





an Open Access Journal by MDPI

Microbial Fuel Cell-Based Biosensors

Guest Editor:

Dr. Grzegorz Pasternak

Laboratory of Microbial Electrochemical Systems, Department of Process Engineering and Technology of Polymer and Carbon Materials, Wroclaw University of Science and Technology, 50-370 Wroclaw, Poland

Deadline for manuscript submissions:

closed (15 April 2022)

Message from the Guest Editor

Dear Colleagues,

The application of microbial fuel cell (MFC) technology in biosensors is gaining increasing interest from the scientific community. MFCs offer unique and attractive features of low cost, fast response time, ease of signal measurement and interpretation, and long-term operation due to the regeneration of electroactive bacteria, which makes them ideal for environmental applications.

MFC biosensors have proven their capability for immediate measurement and monitoring of organic matter in various environments. These devices have also been demonstrated to work as early warning systems through the detection of toxic compounds. Furthermore, due to electricity generation, they can work in an entirely self-powered and autonomous manner.

It is therefore my pleasure to invite you to submit your work to this Special Issue. The main topics of this special issue are related but not limited to:

- microbial fuel cell
- MFC
- biosensor
- bioelectrochemical system
- BOD
- toxicity
- whole cell
- sensor
- electroactive bacteria













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giovanna Marrazza

Department of Chemistry "Ugo Schiff", University of Florence, Via della Lastruccia 3, 50019 Sesto Fiorentino, Italy

Message from the Editor-in-Chief

Biosensors is a leading journal, devoted to fast publication of the latest achievements, technological developments and scientific research in the exciting multidisciplinary area of biosensors. Both experimental and theoretical papers are published, including all aspects of biosensor design, technology, proof of concept and application. Special issues are devoted to specific technologies and applications, and a selection of the most outstanding papers each year is recognized. Pushing the boundaries of the discipline, we invite original papers, as well as timely reviews on cutting edge fields within the subject area.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q1 (Chemistry, Analytical) / CiteScore - Q1 (Engineering (miscellaneous))

Contact Us