







an Open Access Journal by MDPI

New Advances in Cement and Concrete Research

Guest Editor:

Prof. Dr. Gun Kim

Department of Urban and Environmental Engineering, Ulsan National Institute of Science and Technology, Ulsan 44919, Republic of Korea

Deadline for manuscript submissions:

closed (10 March 2023)

Message from the Guest Editor

Dear Colleagues:

While a variety of chemical and mechanical phenomena in cement-based materials has been revealed, there are still challenges around sustainability and resilience. The aim of this Special Issues is to gather recent scientific progress on cement and concrete, particularly dedicated to cuttingedge techniques used for cement and concrete research that unveil new phenomena in those materials and possibly accommodate sustainability and extension of the service life of concrete structures. Specifically, this Special Issues encompasses experimental studies at crossroads between chemistry, materials science and engineering, biology, and applied physics. Potential topics include but are not limited to the following: durability, material characterization, alkali-activated materials, UHPC. internal curing, cement-carbon nanocomposites, CO2 sequestration, and sustainability. Furthermore, to compile comprehensive documentation, other potential studies on engineered cement and concrete, numerical study, and sensing techniques for damage quantification welcomed for publication in this Special Issue.













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