

Special Issue

Chitosan, Chitin, and Cellulose Nanofiber Biomaterials

Message from the Guest Editor

There is increasing interest in using natural polymers and fiber-filled composites to achieve the development of functional biomaterials (polysaccharides chitosan, chitin, cellulose, and their derivatives, etc) for the most varied applications. However, fundamental research relating chitosan/chitin physico-chemistry with biological properties is only addressed by a relatively minor number of studies. In addition, cellulose nanofibers (CNF) unique mechanical properties and renewability increasingly motivate their use as filler in nanocomposites. As a nanomaterial, the question on CNF toxicity and environmental impact has been addressed, and good CNF biocompatibility has been also reported. This special issue is oriented to all types of biomaterials (biological materials, bio-based materials and biomaterials for biomedical applications) presenting chitosan, chitin, and/or cellulose nanofibers, includes: (i) microstructure-properties relationship in both biological and engineering materials; (ii) the understanding of biopolymer physical-chemistry behavior by interrelating processing-microstructure-function-biological response, but it will not be limited to this field.

Guest Editor

Prof. Dr. Anayancy Osorio-Madrazo

1. Institute of Microsystems Engineering IMTEK, University of Freiburg, 79110 Freiburg im Breisgau, Germany
2. Freiburg Materials Research Center FMF, University of Freiburg, 79104 Freiburg im Breisgau, Germany
3. Freiburg Center for Interactive Materials and Bioinspired Technologies FIT, University of Freiburg, 79110 Freiburg im Breisgau, Germany

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

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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 4.7.

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

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

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