

Special Issue

Reinforced Concrete Structures for Durability and Corrosion Resistance

Message from the Guest Editor

The durability of reinforced concrete structures is one of the key tasks of civil engineers. The combination of mild steel rebars with alkaline concrete allows for the construction in nearly every environment thinkable. By adjusting the concrete mixture, replacing the “classical” rebar with non-metallic reinforcements or even developing new building techniques, reinforced concrete has evolved significantly. In addition to its load bearing capacity, the durability of materials needs to be taken into consideration. Thus, the aging effects of materials must be understood through reliable testing. As a result, the modeling of aging phenomena is a useful tool in the design of materials for reinforced concrete structures. Original papers are solicited on the evaluation of building materials and materials modeling to support the durability of reinforced concrete structures in the following areas:

- New materials; New material testing procedures; New material modeling approaches;
- New building techniques furthering durability;
- New findings on corrosion of rebars and pre-stressed steels.

Full papers, communications and reviews are all welcome.

Guest Editor

Prof. Dr. Christoph Gehlen

Centre for Building Materials, Technical University of Munich, Franz-Langinger-Str. 10, 81245 München, Germany

Deadline for manuscript submissions

closed (10 March 2023)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/77743

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)





Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
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 - Q2 (Metallurgy and Metallurgical Engineering) /
CiteScore - Q1 (Condensed Matter Physics)