruz

Dr. Cora Randall has 30 years of experience in NASA space and atmospheric science mission programs, including as the NASA AIM CIPS instrument PI (2009-present). She has been PI on numerous research and analysis grants, and her professional work has ranged from biophysics to astronomy to atmospheric science. She was chair of the CU Boulder ATOC department for 5 years, and has led many university activities, including a 4-year overhaul of the undergraduate general education requirements. She is a current or previous member of numerous satellite science teams, and is an elected fellow of the American Geophysical Union and American Association for the Advancement of Science.

Honors & Awards

American Geophysical Union Bowie Lecturer: Marcel Nicolet Lecture, 2019
Natl. Acad. Sci. Space Studies Board; Decadal Survey Recognition, 2019
CU Boulder Faculty Assembly Excellence in Leadership and Service Award, 2017
Elected Fellow of the American Association for the Advancement of Science, 2015
Elected Fellow of the American Geophysical Union, 2012
University of Colorado Excellence in Leadership Program Fellow, 2010-2011
University of Colorado Provost's Faculty Achievement Award, 2008
NASA Group Achievement Awards (AIM, 2008; Aura, 2005; SOLVE II, 2004; HST, 1991)
Alan Berman Research Publications Award, Department of the Navy; 1996, 2003
Editors' Citation for Excellence in Refereeing, *Geophysical Research Letters*, 1998

Selected Relevant Publications (* Led by student or postdoc)

Polarized Light in Optics and Spectroscopy. D.S. Kliger, J.W. Lewis and C.E. Randall. Academic Press, San Diego, CA. 1990.

*Pettit, J. M., **C. E. Randall**, D. E. Peck, D. R. Marsh, M. van de Kamp, X. Fang, V. L. Harvey, C. J. Rodger, and B. Funke, Atmospheric effects of >30 keV energetic electron precipitation in the southern hemisphere winter during 2003, *J. Geophys. Res. Space Physics*, 124, doi:10.1029/2019JA026868, 2019.

- *Pettit, J., **C. E. Randall**, D. R. Marsh, C. Bardeen, L. Qian, C. H. Jackman, T. N. Woods, A. Coster, V. L. Harvey, Effects of the September 2005 solar flares and solar proton events on the middle atmosphere in WACCM, *J. Geophys. Res.: Space Physics*, 123, 5747-5763, doi:10.1029/2018JA025294, 2018.
- *France, J. A., **C. E. Randall**, et al., Local and remote planetary wave effects on polar mesospheric clouds in the northern hemisphere in 2014, *J. Geophys. Research*, doi:10.1029/2017JD028224, 2018.
- Harvey, V. L., **C. E. Randall**, L. Goncharenko, E. Becker, J. France, On the upward extension of the polar vortices into the mesosphere, *J. Geophys. Res.*, doi:10.1029/2018JD028815, 2018. **AGU Editors' highlight**
- Randall, C. E.**, et al., New AIM/CIPS global observations of gravity waves near 50–55 km, *Geophys. Res. Lett.*, 44, 7044–7052, doi:10.1002/2017GL073943, 2017.
- *Peck, E. D., **C. E. Randall**, V. L. Harvey, and D. R. Marsh, Simulated solar cycle effects on the middle atmosphere: WACCM3 Versus WACCM4, *J. Adv. Model. Earth Syst.*, 07, doi:10.1002/2014MS000387, 2015. **AGU Research Spotlight**.
- Randall, C. E.**, V. L. Harvey, L. A. Holt, D. R. Marsh, D. Kinnison, B. Funke, and P. F. Bernath, Simulation of energetic particle precipitation effects during the 2003–2004 Arctic winter, *J. Geophys. Res. Space Physics*, 120, doi:10.1002/2015JA021196, 2015.
- *Holt, L. A., **C. E. Randall**, E. D. Peck, D. R. Marsh, A. K. Smith, and V. L. Harvey, The influence of major sudden stratospheric warming and elevated stratopause events on the effects of energetic particle precipitation in WACCM, *J. Geophys. Res. Atmos.*, 118, doi:10.1002/2013JD020294, 2013.
- *Karlsson, B., **C.E. Randall**, V.L. Harvey, M. Mills, S. Benze, S.M. Bailey, J.M. Russell, III, Intra-seasonal variability of polar mesospheric clouds due to inter-hemispheric coupling, *Geophys. Res. Lett.* 36 (20), doi:10.1029/2009GL040348, 2009.
- *Seppälä, A., **C.E. Randall**, M.A. Clilverd, E. Rozanov, C.J. Rodger, Geomagnetic activity and polar surface air temperature variability, *J. Geophys. Res.*, 114, A10312, doi:10.1029/2008JA014029, 2009.
- Randall, C.E.**, V.L. Harvey, D.E. Siskind, J. France, P.F. Bernath, C.D. Boone, and K.A. Walker, NO_x descent in the Arctic middle atmosphere in early 2009, *Geophys. Res. Lett.* 36, L18811, doi:10.1029/2009GL039706, 2009. **AGU Editor's Highlight**.
- Randall, C.E.**, V.L. Harvey, C.S. Singleton, S.M. Bailey, P.F. Bernath, M. Codrescu, H. Nakajima, and J.M. Russell, III, Energetic particle precipitation effects on the southern hemisphere stratosphere in 1992-2005, *J. Geophys. Res.*, 112, D08308, doi:10.1029/2006JD007696, 2007.
- Randall, C.E.**, V.L. Harvey, C.S. Singleton, P.F. Bernath, C.D. Boone, and J.U. Kozyra, Enhanced NO_x in 2006 Linked to Strong Upper Stratospheric Arctic Vortex, *Geophys. Res. Lett.*, 33, L18811, doi:10.1029/2006GL027160, 2006.
- Randall, C.E.**, et al., Stratospheric effects of energetic particle precipitation in 2003-2004, *Geophys. Res. Lett.* 32, L05802, doi:10.1029/2004GL022003, 2005. **AGU Editor's Highlight**.
- Randall, C.E.**, et al., Validation of POAM III NO₂ measurements, *J. Geophys. Res.*, 107 (D20), 4432, doi:10.1029/2001JD001520, 2002.
- Randall, C.E.**, D.E. Siskind and R.M. Bevilacqua, Stratospheric NO_x Enhancements in the Southern Hemisphere Polar Vortex in Winter and Spring of 2000, *Geophys. Res. Lett.* 28, 2385-2388, 2001.
- Randall, C.E.**, R.M. Bevilacqua, D.W. Rusch and J.D. Lumpe, POAM II measurements of NO₂, 1993-1996, *J. Geophys. Res.* 103, 28,361-28,371, 1998.
- Randall, C.E.**, et al., Preliminary Results from POAM II: Stratospheric Ozone Densities at High Northern Latitudes, *Geophys. Res. Lett.* 22, 2733-2736, 1995.