Special Issue

Wind Load Effects on High-Rise and Long-Span Structures

Message from the Guest Editor

Wind loading stands as one of the more prominent research areas given the continuous wind-structure interactions. The case of high-rise and long-span structures poses additional challenges given the presence of aerodynamic and aeroelastic effects that could threaten the safety and integrity of constructions and people. The latter could magnify if wind loading combines with separate hazards, which although is not considered a design principle, has occurred with certain periodicity, causing irreversible damage. The Special Issue intends to address the identified challenges and contribute to improving engineering practice. We propose to strengthen the planning, design, construction, and maintenance chain of deliverables, to better visualize the new generation of wind-resilient structures. To achieve this objective, we invite researchers to submit original work, considering the key areas listed below. We accept technical and nontechnical papers provided these align with the established aim, although related research that could contribute to opening new research avenues is welcome.

Guest Editor

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Deadline for manuscript submissions

closed (26 August 2024)



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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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