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Carbon Fiber Reinforced Polymers (CFRPs): Mechanical behaviors and Applications

Guest Editor:

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Message from the Guest Editor

The use of carbon fiber-reinforced plastics (CFRPs) in specific engineering fields, such as in automotive and aerospace applications, is heavily increasing. However, currently, knowledge of their mechanical responses is not complete, and for this reason, they need to be investigated using experiments and models. Experimental campaigns remain the most useful way to characterize them, as, in recent years, many researchers have presented very promising results by using innovative methodologies. Numerical and analytical models of CFRPs represent the key to saving money and time in order to provide validated simulations able to replace, in part, experimental tests.

The Special Issue will focus on any kind of mechanical characterization using both traditional and innovative techniques on CRFPs. Such composites could be made by different kinds of manufacturing processes and investigated by applying several numerical and analytical models. Special attention will be given to innovative approaches able to predict, in a reliable way, the mechanical responses of CFRPs during work conditions.

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Message from the Editor-in-Chief

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