



## Advances in Concrete and Binders for Sustainable Engineering

Guest Editors:

**Prof. Dr. Mónica López-Alonso**

Department of Construction  
Engineering and Projects,  
University of Granada, 18071  
Granada, Spain

**Prof. Dr. Alessandra Bonoli**

Department of Civil, Chemical,  
Environmental and Materials  
Engineering (DICAM), Alma Mater  
Studiorum—Università di  
Bologna, 40131 Bologna, Italy

**Prof. Dr. Francisco Agrela**

Area of Construction Engineering,  
University of Cordoba, 14071  
Córdoba, Spain

Deadline for manuscript  
submissions:

**20 June 2024**

### Message from the Guest Editors

Dear Colleagues,

The management of different industrial waste and by-products, such as recycled aggregates from construction and demolition waste, alumina by-products, biomass ash, and olive stone or reinforcing fibers, as well as the reduction of landfill deposits by incorporating these products in a second life cycle, is the aim of this work.

Over the last two decades, the application of these materials as mixed recycled aggregates or recycled concrete aggregates in engineering works has been studied intensively.

Additionally, the application of some of these by-products in the production of concrete has been the subject of numerous investigations, with the aim of applying these types of materials as a supplementary cementing material, limestone filler, or as a replacement for natural aggregates.

For this reason, this Special Issue presents current research that is applicable for engineering projects, with a focus on the use of efficient materials in some stages of the life cycle in order to improve the reduction in CO<sub>2</sub> demand.





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)