



Advanced Studies in Concrete Materials

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Message from the Guest Editors

Dear colleagues,

It is with great pleasure that we present this Special Issue on "Advanced Studies in Concrete Research." This Special Issue aims to focus on various aspects of concrete research, including additive manufacturing, sustainability, numerical modeling, material characterization, and structural design.

Additive manufacturing is a rapidly growing field that has the potential to revolutionize the construction industry. In this issue, we aim to present studies that investigate the use of 3D printing in concrete construction.

Sustainability is another crucial aspect of concrete research. The studies in this issue examine various sustainable practices and materials, including recycled aggregates, low-carbon cement, and bio-based additives.

Last but not least, structural design is also a critical aspect of concrete research. This Special Issue will accept submissions on research about design techniques and methods for optimizing the performance of concrete structures.

In conclusion, this Special Issue aims to present a comprehensive overview of the latest advances in concrete research.





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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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