

Special Issue

Dynamics Analysis of Structures with Viscoelastic Elements

Message from the Guest Editors

Modern structures are lighter, more economically designed, and made of structural materials with more efficient mechanical properties than constructions built before. Simultaneously, structures become more susceptible to dynamic load activities. In many instances, a reduction in structural vibrations is required in order to achieve the proper conditions of usability of the structures. The protection of engineering structures against the adverse effects of vibration is an important requirement already in their design process. This Special Issue aims to provide a forum for presenting new achievements in the subject of broadly understood dynamics of the type of structures.

- viscoelastic (VE) structures and VE dampers
- linear and nonlinear dynamics analysis of VE structures
- dynamics properties of VE structures
- new VE dampers and layers
- experiments with VE structures
- parameter identification of VE materials
- optimization of structures with VE dampers

Guest Editors

Prof. Dr. Roman Lewandowski

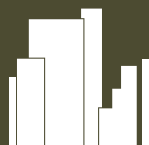
Institute of Structural Engineering, Poznan University of Technology,
Poznan, Poland

Dr. Zdzisław Pawlak

Institute of Structural Engineering, Poznan University of Technology,
Poznan, Poland

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
buildings@mdpi.com

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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

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

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