Special Issue

Fiber-Reinforced Polymer (FRP) and Composites for Structural Engineering

Message from the Guest Editor

Fiber-reinforced polymer (FRP) composites have emerged as a revolutionary class of materials in the field of structural engineering, characterized by their unique combination of high strength, low weight, and excellent corrosion resistance. FRP comprises a polymer matrix reinforced with fibers, typically made from materials such as glass, carbon, or aramid. This innovative composition not only enhances the mechanical properties of the materials but also expands their applicability across various engineering domains, including bridges, buildings, and other critical infrastructure.

FRP materials exhibit a high strength-to-weight ratio, facilitating the design of lighter structures that can significantly reduce the overall load on foundations and supporting systems. The inherent resistance of FRP to chemical and environmental deterioration ensures longevity, reducing maintenance costs and enhancing structural reliability. Meanwhile, FRP composites also allow for design flexibility in terms of their mechanical benefits. Therefore, we decide to collect the latest research (article/review/communications) in this area and hope it will be helpful for future studies.

Guest Editor

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