Special Issue

Evaluating DNA Damage and Toxicological Effects

Message from the Guest Editors

The human genome is constantly challenged by endogenous and exogenous electrophiles that form potentially toxic and mutagenic DNA adducts. This Special Issue will discuss the role of DNA damage in aging and cancer, focusing on adduct structures. detection methods, and their biological and toxicological outcomes. We will review DNA lesions generated from endogenous reactive species and exogenous damaging agents, including environmental toxins and chemotherapeutic drugs. For detection methods, we will cover various techniques including LC-MS, antibody-based methods, and NMR. For biological outcomes of DNA adducts, we will consider toxicological effects, chemical reactivity, mutagenicity, and toxicity. We will also discuss DNA repair mechanisms. Overall, this Special Issue will review the latest advancements in DNA adducts and their toxicological effects.

Guest Editors

Prof. Dr. Natalia Tretyakova

Department of Medicinal Chemistry, University of Minnesota Twin Cities, Minneapolis, MN 55455, USA

Dr. Deyu Li

Department of Biomedical and Pharmaceutical Sciences, College of Pharmacy, University of Rhode Island, Kingston, RI 02881, USA

Deadline for manuscript submissions

31 August 2025



Toxics

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/235328

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

mdpi.com/journal/toxics





Toxics

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 6.4
Indexed in PubMed



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).

