Special Issue

Advanced Composite Materials: Design, Implementation and Characterization

Message from the Guest Editor

Currently, attaining economic and environmental sustainability is crucial. One methodology to achieve this is the utilization of innovative materials such as composites instead of, for example, classical structural steels. In the literature, numerous studies focus on the theoretical aspects of composites. In this Special Issue, attention will be given not only to theoretical approaches but also to the implementation of such materials. Our goals are to explore how composite materials can be used to enhance component performance and to evaluate their behavior and durability. This concerns developing specific testing methodologies and related equipment to characterize these materials and components. This Special Issue will cover (but will not be limited to) the following topics:

- The design of components made of composite materials;
- Static, fatigue, and fracture design;
- Damage criteria;
- Experimental tests characterizing both composite materials and components;
- Lightweight components;
- Joint design (regarding static, fatigue age effects, etc.);
- Manufacturing processes;
- Innovative and emerging applications of composite materials.

Guest Editor

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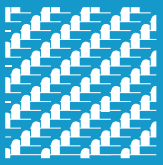

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Message from the Editor-in-Chief

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