



## Advances in Nanomaterials and Molecules and Their Applications on Environment Recovery and Release Systems

Guest Editors:

**Dr. Fernando Gomes de Souza Junior**

Biopolymers & Sensors Lab.,  
Macromolecules Institute,  
Universidade Federal do Rio de  
Janeiro, Rio de Janeiro, Brazil

**Dr. Diganta B. Das**

Department of Chemical  
Engineering, School of  
Aeronautical, Automotive,  
Chemical and Materials  
Engineering (AACME),  
Loughborough University,  
Loughborough LE11 3TU, UK

Deadline for manuscript  
submissions:

**20 July 2024**

### Message from the Guest Editors

Dear Colleagues,

Anthropogenic impacts on the environment are increasingly becoming more catastrophic. Fortunately, nanomaterials and molecular modification developments bring promising prospects for mitigating or zeroing these impacts.

This Special Issue seeks to bring together scientific contributions that address the state of the art and push the boundaries forward. All emerging concepts involving environmental recovery assisted by nanomaterials, molecular modification, machine learning, and related subjects are welcome.

Review articles and original research papers describing recent findings in advanced materials to environmental recovery applications are expected to cover various topics. Potential topics include, but are not limited to: adsorption of contaminants; AI assisting environmental recovery; detection and extraction of contaminants; natural polymers; sensors; zeolites as contaminant absorbers.

We hope that new ideas will promote the fast development of the exciting areas of nanomaterials and molecules useful to environmental recovery applications. We invite you to contribute to this Special Issue by submitting papers on your best research activities.





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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

Materials Editorial Office  
MDPI, St. Alban-Anlage 66  
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)