

Special Issue

Sustainable Innovative Development of New Materials Through the Incorporation of the Waste

Message from the Guest Editors

The increasing demand for sustainable materials is steering research towards the incorporation of waste in construction materials. Mortars and concrete have been extensively studied with the incorporation of different types of waste, such as industrial byproducts, agricultural residues, and post-consumer waste. However, several knowledge gaps still remain, and the performance, durability, economic, and environmental analyses of the composites must be deeply investigated. The energy balance of incorporating waste into new materials needs to be taken into account, as the main objective is to reduce the carbon footprint and contribute to a circular economy. Therefore, it is necessary to analyse all aspects involved in the development of the new material and to also consider waste characterization. This Special Issue aims to address various topics related to the sustainable and innovative development of new materials through the incorporation of waste. We welcome research that investigates and applies different types of waste incorporation in sustainable materials.

Guest Editors

Dr. Cinthia Maia Pederneiras

Laboratório Nacional de Engenharia Civil, Lisbon, Portugal

Prof. Dr. André Augusto Nóbrega Dantas

Instituto Federal de Educação, Ciência e Tecnologia de Goiás—IFG, Goiania, Brazil

Dr. Catarina Correia de Araújo Brazão Farinha

C5LAB—Sustainable Construction Materials Association, Linda-a-Velha, Portugal

Deadline for manuscript submissions

31 August 2025



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/215329

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

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





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



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



About the Journal

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario
Institute of Technology, Oshawa, ON L1G 0C5, 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 and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1
(Geography, Planning and Development)