

## Study of Material Technology in Structural Engineering

Guest Editors:

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submissions:**20 September 2024**

### Message from the Guest Editors

Dear Colleagues,

In the realm of modern civil engineering, the study of material technology stands as a cornerstone of innovation and progress. This Special Issue seeks to serve as a comprehensive collection of research in the dynamic field of material technology in civil engineering, encompassing a diverse array of subjects that highlight the latest advancements, challenges, and transformative potentials of construction materials. This Special Issue aims to not only deepen our understanding of the intricate properties of construction materials, but also inspire the development of innovative solutions that will define the future of our constructed world.

For this Special Issue, we welcome submissions of original research, theoretical and experimental works, case studies, and comprehensive review papers. Relevant topics include, but are not limited to, the following:

- Advancements in concrete composition;
- Sustainable construction materials;
- Nanotechnology in construction;
- Smart and self-healing materials;
- Fiber-reinforced composites;
- Durability and corrosion protection;
- Recycling and reuse of construction materials;
- Chemical and mineral admixtures.



## Editor-in-Chief

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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.

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