

Special Issue

Circular Economy – Supplementary Cementitious Materials in Binders: Processing, Design, Characterization and Performance

Message from the Guest Editors

As a result of the aggressive consumption of resources, we must give up the existing linear economic models (extraction of raw materials, product processing, use, and waste storage) and adopt new models for sustainable management. Recycling is an essential part of ensuring this connection between the beginning and the endpoint of the industrial process, by rehabilitating materials in the production process. The main objective of this Special Issue is to extend knowledge and highlight new supplementary cementitious materials (SCMs) that can be used in partial replacement of Portland cement. Additionally, it seeks to promote the processing, characterization, and creation of innovative designs for preserving the performance of cement/concrete, and using reactivated end-of-life materials in the circular economy context. **Keywords**

- Circular economy
- End-of-life materials: advanced characterization
- SCMs activation and characterization
- Concrete/cement performance evaluation
- Recycled materials
- New binders design and processing.



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2

CiteScore 6.4

Indexed in PubMed



mdpi.com/si/44726

Materials

Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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

Guest Editors

Dr. Bogdan Stefan Vasile

Department of Science and Engineering of Oxide Materials and Nanomaterials, Faculty of Applied Chemistry and Materials Science, University Politehnica of Bucharest, 060042 Bucharest, Romania

Dr. Adrian Ionut Nicoara

National Research Center for Micro and Nanomaterials, Department of Science and Engineering of Oxide Materials and nanomaterials, Faculty of Applied Chemistry and Materials Science, POLITEHNICA University of Bucharest, 011061 Bucharest, Romania

Deadline for manuscript submissions

closed (10 March 2022)





Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



[mdpi.com/journal/
materials](http://mdpi.com/journal/materials)



About the Journal

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.

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

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)