Special Issue

State-of-the-Art and Advances in Electrochemical Sensors/Biosensors

Message from the Guest Editors

The research on enzymatic biosensors has been mostly focused on amperometry based devices. Though the detection of an enzymatic reaction can be achieved by voltammetry, potentiometry or electrochemical impedance spectroscopy. Electrochemical biosensors offer a number of advantages in terms of sensitivity, detection limits and linear responses and have been effectively transferred from the laboratory to the real-world testing. But for enzymatic electrochemical biosensors, there are still many challenges e.g., stability and shelf-life aspects, complex fabrication, high associated costs, etc., which need to be addressed or improved for better performance and from commercial perspective.

This Special Issue devoted to the interesting techniques, methods, and devices related to electrochemical enzyme biosensors, enzyme mimetics, innovative electrochemical mediators, novel immobilization strategies, advanced and functional materials for fabrication, in order to develop highly sensitive, selective, stable and reliable biosensors for agri-food, healthcare & diagnostics and environmental applications.

Keywords:

- enzyme biosensors
- electrochemical sensors and biosensors

Guest Editors

Dr. Baljit Singh

MiCRA Biodiagnostics Technology Gateway and Health, Engineering & Material Sciences (HEMS) Hub, Technological University Dublin (TU Dublin), D24 FKT9 Dublin, Ireland

Dr. Tony O Hara

Pesticide Registration Division, Department of Agriculture, Food & the Marin, Backweston Laboratory Campus, W23 VW2C Celbridge, Ireland

Deadline for manuscript submissions

closed (31 January 2024)



Chemosensors

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 7.3



mdpi.com/si/144484

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

mdpi.com/journal/ chemosensors





Chemosensors

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 7.3



About the Journal

Message from the Editorial Board

Chemosensors continues to grow as a forum for all manners of sensing that encompass chemistry.

Chemosensors is published in open access format – all articles and content are released on the internet immediately following acceptance, thus allowing unlimited access to the content as soon as it is published. We would be happy to have you join our growing list of authors.

Editors-in-Chief

Prof. Dr. Jin-Ming Lin

Beijing Key Laboratory of Microanalytical Methods and Instrumentation, Department of Chemistry, Tsinghua University, Beijing 100084, China

Prof. Dr. Nicole Jaffrezic-Renault

Institute of UTINAM, University of Franche-Comté, UMR-CNRS 6213, 16 Gray Road, 25030 Besançon, France

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Engineering Village and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Physical and Theoretical Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).

