

Special Issue

Recent Scientific Developments in Cement-Based and Alternative Materials—2nd Edition

Message from the Guest Editor

I am delighted to announce an upcoming Special Issue, entitled “Recent Scientific Developments in Cement-based and Alternative Materials”, in the *Buildings* journal. Concrete, mortars and all cement-based materials are crucial parts of modern buildings and different kinds of industrial constructions. However, the growing production of traditional binders, in combination with intensive depletion of natural aggregate resources, causes serious impacts on our environment, in terms of increased carbon dioxide emissions and ecological burdens. In this respect, it is recommended to change the composition of traditional building composites, on the one hand, by using various construction waste materials and industrial by-products as filling or binding components; on the other hand, it is necessary to provide building materials with customized set properties for specific applications. This Special Issue is focused on research of traditional cement-based and alternative composite materials with alkali-activated bases.

Guest Editor

Dr. Jaroslav Pokorný

Department of Civil Engineering, Faculty of Technology, Institute of Technology and Business in České Budějovice, 370 01 České Budějovice, Czech Republic

Deadline for manuscript submissions

30 November 2025



Buildings

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 4.4



mdpi.com/si/208817

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).