

Special Issue

The Advanced Development in Concrete Materials: Properties and Construction Techniques

Message from the Guest Editors

Concrete is the world's second most utilised material on earth following water, with an annual production exceeding 30 billion tonnes. It cannot be replaced as a unique construction material with many advantages. However, traditional concrete practises pose significant challenges regarding durability, sustainability, cost, and construction techniques. Intensive research has been conducted to support concrete development, mitigate its environmental impact, and align with global agendas. Additionally, concrete has demonstrated its ability to incorporate various waste materials, thereby reducing strain on landfills worldwide. The development of concrete construction techniques has also been under the attention of researchers, especially with today's revolution in digitalisation. This Special Issue aims to delve into recent innovations within the aforementioned topics. Researchers are most welcome to contribute their latest innovations in sustainable concrete and advancements in concrete construction techniques. Comprehensive review papers focusing on these areas are also highly recommended for submission.

Guest Editors

Dr. Mustafa Batikha

Prof. Dr. Adil Tamimi

Dr. Samer Al Martini

Deadline for manuscript submissions

20 March 2025



Materials

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 5.8
Indexed in PubMed



mdpi.com/si/212260

Materials

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

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





Materials

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 5.8
Indexed in PubMed



[mdpi.com/journal/
materials](https://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 - Q1 (Metallurgy and Metallurgical Engineering) /
CiteScore - Q2 (Condensed Matter Physics)