







an Open Access Journal by MDPI

# Advances in Recycled Aggregate Concrete and Binders for Sustainable Building 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:

closed (20 July 2023)

## **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.

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

Additionally, the application of some of these by-products in the production of concrete has been the subject of numerous investigations, where the aim is to apply 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 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 the 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, OC 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 svstems. 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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*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 X@Materials\_Mdpi