Special Issue

Human Exposure and Computational Modeling of Persistent Organic Pollutants (POPs)

Message from the Guest Editors

Persistent Organic Pollutants (PoPs) are toxic chemicals including PCBs, PFAS, and dioxins. These persist in the environment and bioaccumulate in human tissues, causing adverse health effects like cancer, immunosuppression, neurotoxicity, etc. Human exposure occurs mostly through air, food, water, and consumer products, often being detected in blood, urine, or other biological matrices through human biomonitoring (HBM) studies. For improving exposure and risk assessment of PoPs, new approach methodologies (NAMs) can guide regulatory decisions by integrating HBM data and computational models. Computational modeling.However, challenges still exist, like data gaps for emerging PoPs, population variability, and huge uncertainty when combining data from multiple platforms like transcriptomics, metabolomics, lipidomics, etc. The ongoing advancement in NAMs, the harmonization of data, and predictive modeling integration are crucial steps for improving risk assessment frameworks and protecting long-term health risks.

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Message from the Editor-in-Chief

Toxics (ISSN 2305-6304) is an international, peer-reviewed, open access journal which provides an advanced forum for studies related to all aspects of toxic chemicals and materials. We aim to publish high quality work that furthers our understanding of the exposure, effects, and risks of chemicals and materials in humans and the natural environment as well as approaches to assess and/or manage the toxicological and ecotoxicological risks of chemicals and materials. Please consider publishing in *Toxics* when preparing your next paper.

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