

## David Wong, Research Computer Scientist, in EPA's National Exposure Research Laboratory

Computational Exposure Division

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**Area of Expertise:** David Wong has expertise in high performance computing performance, parallel algorithms, optimization, numerical methods, and parallel I/O techniques and models coupling.

### Select Publications:

Wong, D. C., Cai, C., Pleim, J., Mathur, R., and Murphy M. S., Validation of the WRF-CMAQ TwoWay Model with Aircraft Data and High Resolution MODIS Data in the CA 2008 Wildfire Case. Chapter 85, Air Pollution Modeling and its Application XXIV. Springer International Publishing AG, Cham (ZG), Switzerland, 531-536, (2016).

Gan, M., C. Hogrefe, R. Mathur, Jon Pleim, J. Xing, David-C Wong, R. Gilliam, G. Pouliot, AND C. Wei. Assessment of the effects of horizontal grid resolution on long-term air quality trends using coupled WRF-CMAQ simulations. ATMOSPHERIC ENVIRONMENT. Elsevier Science Ltd, New York, NY, 132:207-216, (2016).

Mathur, R., J. Xing, S. Napelenok, Jon Pleim, C. Hogrefe, David-C Wong, C. Gan, AND D. Kang. Multiscale Modeling of Multi-decadal Trends in Ozone and Precursor Species Across the Northern Hemisphere and the United States. Chapter 39, Air Pollution Modeling and its Application XXIV. Springer International Publishing AG, Cham (ZG), Switzerland, 239-243, (2016).

Xing, J., J. Wang, R. Mathur, Jon Pleim, S. Wang, C. Hogrefe, C. Gan, David-C Wong, AND J. Hao. Unexpected Benefits of Reducing Aerosol Cooling Effects. ENVIRONMENTAL SCIENCE & TECHNOLOGY. American Chemical Society, Washington, DC, 50(14):7527-7534, (2016).

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### Education:

- B.S. in Computer Science and Mathematics (double major), Oklahoma State University, 1988
- M.S. in Applied Mathematics, Oklahoma State University, 1990
- Ph.D. in Computer Science, North Carolina State University, 1996

**Professional Experience:**

- Computational Scientist, USEPA/ORD/NERL/AMD/AMDB, Research Triangle Park, NC 2008–present.
- Computational Scientist, NOAA Atmospheric Sciences Modeling Division (in partnership with USEPA/NERL), Research Triangle Park, NC, 2006–2008
- Senior Consultant-Science Applications, Lockheed Martin, SAIC (USEPA contractor), Research Triangle Park, NC, 1998–2006