



Sustainable Civil Engineering: Seismic Performance Analysis of Structures

Guest Editors:

Dr. Mahmoud Bayat

Department of Civil and Environmental Engineering, University of South Carolina, Columbia, SC 29208, USA

Dr. Hamid Reza Ahmadi

Department of Civil Engineering, Faculty of Engineering, University of Maragheh, Maragheh 55136-553, Iran

Dr. Saman Soleimani Kutanaei

Department of Civil Engineering, Islamic Azad University, Ayatollah Amoli Branch, Amol, Iran

Deadline for manuscript submissions:

closed (26 March 2023)

Message from the Guest Editors

Earthquake can cause unprecedented disruption, recently displaying a trend of rapidly increasing damage and casualties, for two major factors: (1) urban development in seismic zones; (2) the vulnerability of older and built structures, including poorly constructed non-ductile concrete structures. Estimating and evaluating the seismic vulnerability of structures is critical for informed decision-making.

This Special Issue welcomes theoretical, numerical, and experimental developments as well as case studies on (but not limited to):

- Probabilistic seismic demand analysis of structures (bridges, buildings, dams, soil nailed walls, etc.);
- Performance-based design using seismic protection devices;
- Comprehensive and unified approaches for the PBSD of structures;
- Post-earthquake (after-shock) performance of structures;
- Risk-targeted and resilience-based seismic design of structures;
- Multi-hazard performance-based design of structures;
- Seismic performance of isolated structures, bridges, etc.;
- Near-fault and far-fault ground motions;
- Nonlinear vibration and numerical simulation of structures.





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Prof. Dr. Marc A. Rosen

Faculty of Engineering and
Applied Science, University of
Ontario Institute of Technology,
Oshawa, ON L1G 0C5, Canada

Message from the Editor-in-Chief

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Sustainability Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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