







Special Issue Reprint

# Advanced Engineering Cementitious Composites and Concrete Sustainability

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Concrete, one of the most often-used building materials today, is the cornerstone of modern buildings all over the world, being used for foundations, pavements, building walls, architectural structures, highways, bridges, overpasses, and so on. Because of its adaptability, concrete may be found in practically every construction, in some form or another. Yet, the diverse nature of its components, their combinations, and their doses result in a very wide range of concrete kinds with varying properties. As a result, concrete is a material that is always evolving and is popular even now, especially when it comes to circular economy.

Other ways of concrete manufacturing are now being researched to lessen or remove the limits of this material, which are connected to its brittleness and poor environmental effects. As a result, the development of engineering cementitious composites has resulted in a significant reduction in flexibility issues, while the introduction of new additives and the optimization of the manufacturing process has resulted in a significant reduction in the negative effects of virgin raw material exploitation. In-depth research is still required to optimize and increase the sustainability of these advanced engineering cementitious composites or alternative concretes.

In this Special Issue (SI), state-of-the-art research and review articles on the emerging material systems for AM are collected, with a focus on the process–structure–properties relationships. In total, eleven research papers and six reviews have been collected.



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