



Solid Mechanics as Applied to Civil Engineering

Guest Editors:

Prof. Dr. Zhengwei Li

Faculty of Engineering, China
University of Geosciences, Wuhan
430074, China

Dr. Chuantan Hou

School of Civil Engineering and
Architecture, Wuhan University
of Technology, Wuhan 430074,
China

Deadline for manuscript
submissions:
31 July 2025

Message from the Guest Editors

Solid mechanics is a fundamental discipline within civil engineering that focuses on the behavior of solid materials under various conditions. It encompasses the study of how solid materials deform, bear loads, and fail, providing crucial insights for designing and constructing safe, efficient, and durable structures. By analyzing stress, strain, and the properties of solid materials, civil engineers can predict how structures like buildings, slopes, and dams will respond to external pressures. The aim of this Special Issue is to publish original research papers that advance the field of solid mechanics in civil engineering. Topics of interest include, but are not limited to, the following areas:

- (1) The development of advanced computational models on solid mechanics;
- (2) Experimental studies that provide new insights into material performance;
- (3) Application of solid mechanics in structural design.

More details: <https://www.mdpi.com/si/213276>





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, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/buildings
buildings@mdpi.com
X@Buildings_MDPI