Special Issue

Advanced Biopolymers for Tissue Engineering Application

Message from the Guest Editor

Tissue engineering can solve many problems of regenerative medicine, with the capacity to improve the duration and quality of human life by restoring the lost structure and function of organs and tissues. The main task of tissue engineering and regenerative medicine is to develop an optimal biodegradable polymer scaffold (matrix), ensuring cell adhesion and proliferation. This must be gradually replaced by forming tissues or organs. Biodegradable polymers are used as biomaterials to create scaffolds, and the choice of polymer is determined by its biomechanical compatibility with the resorbed tissue. Materials used in soft tissue replacement surgery should have a high water-retaining capacity. Therefore, from the point of view of biomimetics, the use of polysaccharide hydrogels is preferable over hydrophobic biodegradable polyesters. Conversely, due to their mechanical strength and osteoconductive properties, composite materials based on polyhydroxyalkanoates and inorganic phosphates are considered promising for bone replacement. The Special Issue aims to provide a platform for the communication and fast publication of high-quality original and review papers.

Guest Editor

Prof. Dr. Nataliya Kildeeva

Department of Chemistry and Technology of Polymer Materials and Nanocomposites, The Kosygin State University of Russia, 119071 Moscow, Russia

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

mdpi.com/journal/polymers

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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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