

## Special Issue

# Mechanics of Advanced Composite Structures

### Message from the Guest Editors

This Special Issue highlights pioneering advancements and transformative engineering applications of composite materials across aerospace, aeronautics, and maritime industries. It delves into the optimization of fabrication and processing methodologies for high-performance composites, revolutionary developments in multi-scale manufacturing techniques, and the mechanical resilience and performance evolution of lightweight structures subjected to extreme operational conditions, including high mechanical loads, corrosive environments, and thermal cycling. The scope encompasses the design, characterization, and deployment of fiber-reinforced polymers, ceramic matrix composites, and adaptive material systems, with emphasis on resolving fundamental challenges such as microstructural tailoring, interfacial engineering, and multifunctional hybridization.

- composite mechanics;
- lightweight structural design;
- advanced material applications;
- failure mode analysis;
- material–structure–function

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### Guest Editors

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### Deadline for manuscript submissions

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## Applied Sciences

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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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### Editor-in-Chief

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