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### **EDUCATION:**

- Southwestern at Memphis, Tennessee, Physics B.S., 1973
- Johns Hopkins University, Baltimore, MD Physics M.S., 1975
- Johns Hopkins University, Baltimore, MD Physics Ph.D., 1978
- Harvard University, Cambridge, MA Atmospheric Chemistry 1978-1988

### **PROFESSIONAL EXPERIENCE:**

- January 1999 to Present, Head, Department of Meteorology, The Pennsylvania State University
- June 1993 to Present, Professor, Department of Meteorology, The Pennsylvania State University
- August 1988 to June 1993, Associate Professor, Department of Meteorology, The Pennsylvania State University
- July 1978 to August 1988, Postdoctoral and Research Associate/Fellow in Chemical Physics, Harvard University

### **SELECTED RECENT PUBLICATIONS:**

- Ren, X., H. Harder, M. Martinez, R. L. Leshner, A. Oligier, J. B. Simpas, W.H. Brune, J. J. Schwab, K. L. Demerjian, Y. He, X. Zhou, and H. Gao, OH and HO<sub>2</sub> Chemistry in the Urban Atmosphere of New York City, *Atmospheric Environment*, **37**, 3639-3651, 2003a.
- Ren, X., G.D. Edwards, C.A. Cantrell, R.L. Leshner, A. R. Metcalf, T. Shirley, W. H. Brune, Intercomparison of peroxy radical measurements at a rural site using laser-induced fluorescence and Peroxy Radical Chemical Ionization Mass Spectrometer (PerCIMS) techniques, *J. Geophys. Res.*, **108**, D19, 4605, 10.1029/2003JD003644, 2003b.
- Martinez, M.; H. Harder, T.A. Kovacs, J.B. Simpas, J. Bassis, R. Leshner, W.H. Brune, G.J. Frost, E.J. Williams, C.A. Stroud, B.T. Jobson, J.M. Roberts, S.R. Hall, R.E. Shetter, B. Wert, A. Fried, B. Alicke, J. Stutz, V.L. Young, A.B. White, R.J. Zamora, OH and HO<sub>2</sub> concentrations, sources, and loss rates during the Southern Oxidants Study in Nashville, Tennessee, summer 1999, *J. Geophys. Res.*, **108**, D19, 4617, 10.1029/2003JD003551, 2003.
- Martinez, M, H. Harder, X. Ren, R.L. Leshner, W.H. Brune, Measuring atmospheric naphthalene with laser-induced fluorescence, *Atmospheric Chemistry and Physics*, **4**, 563-569, 2004.
- Faloona, I.C., D. Tan, R.L. Leshner, N.L. Hazen, C.L. Frame, J.B. Simpas, H. Harder, M. Martinez, P. Di Carlo, X.R. Ren, W.H. Brune, A laser-induced fluorescence instrument for detecting tropospheric OH and HO<sub>2</sub>: Characteristics and calibration, *J. Atmos. Chem.*, **47**, 139-167, 2004.
- Di Carlo, P; W.H. Brune, M. Martinez, H. Harder, R. Leshner, X.R. Ren, T. Thornberry, M.A. Carroll, V. Young, P.B. Shepson, D. Riemer, E. Apel, C. Campbell, Missing OH reactivity in a forest: Evidence for unknown reactive biogenic VOCs, *Science*, **304**, 722-725, 2004.
- Ren, X.R., Brune, W.H., Cantrell, C.A., et al., Hydroxyl and peroxy radical chemistry in a rural area of Central Pennsylvania: Observations and model comparisons, *J. Atmos. Chem.*, **52** (3): 231-257, 2005.
- Ren, X., W.H. Brune, A. Oligier, A.R. Metcalf, J. B. Simpas, T. Shirley, J. J. Schwab, C. Bai, U. Roychowdhury, Y. Li, C. Cai, K.L. Demerjian, Y. He, X. Zhou, H. Gao, and J. Hou, OH, HO<sub>2</sub>, and OH reactivity during the PMTACS–NY Whiteface Mountain 2002 campaign: Observations and model comparison, *J. Geophys. Res.*, **111**, D10S03, doi:10.1029/2005JD006126, 2006.

**PROFESSIONAL AFFILIATIONS:**

American Geophysical Union, AAAS, American Meteorological Society

**AWARDS:**

NASA Group Achievement Awards: AAOE, AASE, ASHOE/MAESA, SONEX, INTEX-A.  
Wilson Research Award, College of Earth and Mineral Sciences, Penn State University, 1994.  
Henry G. Houghton Award, American Meteorological Society, 2000.  
American Geophysical Union Fellow, 2003; American Meteorological Society Fellow, 2006.

**COLLABORATORS AND OTHER AFFILIATIONS:**

**(i) Collaborators**

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**(ii) Graduate and post-doctoral advisors**

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post-doctoral advisor: James G. Anderson, Harvard University

**(iii) Thesis advisor and post-graduate scholar sponsor.**

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