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### **Education:**

Iowa State University      PhD Physics (1984)  
University of Cincinnati      BS Physics (1978)

### **Current position:**

Senior Scientist and Section Head for Remote Sensing, Atmospheric Chemistry Observations and Modeling Laboratory, NCAR.

### **Professional experience:**

National Center for Atmospheric Research: Advanced Study Program Postdoctoral Fellow (1985-1987), Scientist I, II, III (1987-1999), Senior Scientist (2000-present). Director of the Atmospheric Chemistry Division from 2007-2015.

### **Recent professional activities:**

Houghton Lecturer, EAPS, Massachusetts Institute of Technology. May-June 2015.

Principal Lecturer, Workshop on Fluid Dynamics in Earth and Planetary Sciences, Kyoto, Japan.  
December 2014.

Contributing author for Working Group I to the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change.

Lead Author for 2002, 2006 and 2010 UNEP/WMO Scientific Assessments of Ozone Depletion.

Scientific Steering Committee, Network for the Detection of Atmospheric Composition Change (NDACC), 2004-2014.

Scientific Steering Group for Stratospheric Temperature Trends activity, Stratosphere-troposphere Processes and their Role in Climate (SPARC), World Climate Research Program (WCRP), 1996-present. Co-chair 2005-2015.

International Ozone Commission member, 2009-present.

Associate Editor, Journal of the Atmospheric Sciences, 1999-present.

NASA Science Teams for the Upper Atmosphere Research Satellite (UARS), Stratospheric Aerosol and Gas Experiment (SAGE II), High Resolution Dynamics Limb Sounder (HIRDLS), Atmospheric Infrared Spectrometer (AIRS), GPS radio occultation and Aura Science Team. 1994-present.

**Recent publications: (full list available on my web site listed above)**

- Randel, W.J., M. Park, L. Emmons, D. Kinnison, P. Bernath, K. Walker, C. Boone and H. Pumphrey, 2010: Asian monsoon transport of pollution to the stratosphere. *Science*, 328, 611, doi:10.1126/science.1182274.
- Randel, W.J., E. Moyer, M. Park, E. Jensen, P. Bernath, K. Walker and C. Boone, 2012: Global variations of HDO and HDO/H<sub>2</sub>O ratios in the UTLS derived from ACE-FTS satellite measurements. *J. Geophys. Res.*, VOL. 117, D06303, doi:10.1029/2011JD016632.
- Thompson, D.W.J., D. J. Seidel, W.J. Randel, C.-Z. Zou, A.H. Butler, C. Mears, A. Osso, C. Long, and R. Lin, 2012: The mystery of recent stratospheric temperature trends. *Nature*, 29 November 2012, Vol. 491, 692-697, doi:10.1038/nature11579.
- Bourassa, A.E., A. Robock, W.J. Randel, T. Deshler, L.A. Rieger, N.D. Lloyd, E.J. Llewellyn and D. A. Degenstein, 2012: Large volcanic aerosol load in the stratosphere linked to Asian monsoon transport. *Science*, 6 July 2012, Vol. 337 no. 6090, pp. 78-81, doi:10.1126/science.1219371.
- Park, M., W. J. Randel, D. E. Kinnison, L. K. Emmons, P. F. Bernath, K. A. Walker, C. D. Boone, and N. J. Livesey, 2013: Hydrocarbons in the upper troposphere and lower stratosphere observed from ACE-FTS and comparisons with WACCM. *J. Geophys. Res. Atmos.*, 118, doi:10.1029/2012JD018327.
- Randel, W.J., and E.J. Jensen, 2013: Physical processes in the tropical tropopause layer and their role in a changing climate. *Nature Geoscience*, 6, 169-176, doi:10.1038/ngeo1733.
- Abalos, M., W.J. Randel, D.E. Kinnison and E. Serrano, 2013: Quantifying tracer transport in the tropical lower stratosphere using WACCM. *Atmos. Chem. Phys.*, 13, 10591-10607, doi:10.5194/acp-13-10591-2013.
- Garney, H. and W.J. Randel, 2013: Dynamic variability of the Asian monsoon anticyclone observed in potential vorticity and correlations with tracer distributions. *J. Geophys. Res.*, 118, 13,421–13,433, doi:10.1002/2013JD020908.
- Bourassa, A.E., D. A. Degenstein, W.J. Randel, J.M. Zawodny, E. Kyrola, C.A. McLinden, C.E. Sioris and C.Z. Roth, 2014: Trends in stratospheric ozone derived from merged SAGE II and Odin-OSIRIS satellite observations. *Atmos. Chem. Phys.*, 14, 6983-6994, doi:10.5194/acp-14-6983-2014.
- Abalos, M., W.J. Randel and E. Serrano, 2014: Dynamical forcing of sub-seasonal variability in the tropical Brewer-Dobson circulation. *J. Atmos. Sci.*, 71, 3439-3453, doi:10.1175/JAS-D-13-0366.1.
- Randel, W.J. and F. Wu, 2015: Variability of zonal mean tropical temperatures derived from a decade of GPS radio occultation data. *J. Atmos. Sci.*, 72, 1261-1275, doi:10.1175/JAS-D-14-0216.1.
- Randel, W. J., K. Zhang, and R. Fu, 2015: What controls stratospheric water vapor in the NH summer monsoon regions? *J. Geophys. Res. Atmos.*, 120, 7988–8001, doi:10.1002/2015JD023622.