Special Issue

Design and Property Control of Polymer Bio-Nanocomposites Based on Polymer Blends Matrix

Message from the Guest Editors

The aim of this Special Issue is to highlight the progress and fundamental aspects of the preparation, chemical modification, properties characterization, and application of polymer nanocomposites based on blends of biodegradable macromolecules and natural nanofillers. An important way for enhancing the nanoparticle dispersion in polymer nanocomposites can be achieved by polymer blending, i.e. by mixing the main polymer component with a second polymer, which is compatible with the main polymer and -at the same time- capable of favourable interactions with the nanoparticles (through their polar or reactive surface groups), promoting a more complete dispersion of the nanofiller into the polymer matrix. Furthermore, the second polymer component may serve as a modifier of the system properties. Thus, the use of polymer blends as matrices in composite systems offers several advantages, in both improving processability and widening the spectrum of properties and applications, as well as in reducing the costs of raw materials.

Guest Editors

Prof. Dr. Mariano Pracella

Department of Chemistry and Industrial Chemistry, University of Pisa, Pisa, 56122 Pisa , Italy

Prof. Dr. Ewa Piorkowska

Centre of Molecular & Macromolecular Studies, Polish Academy of Sciences, 90-363 Lodz, Poland

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
polymers@mdpi.com

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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 4.9.

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

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