Special Issue

Computational Modelling and Simulation of Building Materials

Message from the Guest Editor

This Special Issue invites contributions from both researchers and practitioners from different disciplines that report recent advancements in the field of computational modelling and simulation of building materials, such as: a) multiscale models for the characterization of building materials (continuum micromechanics and computational multiscale models) that focus on emergent behaviour and understanding the link between small-\Scale material characteristics and their macroscopic mechanical properties; b) datadriven methods and mathematical and numerical algorithms for model order reduction; c) modelling of transport and physico-chemo-mechanical processes (creep, shrinkage, chemical dissolution and chemically expansive processes); d) rheological modelling and classification of fresh cementitious composites and concrete; e) simulation of additive manufacturing processes and f) computational methods for damage detection and identification.

Guest Editor

Dr. Jithender J. Timothy

Department of Materials Engineering, TUM School of Engineering and Design, Technical University of Munich, 81245 Munich, Germany

Deadline for manuscript submissions

closed (31 March 2025)



Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/148134

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

mdpi.com/journal/mathematics





Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

