



## Concrete Aggregates in Building Materials

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### Message from the Guest Editors

The use of both fine and coarse aggregates is highly important in concrete production and constitutes more than 70% of the total concrete volume. Therefore, researchers have focused on studying the characteristics required for each type. Usually, natural fine and coarse aggregates are used in preparing concrete mixtures in huge amounts. The continuous extraction of these natural aggregates causes environmental issues and a risk of future depletion due to the increasing demand for concrete. Thus, using a renewable and sustainable aggregate has become an urgent, promising matter to solve this problem.

The main purpose of this Special Issue is to identify and discover renewable and sustainable construction materials that can be used as aggregates in concrete production. This Special Issue includes, but is not limited to:

- Renewable aggregates;
- Sustainable aggregates;
- Recycled aggregates;
- Waste materials as aggregates;
- Agriculture and industrial wastes as aggregates;
- Eco-friendly construction materials.





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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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