

Jonathan D. Krug, Environmental Engineer, in EPA's National Exposure Research Laboratory

Exposure Methods and Measurements Division

[Mailing Address](#)

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Area of Expertise: Jonathan's research focus includes studies of secondary organic aerosol (SOA) formation, composition, and contribution to atmospheric concentrations. Additional interests include gas-borne particulates with an emphasis on simulating complex multi-pollutant urban atmospheres. Jonathan provides instrument design and engineering analysis to various projects within the division.

Select Publications:

MA McGee, EH Boykin, QT Krantz, C King, J Krug, N Modak, CE Wood, MI Gilmour, SH Gavett. Effects of Photochemically Aged Atmospheres on Allergic Responses in Mice. Poster session at: 54th Annual Society of Toxicology; 2015 March 22-26; San Diego, CA.

Ivan R. Piletic, John H. Offenberg, David A. Olson, Mohammed Jaoui, Jonathan Krug, Michael Lewandowski, John M. Turlington, Tadeusz E. Kleindienst. Constraining carbonaceous aerosol sources in a receptor model by including 14C data with redox species, organic tracers, and elemental/organic carbon measurements, Atmospheric Environment, Volume 80, December 2013, Pages 216-225, ISSN 1352-2310.

Krug, J., M. Lewandowski, T.E. Kleindienst, M. Higuchi, and I. Gilmour, 2013, Development of a mobile atmospheric reaction chamber with precision thermodynamic control for generation of complex urban air mixtures. EPA PM Clean Air Research Annual Meeting, Seattle, WA, July 25-26.

Krug, J., Lewandowski, M., Offenberg, J., Kleindienst, T., and Gilmour, I. Development of a Mobile Atmospheric Reaction Chamber with Precision Thermodynamic Control for Generation of Complex Urban Air Mixtures. Poster session at: 31st Annual American Association for Aerosol Research; 2012 Oct 8-12; Minneapolis, MN.

Willis, R., Bunker, K., Lersch, T., Casuccio, G., Grulke, E., Mandzy, N., Conny, J., Lewandowski, M., Weinstein, J., Krug, J., Kovalcik, K. Physicochemical Characterization of Cerium Particles Generated by combustion of Ce-Doped Diesel Fuel. Presentation at: 31th Annual American Association for Aerosol Research; 2012 Oct 8-12; Minneapolis, MN.

Krug, J., Gilmour, I., Higuchi, M., Lewandowski, M., Offenberg, J., Linak, B., Kleindienst, T.E., Development of a Photochemical Smog Chamber for Studying Toxicity of Urban Air Mixtures. EPA PM Clean Air Research Annual Meeting, Seattle, WA, May 1st 2012.

View more research publications by [Jonathan Krug](#).

Education:

- M.S., Environmental Engineering, University of North Carolina at Chapel Hill, 2010
- B.S., Mechanical Engineering, North Carolina State University, 2006

Professional Experience:

- Environmental Engineer, USEPA, ORD, NERL-EMMD-AQB, RTP, NC 2014-present
- Mechanical Engineer, USEPA, ORD, NERL-HEASD-PMRB, RTP, NC 2010-2014
- Research Assistant, University of North Carolina, Chapel Hill, NC 2008-2010
- Design Engineer, LMHT Associates, Durham, NC 2006-2008

Honors and Awards:

- Exceptional Support to NERL Research Award. For multipollutant atmospheric chemistry research in support of exposure science. 2015 NERL Awards.