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Deformation and Fracture Mechanics Analysis of Composite Materials

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Deadline for manuscript submissions:
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Message from the Guest Editors

In recent years, there has been an increase in the utilization of advanced composites as primary structural materials due to their outstanding properties. The structural and mechanical properties, such as elongation, fatigue strength, fracture toughness, plasticity, etc., are subjected to extensive research and discussion. The primary objective of this Special Issue is to investigate the deformation and mechanics of fracture for composite materials used in various industrial applications, including energy, aerospace, marine engineering, etc., to increase fatigue strength and structural lifespan. Research areas may include, but are not limited to, the following:

- Structural and mechanical behavior analysis;
- Numerical analysis and modeling of materials characteristics;
- Deformation and fracture mechanics analysis of composite materials;
- Novel methods for assessing the mechanical properties evolution in advanced composite materials;
- Advanced manufacturing technologies to fabricate composite materials;
- Developing multifunctional materials and structures;
- Various industrial applications of composite materials.

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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 multi-dimensional network.

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