

Special Issue

Carbon Fiber-Reinforced Plastics/Polymers: Applications and Characteristics

Message from the Guest Editors

The use of carbon fiber-reinforced polymer (CFRP) composites continues to increase due to their high strength-to-weight ratios and their enhanced design flexibility. These advanced materials find application in the automotive, renewable energy and aerospace industries. However, structural discontinuities within CFRP components are a particular concern due to the associated stress concentration within an anisotropic material system. They are also susceptible to out-of-plane loading and delamination weaknesses.

Researchers have exploited many strategies to address these issues, such as material design innovations, modified matrix compositions and through-thickness reinforcement techniques. These advancements have broadened the scope of CFRP applications, enabling their use in a variety of fields. This Special Issue aims to provide insights into recent studies advancing the understanding and utilization of CFRP composites in innovative ways.

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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 multi-dimensional network.

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