

David K. Heist, Research Physical Scientist, in EPA's National Exposure Research Laboratory

Computational Exposure Division

[Mailing Address](#)

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Area of Expertise: David Heist has expertise in wind tunnel modeling of atmospheric boundary layers for the study of air pollution dispersion. He also has expertise with development and evaluation of applied dispersion models and algorithms.

Select Publications:

Perry, S., D. Heist, L. Brouwer, E. Monbureau, AND L. Brixey. Characterization of pollutant dispersion near elongated buildings based on wind tunnel simulations. *ATMOSPHERIC ENVIRONMENT*. Elsevier Science Ltd, New York, NY, 142:286-295, (2016).

Arunachalam, S., A. Valencia, M. Snyder, V. Isakov, D. Heist, D. Carruthers, AND A. Venkatram. Development and Evaluation of Model Algorithms to Account for Chemical Transformation in the Nearroad Environment. ISES 2015 Annual Meeting, Henderson, NV, October 19 - 22, 2015.

Heist, D., C. Hood, A. Venkatram, S. Perry, V. Isakov, M. Snyder, L. Brouwer, D. Carruthers, J. Stocker, AND S. Smith. Evaluation of US and UK Models in Simulating the Impact of Barriers on Near-Road Air Quality. ISES 2015 Annual Meeting, Henderson, NV, October 18 - 22, 2015.

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Education:

- B.S. Mechanical Engineering, Lehigh University, 1988
- Ph.D. Mechanical Engineering, Cornell University, 1994

Professional Experience:

- Physical Scientist, National Exposure Research Laboratory, US Environmental Protection Agency, Research Triangle Park, NC, 2008 – Present
- Physical Scientist, Air Resources Laboratory, NOAA, Research Triangle Park, NC, 2003 – 2008
- Research Scientist, ManTech Environmental Technology, Inc., Research Triangle Park, NC, 1999 – 2003
- Visiting Postdoctoral Research Fellow, Department of Chemical Engineering, University of Illinois, Urbana, IL, 1997 – 1999

- Research Fellow, Environmental Flow Research Laboratory, University of Surrey, UK
1994 - 1997