



Recent Developments in Bio-Based Particleboards and Fiberboards

Guest Editor:

Dr. Philippe Evon

Laboratory of Agro-industrial
Chemistry (LCA), Toulouse INP-
ENSIACET, Toulouse, France

Deadline for manuscript
submissions:

20 October 2024

Message from the Guest Editor

This Special Issue aims to collate the latest research on particleboards and fiberboards made from renewable resources.

Plant fibers have many advantages. They are abundant, cheap, and have a relatively minimal impact on the environment. Whether thermoplastics or thermosets, binders can also be of biosourced origin.

Bio-based particleboards and fiberboards can thus be independent from fossil resources, having the advantage of being low VOC emitters. In particular, the replacement of formaldehyde-based resins with natural binders makes them more conducive to the environment and human health.

This Special Issue will be of interest to producers of fiberboards and particleboards, as we aim to market more environmentally friendly materials in the future.

The topics of interest for this Special Issue include (but are not limited to) the following:

- The origin of natural fibers and binders;
- Fiber preparation;
- Mixture preparation and molding;
- Waterproofing strategies (at the moment of molding or as a post-treatment);
- Thermo-mechanical performance (including in a humid environment);
- VOC emissions[...]





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

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