



toxics



an Open Access Journal by MDPI

Using Metabolomics, Exposomics and Epigenomics to Bridge Critical Knowledge Gaps of Chemical Exposures in Fish and Aquatic Invertebrates

Guest Editors:

Dr. Edwin Routledge

College of Health and Life
Sciences, Brunel University
London, Uxbridge UB8 3PH,
Middlesex, UK

Dr. Thomas Miller

College of Health, Medicine and
Life Sciences, King's College
London, London, UK

Deadline for manuscript
submissions:

closed (20 July 2023)

Message from the Guest Editors

Dear Colleagues,

Chemical pollution is becoming increasingly pervasive in the aquatic environment, and is responsible for a wide variety of adverse effects in wildlife. Traditionally, research efforts have focused on the application of effect-based assessment for apical endpoints without considering the underlying mechanisms that link cause to effect. The purpose of this Special Issue is to highlight the application of exciting and disruptive research using metabolomics, exposomics and epigenomics that will bridge critical knowledge gaps of chemical exposures and aid the development of adverse outcome pathways (AOPs) in fish and aquatic invertebrates. We invite high-quality original research papers detailing in vitro and in vivo (field and laboratory) studies, with an emphasis on fish and aquatic invertebrates. While underlying mechanisms may not be fully characterized, the research should attempt to develop a plausible mechanistic basis for apical effects and include realistic and measured chemical exposure scenarios where possible. Research on single chemicals, mixtures, complex environmental samples and cross-species comparisons are welcome.



mdpi.com/si/154729

Special Issue



toxics



an Open Access Journal by MDPI

Editor-in-Chief

Dr. Demetrio Raldúa

Department Environmental
Chemistry, IDAEA-CSIC, Jordi
Girona 18, 08034 Barcelona,
Spain

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.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [Embase](#), [CAPus / SciFinder](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q1 (Toxicology) / CiteScore - Q1 (Chemical Health and Safety)

Contact Us

Toxics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/toxics
toxics@mdpi.com
X@@Toxics_MDPI