

Structural Health Monitoring, Damage Detection and Long-Term Performance

Guest Editors:

Dr. Esequiel Mesquita

Prof. Dr. Humberto Varum

Dr. Paulo Antunes

Dr. Antonella D'Alessandro

Deadline for manuscript
submissions:

30 November 2024

Message from the Guest Editors

With the increase in natural hazards, the degradation of existing infrastructure, and advances in computational methods, structural health monitoring (SHM) has become a promising technique for assessing civil structural conditions.

This Special Issue, “Structural Health Monitoring, Damage Detection and Long-Term Performance”, will provide an overview of the existing knowledge on new approaches for building monitoring. Original research, theoretical and experimental work, case studies, and comprehensive review papers are invited to be submitted for possible publication. Relevant topics to this Special Issue include, but are not limited to, the following subjects:

- New approaches for SHM;
- Short and long-term monitoring;
- New sensors and sensorial networks;
- Digital methodologies for monitoring applications;
- Monitoring strategies for construction sustainability;
- Cultural heritage.



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)