Recent Advances in Theoretical and Computational Modeling of Composite Materials and Structures

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Message from the Guest Editors

Dear Colleagues,

Composite materials and structures feature internal length scales and nonlocal behaviors, whose response could be analyzed systematically, while including the effect of the staking sequences, ply orientations, agglomeration of nanoparticles, volume fractions of the constituents, and porosity level.

Studies on fiber-reinforced composites and laminates, functionally graded materials (FGMs), Carbon nanotubes (CNTs), graphene nanoplatelets, SMART constituents, as well as innovative and advanced classes of composites are welcome. Some examples could be represented by large stroke SMART actuators, piezoelectric sensors, shape memory alloys, magnetostrictive and electrostrictive materials, as well as auxetic components and angle-tow laminates. These constituents could be included in the lamination schemes of SMART structures for a successful control and monitoring of their vibrational behavior and/or static deflection.

Special Issue

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Message from the Editor-in-Chief

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