

## **Donna Schwede, Physical Scientist, in EPA's National Exposure Research Laboratory**

Computational Exposure Division

[Mailing Address](#)

[schwede.donna@epa.gov](mailto:schwede.donna@epa.gov)

**Area of Expertise:** Donna Schwede has expertise in air-surface exchange, atmospheric deposition, and air quality modeling.

### **Select Publications:**

- Bash, J., J. Walker, M. Shepard, K. Cady-Pereira, D. Henze, D. Schwede, L. Zhu, and E. Cooter, 2015. Modeling Reactive Nitrogen in North America: Recent developments, observational needs, and future directions. EM Magazine, September.
- Butler, T., R. Marino, D. Schwede, R. Howarth, J. Sparks, K. and Sparks, 2015. Atmospheric ammonia measurements at low concentration sites in the northeastern USA: implications for total nitrogen deposition and comparison with CMAQ estimates. Biogeochemistry, 122(2):191-210.
- Pye, H.O., D.J. Luecken, L. Xu, C.M. Boyd, N.L. Ng, K.R. Baker, B.R. Ayres, J.O. Bash, K. Baumann, W.P. Carter, E. Edgerton, J.L. Fry, W.T. Hutzell, D.B. Schwede, and P. B. Shepson, 2015. Modeling the current and future roles of particulate organic nitrates in the southeastern United States. Environmental Science & Technology, 49(24): 14195-14203.
- Sarwar, G., B. Gantt, D. Schwede, K. Foley, R. Mathur, and A. Saiz-Lopez, 2015. Impact of enhanced ozone deposition and halogen chemistry on tropospheric ozone over the Northern Hemisphere. Environmental Science and Technology, 49(15):9203-9211.
- Schwede, D. and G. Lear, 2014. A Novel Hybrid Approach for Estimating Total Deposition in the United States. Atmospheric Environment, 92:207-220.
- Cooter, E., A. E. Rea, R. J. Bruins, D. B. Schwede, and R. L. Dennis, 2013. The Role of the Atmosphere in the Provision of Ecosystem Services. Science of the Total Environment, 448(3):1-208.

View more research publications by [Donna Schwede](#).

### **Education:**

- B.S. Geology, State University of New York at Cortland, 1982
- M.S. Geology, Duke University, 1985

## **Professional Experience:**

- Physical Scientist, USEPA/ORD/NERL, Research Triangle Park, NC, 2008 – Present
- Physical Scientist, NOAA Atmospheric Sciences Modeling Division (in partnership with USEPA/NERL), Research Triangle Park, NC, 1993 – 2008
- Programmer Analyst, Computer Sciences Corporation, Research Triangle Park, NC, 1987 – 1993
- Physical Science Teacher, Ravenscroft School, Raleigh, NC, 1984 – 1987

## Honors and Awards:

- STAA Award – Level III (2015)  
“Linking Agricultural Crop Management and Air-Quality Models for Regional-to-National Scale Nitrogen Assessments”
- EPA Bronze Medal (2014)  
“For the development of EnviroAtlas: an interactive web-based tool of ecosystem benefits, demographics, and stressors that informs assessments and decisions at national to community scales”
- EPA Bronze Medal (2013)  
“For collaboration to develop an integrated air quality-biosphere system connecting air and agricultural management to human health and ecosystem health and services.”
- Exceptional/Outstanding ORD Technical Assistance to the Regions or Program Offices (2011)
- CMAQ Model Team  
EPA Bronze Medal (2011)  
“For the development and implementation of the innovation in the development of the Visualization environment for Rich Data Interpretation (VERDI)”
- EPA Office of Research and Development Science and Technological Achievement Award, Level III (2010)  
“For developing a Tool to Facilitate the Inclusion of CMAQ Estimates of Atmospheric Deposition in Water Quality Analyses”