# **Special Issue**

# Advances in Research on Structural Dynamics and Health Monitoring

# Message from the Guest Editors

Dear colleagues, This Special Issue "Advances in Structural Dynamics and Health Monitoring" aims to collect and disseminate the latest developments in the dynamic analysis and health monitoring of civil structures to reflect current research trends and challenges in these fields. We invite original research, in terms of analysis and design methods, numerical modelling, experimental testing, field measurements, and case studies, as well as state-of-the-art review papers. Themes of interest include, but are not limited to:

- Dynamic response of structures;
- Safety and serviceability of structures under dynamic loads;
- Sustainability of civil structures under extreme loads;
- Refinement of design codes to accommodate extreme loading conditions;
- Measurement and testing of structural vibrations;
- Vibration control and implementation of smart materials in control devices;
- Performance evaluation of various passive, semiactive, and active control schemes;
- Structural health monitoring;
- System identification;
- Structural performance assessment.

# **Guest Editors**

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# Deadline for manuscript submissions

closed (30 September 2024)



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# About the Journal

# 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.

# Editor-in-Chief

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