



Advances in Structural Monitoring for Infrastructures in Construction

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Message from the Guest Editors

Structural Monitoring is considered an important method for ensuring the safety and service performance for the structures and infrastructures in civil engineering. Most of the parameters are estimated by the previous experience during the design period, which may be different from the actual parameters, including the values, direction and distribution. Moreover, there will be inevitably some differences between the actual civil structures and the design blueprint, due to the complicated building process. There will be some accidental loads happening during the long service life of the infrastructures. Therefore, it is important to obtain the actual structural parameters to accurately assess the structures using the Structural Monitoring method.

Topics include but are not limited to:

- Sensors and sensing technology;
- Non-destructive testing technology;
- Structural parameter assessment;
- Damage identification;
- Structural performance assessment;
- Residual life assessment of structure;
- Monitoring data analysis;
- Reliability and maintenance engineering;
- Application of structural monitoring techniques in civil engineering.

Deadline for manuscript
submissions:

closed (31 December 2023)



mdpi.com/si/167900

Special Issue

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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.

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