Special Issue

Behaviour Analysis of Polymeric Composite Material Structures

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).

Guest Editor

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Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Alexander Böker

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