

Special Issue

Porous and Hygroscopic Materials with Fiber Reinforced Polymers

Message from the Guest Editors

Fiber-reinforced polymers (FRP) make their way in various fields from aerospace to mechanical and civil engineering applications. Hybrid systems and materials where original material is reinforced or enhanced with FRP are increasingly used in civil engineering, where wood (a lignocellulosic, organic material) and are substrates being reinforced. Both materials are hygroscopic and porous and this makes the bond (may or may not be via adhesion) extremely challenging. In addition, biodegradability of wood, concrete alkalinity, heterogeneity, and properties variability are additional variables that must be considered. These include but are not limited to: creep and mechano-sorptive creep, chemical degradation of the interface, effects of temperature, water-vapor pressure, load history and combination of thereof. This Special Issue of journal attempts to address the state-of-the-art in research in the area of hybrid systems with special focus on fundamental properties of fiber-reinforced plastic – porous, hygroscopic material interface such as wood-FRP or concrete-FRP, their performance and durability under effects of loads and interaction with the environment.

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Message from the Editor-in-Chief

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 4.9.

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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