

## Special Issue

# Evaluating the Impact of Sample Preparation and Curing Methods on the Freeze - Thaw Resistance of Concrete

### Message from the Guest Editor

Dear colleagues, Concrete is the most used and versatile construction material. The freeze–thaw (F/T) resistance of concrete is crucial for the durability of structures being exposed to freezing conditions. Generally distinguish two types of freeze–thaw degradations: 1) internal structural damage and 2) scaling caused by F/T in the presence of de-icing agents. These test methods and related sample preparation and curing procedures are based on long-term practical experience with Portland cement concrete. This Special Issue aims to gather knowledge and discuss the impact of sample preparation and curing methods on the freeze–thaw resistance of concrete, cast from fresh concrete or obtained from existing structures. Topics of interest include:

- Influence of sample preparation and curing on F/T resistance of concrete;
- Influence of sample extraction on F/T resistance of concrete;
- Influence of sample size and geometry on F/T resistance of concrete;
- Influence of freeze–thaw protocols;
- Precision and reliability of test procedures.

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### Guest Editor

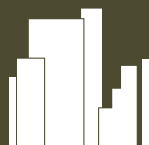
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### Deadline for manuscript submissions

closed (20 February 2024)



## Buildings

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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.

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### Editor-in-Chief

Prof. Dr. David Arditi

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