Special Issue

New Approach Methodologies in Environmental Risk Assessment of Chemical Contaminants

Message from the Guest Editor

The impacts of environmentally relevant concentrations of chemicals and their mixtures on biological systems are challenging to assess. Many current approaches to assessing pollution focus on detecting chemicals and pollutants in the environment. Such approaches are weak in providing links between specific pollutants and their possible mechanisms of action and ecological effects, failing to produce diagnostic insight concerning the type of stressor or predict future impacts. These limitations shifted ecotoxicology towards New Approach Methodologies (NAMs), which provide new metrics for pollution assessment using in vitro cell-based assays. NAMs aim to provide mechanistic insights into chemical toxicity, enhance predictive risk assessments, and align with the principles of the 3Rs (replacement, reduction, and refinement of animal testing). This Special Issue welcomes submissions that highlight mechanistic toxicological studies using in silico, in vitro, and whole-organism responses in accordance with the 3Rs, as well as high-throughput screening methods such as omics and behavioral assays, and the application of NAMs to regulatory bodies.

Guest Editor

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Deadline for manuscript submissions

26 June 2026

Toxics

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/236393

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About the Journal

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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