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Title:

Bringing it all together: A Web-based Database for Chemical and Biological Data to Support Environmental Toxicology

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The EPA Comptox Chemistry Dashboard is a web-based application providing access to a set of data resources provided by the National Center of Computational Toxicology. Sitting on a foundation of chemistry data for ~750,000 chemical substances the application integrates bioassay screening results, physicochemical and toxicological endpoints (both experimental and predicted) and consumer product and functional use data. By integrating a series of other EPA and public databases (e.g. ECOTOX, the EPA Substance Registry Service, EPA's ChemView and PubChem), the dashboard provides a hub for connecting to other releases of value to environmental scientists and toxicologists. The underpinning architecture has been developed in a manner allowing for the release of the dashboard as a public resource, as well as for delivering applications used inside confidential business information environments. These applications are being assessed for potential applications to support risk decisions. This presentation will provide an overview of the dashboard focusing specifically on the most recent functionality supporting deeper integration to the ToxCast bioassay data and exposure data and predictions available via the dashboard. This abstract does not reflect U.S. EPA policy.