



Testing, Modelling, Analysis and Optimization of Building Structures and Materials

Guest Editor:

Dr. Oldrich Sucharda

Faculty of Civil Engineering, VSB-
Technical University of Ostrava,
Ludvíka Podéště 1875/17, 708 33
Ostrava-Poruba, Czech Republic

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Message from the Guest Editor

Dear Colleagues,

Development in structural engineering goes hand in hand with research into new structural solutions and the utilization of innovative materials. The utilization of new building materials can also contribute to improving the sustainability of civil engineering with increased structural durability. The innovative design solution itself is most often associated with advanced analysis and experiments. Advanced analysis is then based on numerical modeling and nonlinear solutions. In light of the above information, the aim of this Special Issue is to increase knowledge of testing and nonlinear modeling of materials and structures. Concrete, wood, [...]

For further reading, please follow the link to the Special Issue Website at:

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Dr. Oldrich Sucharda
Guest Editor





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.

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Buildings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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