



Development Characterization and Application of Biochar-Based Composites

Guest Editors:

Dr. Massimo Rovere

Department of Applied Science and Technology, Politecnico di Torino, 10129 Turin, Italy

Dr. Carlo Rosso

Department of Mechanical and Aerospace Engineering, Politecnico di Torino, 10129 Turin, Italy

Deadline for manuscript submissions:

closed (31 July 2023)

Message from the Guest Editors

Dear Colleagues,

Biochar-based fillers can now have new and attractive applications due to their low cost, large availability and smart properties. It is proven the biochar-based fillers can provide comparable characteristics to the matrix. Some examples are the successful use of biochar fillers for creating sensors based on biochar's electrical and piezoelectrical properties. Biochar-based composites have also shown very good mechanical properties that greatly enhanced matrix behaviour accordingly with the particular characteristic of the chosen filler, both in terms of resistance and friction. Biochar is a green and environmental friendly material and, since biochar is derived from biomasses pyrolysis, it is important to point out not only the properties of the final product but also to focus on standard production methods that tend to limit variation of properties due to different precursor feedstocks. In this Special Issue, the best researchers in the field will propose detailed discussions based on their experience, in order to bolster the interest around this new class of filler materials.

Dr. Massimo Rovere

Dr. Carlo Rosso

Guest Editors



mdpi.com/si/92196

Special Issue



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

mdpi.com/journal/materials
materials@mdpi.com
[@Materials_Mdpi](https://twitter.com/Materials_Mdpi)