



Behaviour Analysis of Polymeric Composite Material Structures

Guest Editor:

Prof. Dr. Ionel Chirica

Department of Mechanical
Engineering, "Dunarea de Jos"
University, 800201 Galati,
Romania

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Message from the Guest Editor

The Special Issue introduces the methods of analysis of polymeric composite material structures and combines classical lamination theory with macromechanical failure principles for the prediction and optimization of composite structural performance. It addresses topics such as available compounds, high-strength fibres, and the behaviour of anisotropic, orthotropic, and transversely isotropic materials and structures subjected to various loadings. The composite material structures' behaviour can be simulated by using an appropriate morphological law. Many models should be analysed through three-dimensional composite structures and two-dimensional cumulative size distributions. Numerical and experimental models that will help to find the best results for polymeric composite structures' behaviour regarding bending, torsion, buckling, postbuckling, and failure are expected to be developed. The analysis will focus on perfect and imperfect structures (delaminated plates and structures with fabrication imperfections).





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Editor-in-Chief

Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien
und Polymertechnologie,
University of Potsdam, 14476
Potsdam-Golm, Germany

Message from the Editor-in-Chief

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Polymers Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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