

CURRICULUM VITAE  
Edward J. Dlugokencky

EDUCATION

- Ph.D. Chemistry, University of Colorado, Boulder, 1987  
Thesis advisor: Carleton Howard  
Thesis title: Nitrate Radical Atmospheric Reactions: Kinetics and Mechanisms
- B.A. Chemistry, University of California, San Diego, 1981

EMPLOYMENT HISTORY

- Aug. 93 to Present: Research Chemist, NOAA ESRL Global Monitoring Division  
Jun. 90 to Aug. 93: University of Colorado, Cooperative Institute for Research in Environmental Sciences (working at NOAA/CMDL)  
Jun. 89 to Jun. 90: Visiting Scientist, National Center for Atmospheric Research, Boulder, CO  
Feb. 88 to May 89: Sabbatical Replacement, Institute of Nuclear Sciences, Department of Scientific and Industrial Research, Lower Hutt, New Zealand  
May 87 to Feb 88: Postdoctoral Fellowship, NOAA Aeronomy Laboratory, Atmospheric Chemical Kinetics Group

CURRENT RESEARCH

- Measurements of the global distributions of atmospheric CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and SF<sub>6</sub>.  
Studies of long-lived greenhouse gas budgets.

OTHER EXPERIENCE

- Former Chair WMO Global Atmosphere Watch, Scientific Advisory Group for GHGs, 2003 to 2015  
Lead author, IPCC TAR and AR5  
Contributing author to US Climate Change Science Program, SAP 3.4, Chap. 5  
Scientific lead for WMO GAW Central Calibration Laboratory for CH<sub>4</sub>

SELECTED PUBLICATIONS

- Dlugokencky, E.J., L.P. Steele, P.M. Lang, and K.A. Masarie, The growth rate and distribution of atmospheric methane, *J. Geophys. Res.*, 99, 17,021-17,043, 1994.
- Dlugokencky, E.J., K.A. Masarie, P.M. Lang, P.P. Tans, L.P. Steele, E.G. Nisbet, A dramatic decrease in the growth rate of atmospheric methane in the northern hemisphere during 1992, *Geophys. Res. Lett.*, 21, 45-48, 1994.
- Dlugokencky, E.J., Steele, L.P., Lang, P.M., and Masarie, K.A., Atmospheric methane at Mauna Loa and Barrow observatories: Presentation and analysis of in situ measurements, *J. Geophys. Res.*, 100, 23,103-23,113, 1995.
- Dlugokencky, E.J., E.G. Dutton, P.C. Novelli, P.P. Tans, K.A. Masarie, K.O. Lantz, and S. Madronich, Changes in CH<sub>4</sub> and CO growth rates after the eruption of Mt. Pinatubo and their link with changes in tropical tropospheric UV flux, *Geophys. Res. Lett.*, 23, 2761-2764, 1996.
- Dlugokencky, E.J., K.A. Masarie, P.M. Lang, and P.P. Tans, Continuing decline in the growth rate of the atmospheric methane burden, *Nature*, 393, 447-450, 1998.
- Dlugokencky, E.J., B.P. Walter, K.A. Masarie, P.M. Lang, and E.S. Kasischke, Measurements of an anomalous global methane increase during 1998, *Geophys. Res. Lett.*, 28, 499-502, 2001.
- Dlugokencky, E.J., S. Houweling, L. Bruhwiler, K.A. Masarie, P.M. Lang, J.B. Miller, and P.P. Tans, Atmospheric methane levels off: Temporary pause or new steady-state?, *Geophys. Res. Lett.*, 30 (19), doi:10.1029/2003GL018126, 2003.
- Dlugokencky, E. J., et al. (2009), Observational constraints on recent increases in the atmospheric CH<sub>4</sub> burden, *Geophys. Res. Lett.*, 36, L18803, doi:10.1029/2009GL039780.
- Dlugokencky, E. J., Nisbet, E. G., Fisher, R. & Lowry, D. (2011) Global atmospheric methane: budget, changes and dangers. *Phil. Trans. R. Soc. A* 369, 2058–2072. (doi:10.1098/rsta.2010.0341).