







an Open Access Journal by MDPI

# **Development of Advanced Adsorption and Catalytic Materials**

Guest Editor:

#### Dr. Agnieszka Gładysz-Płaska

Faculty of Chemistry, Maria Curie-Skłodowska University, Maria Curie-Skłodowska Sq. 3, 20031, Lublin, Poland

Deadline for manuscript submissions:

closed (20 November 2023)

## Message from the Guest Editor

Dear Colleagues,

Adsorption and catalytic materials are important in a variety of industrial applications, including environmental remediation, energy production, and chemical synthesis. The materials used for adsorption can be organic or inorganic and can be of different shapes and sizes, such as powders, granules, or fibers. Moreover, the development of hybrid adsorbents, which combine different types of adsorption materials, has led to materials with improved adsorption properties and selectivity, further increasing their potential applications. Common examples of adsorption materials include activated carbon, zeolites, silica gel, alumina, and ion exchange resins.

In general, the effectiveness of an adsorption material depends on factors such as its surface area, pore size, and chemical composition, as well as the properties of the molecules or particles being adsorbed. In many cases, adsorption and catalytic materials are used together to achieve specific chemical transformations. This Special Issue seeks to provide a platform for a thorough discussion of the most recent advances in the design, characterization, and application of adsorption and catalytic materials.













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 iournal covers twenty-five comprehensive biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and systems. 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**