

Computational Models for Dynamic Analyses of Buildings and Structures

Guest Editors:

Dr. Annalisa Greco

Associate Professor, Department
of Civil Engineering and
Architecture, University of
Catania, Catania, Italy

Prof. Dr. Salvatore Caddemi

Department of Civil Engineering
and Architecture, University of
Catania, Catania, Italy

Prof. Dr. Ivo Calìò

Department of Civil Engineering
and Architecture, University of
Catania, Catania, Italy

Deadline for manuscript
submissions:

closed (31 December 2021)

Message from the Guest Editors

Dear Colleagues,

The analysis of the dynamic behavior of buildings and structures has had notable development in recent decades thanks to the ever-increasing effectiveness of modeling and calculation tools. The availability of a reliable computational model, either accurate or simplified, is, without doubt, one of the most crucial needs for a structural engineer. One of the most studied problems in structural engineering concerns the estimation of the seismic vulnerability of existing buildings, many of which were built in the absence of specific technical regulations. The reliability of this estimate is closely linked to the correct modeling of the building in question concerning both structural and non-structural elements. Another fundamental aspect in structural engineering concerns [...]

For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/buildings/special_issues/Computational_Models_Analyses_Buildings

Prof. Annalisa Greco
Prof. Salvatore Caddemi
Prof. Ivo Calìò
Guest Editors



[mdpi.com/si/76516](https://www.mdpi.com/si/76516)

Special Issue

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

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.

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), Inspec, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Civil*) / CiteScore - Q1 (*Architecture*)

Contact Us

Buildings Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/buildings
buildings@mdpi.com
[X@Buildings_MDPI](https://twitter.com/Buildings_MDPI)