

Daiwen Kang, Physical Scientist, in EPA's National Exposure Research Laboratory

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Area of Expertise: Air quality modeling development and applications, model simulation analysis and evaluations, Direct Decoupled Method (DDM) for sensitivity analysis, process analysis on modeled outputs and observations, design and development of analysis tools, and bias-adjusted air quality forecast study.

Select Publications:

Kang, D., C. Hogrefe, K. L. Foley, S. L. Napelenok, R. Mathur, and S. T. Rao, Application of the Kolmogorov-Zurbenko filter and the decoupled direct 3D method for the dynamic evaluation of a regional air quality model, *Atmos. Environ.*, 80, 58-69, 2013.

Kang, D., R. Mathur, S. T. Rao, "Real-time bias-adjusted O₃ and PM_{2.5} air quality index forecasts and their performance evaluations over the continental United States", *Atmospheric Environment*, 44, 2203-2212, doi:10.1016/j.atmosenv.2010.03.017, 2010.

Kang, D., R. Mathur, S.T. Rao, and S. Yu, "Bias-adjustment Techniques for Improving Ozone Air Quality Forecasts", *Journal of Geophysical Research*, 113, D23308, doi:10.1029/2008JD010151, 2008.

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Education:

- B.S. in Chemistry, Ocean University of China, Qingdao, China, 1987
- M.S. in Marine Chemistry, Ocean University of China, Qingdao, China, 1990
- M.S. in Computer Science, North Carolina State University, Raleigh, NC, 1999
- Ph. D. in Atmospheric Sciences, North Carolina State University, Raleigh, NC, 2001

Professional Experience:

- Physical Scientist, CED/NERL/ EPA, Research Triangle Park, NC, 2015 – Present
- Senior Prof. Physical Scientist, Computer Science Corporation, Research Triangle Park, NC, 2009 – 2015
- Physical Scientist, Science and Technology Corporation, Research Triangle Park, NC, 2004 – 2009
- Visiting Scientist, UCAR, Research Triangle Park, NC, 2002 – 2004
- 1997 - 2001 Research Assistant, North Carolina State University, Raleigh, NC

- 1999 – 2001 Canon National Park Science Scholar, North Carolina State University, Raleigh, NC
- 1990 - 1996 Environment Engineer, Institute for Environmental Sciences, Jinan, China