

Special Issue

Drug Metabolism and Toxicological Mechanisms

Message from the Guest Editors

Absorption, distribution, metabolism, and excretion (ADME) processes are of importance in understanding how the body disposes and responds to drugs. These processes play a pivotal role in assessing the efficacy and safety of drugs, while also enabling the prediction of potential adverse reactions or toxicities. A parent drug can undergo biotransformation by drug-metabolizing enzymes, leading to the formation of either toxic metabolites (metabolic activation) or non-toxic metabolites (detoxification). Thus, drug metabolism can be a key determinant of drug toxicity. Recently, new approach methodologies such as in silico methods, based on non-animal data, have been developed and applied in regulatory practices. This Special Issue mainly focuses on drug metabolism and toxicological mechanisms. It extensively covers a range of topics, including drug metabolism, physiologically based pharmacokinetic (PBK) modeling, toxicokinetics–toxicodynamics (TK–TD), ADME characterization, the identification and toxicity of metabolites, high-throughput pharmacokinetics (HT-PK), organ-specific toxicity, and toxicological mechanisms.

Guest Editors

Prof. Dr. Qi Wang

Dr. Youbo Zhang

Dr. An Zhu

Deadline for manuscript submissions

closed (31 December 2024)



Toxics

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/186855

Toxics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
toxics@mdpi.com

[mdpi.com/journal/
toxics](https://mdpi.com/journal/toxics)





Toxics

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 6.4
Indexed in PubMed



[mdpi.com/journal/
toxics](https://mdpi.com/journal/toxics)



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.

Editor-in-Chief

Dr. Demetrio Raldúa
Department Environmental Chemistry, IDAEA-CSIC, Jordi Girona 18,
08034 Barcelona, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.1 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).