Special Issue

Mechanical and Structural Behavior of Fiber-Reinforced Concrete

Message from the Guest Editor

This Special Issue of Applied Sciences welcomes studies focusing on the ongoing efforts in the research of the mechanical and structural performance of FRC. This includes novel applications of FRC beyond traditional construction, such as 3D printing, additive manufacturing, and architectural design possibilities; FRC design and performance prediction based on artificial intelligence; comprehensive cost-benefit analyses to evaluate the economic advantages of using FRC; the environmental impact of FRC, considering factors such as embodied energy, carbon footprint, and sustainable sourcing of fibers; fiber reinforced recycled aggregate concrete; validation of FRC performance in real-world applications; contributions to the refinement and development design codes and standards specific to FRC; studies on the effectiveness of blending different fiber types and combinations in FRC and its optimization; and the development of methods to ensure the most efficient fiber orientation within the concrete matrix, amongst others.

Guest Editor

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Deadline for manuscript submissions

closed (20 April 2025)



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

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