**Katherine Phillips, Physical Scientist, in EPA's National Exposure Research Laboratory**

Computational Exposure Division
Mailing Address

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**Area of Expertise**: With a background in atomistic and molecular modeling of materials for energy storage devices, Katherine's research now focuses on developing and implementing chemoinformatic approaches to support exposure and dose models. Most recently, she has constructed models that predict how thousands of chemicals can be used in consumer products found in and around the home. These predictions can then be used to identify potential alternatives in a high-throughput way. In addition to alternatives identification, these models can also be used to parameterize high-throughput exposure models.

**Select Publications**:

Long Y, Sliwinska-Bartkowiak M, Drozdowski H, Kempinski M, Phillips KA, Palmer JC, Gubbins KE. High pressure effect in nanoporous carbon materials: effects of pore geometry. Colloids and Surfaces A-Physicochemical and Engineering Aspects, 437(SI):33-41, 2013.

Phillips KA, Palmer JC, Gubbins KE. Analysis of the solvation structure of rubidium bromide under nanoconfinement. Molecular Simulation, 38(14—15), 1209—1220, 2012.

View more research publications by Katherine Phillips.

**Education**:

- Ph. D., Chemical and Biomolecular Engineering, North Carolina State University, 2014
- B. S., Chemical and Biological Engineering, The University of Alabama, 2009

**Professional Experience**:

- Physical Scientist, U. S. EPA, 2016 – present
- ORISE Postdoctoral Fellow, U. S. EPA, 2015 – 2016
- Chemical and Biomolecular Engineering Postdoctoral Fellow, NC State University, 2014 -- 2015