

## **Generating Exposure-Relevant Measurement Data for Potential Use in Support of TSCA Requirements**

ISES Symposium: Challenges and Opportunities: Assessing Exposures to Chemical Substances under Amended TSCA- Methods, Models, and Data

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The EPA Office of Research and Development (ORD) has a number of ongoing projects which generate exposure measurements. These data may inform ongoing implementation of the amended Toxic Substances Control Act (TSCA). Exposure measurements include physical-chemical property information, monitoring (environmental, biological, and consumer product), and emission testing data. Together, these data will help identify and characterize exposure potential for chemical substances and mixtures. ORD has recently developed the Computational Toxicology (CompTox) Chemistry Dashboard for dissemination of high-quality curated chemical structures, physicochemical properties, and exposure-related data. The CompTox Chemistry dashboard includes measured and predicted properties for over 700,000 chemicals. ORD is augmenting the data with new measured values for potentially challenging chemical classes. Further, data for many chemicals in consumer products, human serum, house dust, drinking water, and other environmental media are being generated by both ORD and contract laboratories to help refine exposure pathways and reduce uncertainty in exposure predictions. Suspect screening and non-targeted analyses (SSA/NTA) using high resolution mass spectrometry methods are being used with targeted confirmation for high-priority chemicals. Finally, both ORD and contract laboratories are generating data describing the emission and migration characteristics of chemicals from consumer products using testing chamber methods. Prior to any implementation, the fitness-for-purpose of these data (e.g., for prioritization, scoping, or risk evaluation) must be evaluated in the context of TSCA requirements. *The views expressed here are those of the authors and do not necessarily reflect the views or policies of the U. S. EPA.*