



## Maintenance, Repair and Rehabilitation of Building Structures

Guest Editors:

**Dr. Ingrid Boem**

Department of Engineering and  
Architecture, University of Trieste,  
Trieste, Italy

**Dr. Claudia Brito De Carvalho  
Bello**

Department of Architecture  
Construction Conservation  
(DACC), Università IUAV di  
Venezia, 30123 Venice, Italy

Deadline for manuscript  
submissions:

**closed (30 June 2024)**

### Message from the Guest Editors

The Special Issue is focused, in particular, on structural intervention strategies for the maintenance, repair and rehabilitation of buildings, with special attention paid to innovative and less invasive solutions, as well as to the use of sustainable materials.

This Special Issue invites researchers to contribute works that advance the state of the art of the relevant topics. These include, but are not limited to, the following fields:

- Laboratory and in situ experimental tests proving the effectiveness of the interventions (e.g. monotonic tests, cyclic tests, dynamic tests, both on full scale or scaled samples);
- Discussions on the applicability, compatibility and durability of the interventions and periodic maintenance;
- Methods to assess the proper installation;
- Numerical simulations to predict the interventions effectiveness (ranging to simplified approaches to advanced computational models)
- Analytical strategies for design and performance prediction;
- Actual applicative experiences and simulated case studies;
- Original literature reviews and discussions on the topic.





## 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