

Daniel A. Vallero, Research Physical Scientist, in EPA's National Exposure Research Laboratory

Systems Exposure Division

[Mailing Address](#)

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Area of Expertise: Dr. Vallero is developing a system for prioritizing chemical ingredients based on their exposure potential based on physicochemical properties and human factors that may affect chemical exposures. He also conducts research on exposures to air pollutants; especially those found near roadways and industrial settings, including asbestos and other fibers.

Select Publications:

Kimbrough, S., Hays, M., Preston, W., Vallero, D., and Hagler, G. (2015). Episodic impacts from California wildfires identified in Las Vegas near-road air quality monitoring. *Environmental Science & Technology*. Jan 5;50(1):18-24. doi: 10.1021/acs.est.5b05038. Epub 2015 Dec 16.

Vallero, D. and Isukapalli, S. (2014). Simulating real-world exposures during emergency events: Studying effects of indoor and outdoor releases in the Urban Dispersion Program In upper Manhattan, New York. *Journal of Exposure Science and Environmental Epidemiology*. (24(3): 279-289. doi:10.1038/jes.2013.

Goldsmith M-R., , ... Vallero, D.A., ...Dary C.C. (2013). Development of a consumer product ingredient database for chemical exposure screening and prioritization. *Food and Chemical Toxicology*. 65C:269-279. doi: 10.1016/j.fct.2013.12.029.

Mitchell, J., Collier, Z.A., Pabon, N., Egeghy, P., Cohen Hubal, E.A., Linkov, I. and Vallero, D.A. (2013). A decision analytic approach to exposure-based chemical prioritization. *PLOS One*. 8(8): 1-13. e70911. doi: 10.1371/journal.pone.0070911.

Mitchell-Blackwood, J., Arnot, J. Jolliet, O., Egeghy, P., Georgopolous, P., Isukapalli, S., Wambaugh, J., Cohen-Hubal and Vallero, D. (2013). [Comparison of models to prioritize chemicals based on exposure potential](#). *Science of the Total Environment*. 458:555-567.

Isaacs, K., McCurdy, T., Glen, G, M. Nysewander, A. Errickson, S. Forbes, S. Graham, L. McCurdy, L. Smith, N. Tolve and D. Vallero (2012). Statistical properties of longitudinal time-activity data for use in human exposure. *Journal of Exposure Science and Environmental Epidemiology*. 10/2012; DOI:10.1038/jes.2012.94

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Education:

- Ph.D., Civil and Environmental Engineering, Duke University, Durham, NC
- M.S., Civil and Environmental Engineering, University of Kansas, Lawrence, KS
- M.S., City and Regional Planning, Southern Illinois University, Edwardsville, IL
- B.A., Earth Sciences & Psychology, Southern Illinois University, Edwardsville, IL

Professional Experience:

- Senior Environmental Research Scientist; EPA, 1990-present
- Adjunct Professor, Duke University, Pratt School of Engineering, 2000-present
- Adjunct Associate Professor, North Carolina Central University, 2012
- Associate Professor, North Carolina Central University, January 2002-December 2003
- Congressional Staff Member, U.S. House of Representatives, Subcommittee on Energy and Power, Washington, DC, 1993
- Environmental Scientist and Planner, EPA, Region 7, Kansas City, KS, 1976-1990

Awards and Honors:

- Scientific and Technological Achievement Award, 2015, Level II, "ExpoCast High Throughput Framework for Rapid Prioritization of Human Exposure to Environmental Chemicals," Co-recipients: R.W. Setzer, J.F. Wambaugh, E. Cohen Hubal, D.M. Reif, J. Mitchell-Blackwood, S. Gangwal, A. Frame, J. R. Rabinowitz, T.B. Knudsen, R.S. Judson, P.P. Egeghy, J. Arnot, and O. Jolliet.
- Top Ten Abstract. "A High-Throughput Exposure Estimation Tool Incorporating ADME Processes." Society of Toxicology. Risk Assessment Specialty Section, 2015.
- Office of Research and Development Teamwork Award, 2012, Federal Highway Administration Near-Road Study.