Special Issue

Structural Response of Buildings in Fire

Message from the Guest Editor

Post-earthquake fire (PEF) or post-fire earthquake (PFE) pose a significant threat to both human beings and urban structures. They may contribute to the collapse of damaged buildings as well as result in the loss of property and human casualties. This Special Issue aims to present the main observations regarding PEF, PFE, and fire events. This Special Issue will also cover the mitigation research that could be helpful to reduce or prevent the structural damage caused due to fire. The topics of this Special Issue include, but are not limited to, the following:

- The structural response of various types of buildings under structural fire.
- The response of material behavior under fire such as mortar, wood, concrete, steel, and so on.
- The evaluation of residual strength for buildings subjected to horizontal and vertical loadings after a fire incident.
- Any kind of numerical methodology for the evaluation of post-earthquake fire/post-fire earthquake columns or beams in seismic resisting systems including moment resisting frames, building frame system, shear wall, and so on.

Guest Editor

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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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