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Blast Loading and Blast Effect on Structures

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Deadline for manuscript submissions:

closed (20 May 2023)

Message from the Guest Editors

Dear Colleagues,

Research on impulse loads, such as blasts and impacts, and their effects on structures has increased significantly in recent years due to the reported increase in threats to buildings, monuments, and infrastructure in urban areas.

Contributions should concentrate on understanding and characterizing blast and impact loads as well as studying their influence on structures. We welcome articles studying the propagation of blast waves, including reflection, refraction, and diffraction phenomena by means of experimental or numerical approaches.

Masonry, reinforced concrete, steel, timber, and structural glass are the main materials used in the construction of the perimetral walls of targeted structures. Assessing their response to impulse loads and establishing strengthening solutions or protection devices is of particular relevance here.

Research studies focusing on the characterization of the structural or material response, including fluid-structure interaction, strain-rate effects, and the nonlinear transient dynamic response of the structure, are just a few among the possible topics of this Special Issue.





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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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