Computational Modelling and Simulation of Building Materials

Guest Editor:

Dr. Jithender J. Timothy
Department of Materials Engineering, TUM School of Engineering and Design, Technical University of Munich, 81245 Munich, Germany

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Message from the Guest Editor

Dear Colleagues,

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) data-driven 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.

Special Issue

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

Message from the Editor-in-Chief

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