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Methodology of the Design and Testing of Composite Structures

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Message from the Guest Editors

Compared to common homogeneous materials, composites exhibit better thermal, electrical, tribological or mechanical properties. This is due to the fact that in composite materials, the best features of the matrix (e.g., ductility, fracture toughness, low specific weight) and the particles embedded therein (e.g., high strength, high elastic modulus, wear resistance, desired thermal or electrical conductivity) are combined. It should be noted that a change in even one of the above-mentioned factors impacts the effective properties of the composite. Thus, there is a well-reasoned need to determine such properties before implementing and manufacturing newly engineered composite materials.

The scope of this Special Issue will provide a forum for reports on the following topics:
Manufacturing of composite materials;
Analytical and numerical modelling of composite materials;
Test methods for composite materials and structures;
Experimental procedures for establishing averaged mechanical and physical properties of composites;
Analytical and numerical models for predicting averaged mechanical and physical properties of composites;
New trends in composite materials.

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Message from the Editor-in-Chief

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