



## Electrochemical Techniques and Methods for Materials Analysis

Guest Editor:

### Prof. Władysław W. Kubiak

Department of Analytical  
Chemistry, Faculty of Materials  
Science and Ceramics, AGH  
University of Science and  
Technology, Al. Mickiewicza 30,  
30-059 Krakow, Poland

Deadline for manuscript  
submissions:

**closed (31 August 2021)**

### Message from the Guest Editor

Electrochemical methods and techniques for chemical composition analysis and for measuring various parameters of materials have been known and utilized for many years. They provide essential information useful in various areas of materials applications. In the scope of chemical analysis, they require (with a few exceptions) the sample to be in the form of conducting liquid, which allows to achieve an accuracy and precision unavailable for other methods. On the other hand, processes of the solid dissolution/digestion cause averaging of chemical information and loss of essential structural information, as well as information of distribution and identity of functional groups.

This Special Issue kindly invites you to submit original research papers and reviews addressing the current progress, development, and applications of electrochemical methods for the characterization and optimization of materials.

### Keywords

- electrochemical methods
- electrochemical characterization
- electrode modification
- electric double layer and colloidal properties
- electrochemical impedance spectroscopy (EIS)
- scanning electrochemical microscopy (SECM)





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

## 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, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

## Contact Us

*Materials* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)