

## Special Issue

# Toxicology in Cells: Cellular Mechanisms, Molecular Responses, and Modern Models

### Message from the Guest Editors

Toxicology is entering a new era driven by the rapid development of advanced cellular models, high-throughput technologies, and systems biology approaches.

This Special Issue, “Toxicology in Cells: Cellular Mechanisms, Molecular Responses, and Modern Models”, aims to highlight recent advances in the study of toxic effects at the cellular and molecular level.

Topics of interest include (but are not limited to) the following:

- Mechanisms of cellular stress, apoptosis, autophagy, and necroptosis induced by toxicants;

- Mitochondrial dysfunction, oxidative stress, and ER stress in toxicity;

- Cellular uptake and processing of nanoparticles and other emerging contaminants;

- Organoid, organ-on-a-chip, and 3D cell models for toxicity testing;

- Drug-induced liver, kidney, and cardiac toxicity in cell systems;

- Immunotoxicity and inflammatory responses at the cellular level;

- Integration of in vitro and in silico methods for predictive toxicology;

This Special Issue will provide a platform for presenting innovative approaches that bridge the gap between cellular biology and toxicology, contributing to the development of mechanism-based safety assessment and precision toxicology.

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### Guest Editors

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## Cells

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## About the Journal

### Message from the Editorial Board

*Cells* has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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### Editors-in-Chief

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#### Journal Rank:

JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).