

Special Issue

Polymer Composites Reinforced by Cellulose Nanocrystals: Production, Properties, and Application

Message from the Guest Editor

Cellulose is one of most available renewable natural resources with an annual production rate of more than 75 billion tons. As a cheap biopolymer, cellulose plays an important role in the production of ecologically pure biocompatible and biodegradable functional materials. Rod-like particles of cellulose nanocrystals (CNCs) can be isolated from cellulose fibers under acid or enzymatic hydrolysis conditions. The application of biodegradable polymers and polymeric composite materials attracts increasing attention due to environmental protection issues that have arisen. Currently, a tendency to use natural organic nanofillers is caused by their advantages compared to conventional inorganic fillers: biodegradability and nontoxicity. The use of CNCs as nano-dimensional elements for reinforcement of polymeric matrices is of interest due to unique combination of required physical and chemical properties and environmental benefits.

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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