

Special Issue

Durability, Physical and Mechanical Properties of Ecofriendly Cement and Concrete Composites

Message from the Guest Editors

Cement and concrete composites are widely used in various fields of civil engineering as one of the main building materials. In recent years, cement and concrete composites prepared using different fibers (steel fibers, basalt fibers, PVA fibers, polypropylene fibers, etc.) and industrial byproducts (tailings, recycled aggregates, fly ash, silica ash, gangue, etc.) have been under intense discussion. These materials have a positive impact on the improvement of cement and concrete composites' physical, mechanical, and durability properties. At the same time, the use of cement and concrete composites prepared by industrial byproducts can effectively reduce environmental load and production costs, which is conducive to the sustainable development of cement and concrete composites. This Special Issue aims to delve into the physical mechanics and durability of cement and concrete composites prepared using various fibers and industrial byproducts. Research and academic areas of interest for this Special Issue include but are not limited to material, civil, and environmental engineering.

Guest Editors

Prof. Dr. Sheliang Wang

School of Civil Engineering, Xi'an University of Architecture & Technology, Xi'an 710055, China

Dr. Tao Li

College of Architecture Engineering, Huanghuai University, Zhumadian 463000, China

Deadline for manuscript submissions

closed (29 February 2024)



Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 4.4



mdpi.com/si/164023

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

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





Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 4.4



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



About the Journal

Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

Editor-in-Chief

Prof. Dr. David Arditi

Construction Engineering and Management Program, Department of Civil, Architectural, and Environmental Engineering, Illinois Institute of Technology, 3201 South Dearborn Street, Chicago, IL 60616, USA

Author Benefits

High Visibility:

indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Construction and Building Technology) /
CiteScore - Q1 (Architecture)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).