

## Special Issue

# Electrochemical Approaches in Bioanalysis: Translational Applications in Medicine and Environmental Monitoring

### Message from the Guest Editor

This Special Issue, titled “Electrochemical Approaches in Bioanalysis: Translational Applications in Medicine and Environmental Monitoring”, aims to highlight cutting-edge developments in the design, fabrication, and application of electrochemical sensors and biosensors. Topics of interest include the integration of nanomaterials, biomimetic recognition elements (aptamers, molecularly imprinted polymers), and novel electrode platforms (3D-printed, paper-based, microfluidic systems) to enhance sensitivity and selectivity. Contributions focusing on translational applications, from point-of-care diagnostics and real-time patient monitoring to the detection of contaminants, toxins, and emerging pollutants in complex environmental matrices, are particularly welcome. By bringing together innovations in electrochemistry, materials science, and bioanalytical chemistry, this issue seeks to provide a multidisciplinary perspective on the next generation of electrochemical devices. Ultimately, the goal of this Special Issue is to bridge fundamental advances with practical applications, fostering technologies that can impact healthcare, environmental sustainability, and public security.

### Guest Editor

Dr. Mihaela Tertis

Analytical Chemistry Department, Iuliu Hatieganu University of Medicine and Pharmacy in Cluj-Napoca, Cluj Napoca, Romania

### Deadline for manuscript submissions

31 December 2026



## Molecules

an Open Access Journal  
by MDPI

Impact Factor 4.6  
CiteScore 8.6  
Indexed in PubMed



[mdpi.com/si/254623](https://mdpi.com/si/254623)

*Molecules*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[molecules@mdpi.com](mailto:molecules@mdpi.com)

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





# Molecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 8.6  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

---

### Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarInLit, AGRIS, and other databases.

#### Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).