

Special Issue

Advancements in Biopolymers for Tissue Engineering: Innovations, Challenges and Future Directions

Message from the Guest Editor

Tissue engineering holds immense promise for regenerative medicine, offering the potential to repair or replace damaged tissues and organs. Biopolymers, derived from natural sources or synthesized to mimic natural components, are central to this field. Their biocompatibility, biodegradability, and tuneable mechanical and physico-chemical properties make them ideal for creating scaffolds, hydrogels, and drug delivery systems that support cell growth and tissue regeneration. This Special Issue of *Polymers* focuses on the latest advancements in biopolymers for tissue engineering, exploring innovative approaches, addressing key challenges, and outlining future research directions. We encourage submissions that address challenges in translating biopolymer-based technologies from the laboratory to the clinic, and those that explore the future potential of biopolymers in regenerative medicine. Furthermore, we aim to provide a comprehensive overview of the current state-of-the-art and to stimulate further innovation in this rapidly evolving field. We look forward to your contributions.

Guest Editor

Dr. Monica B. Mathor

Instituto de Pesquisas Energéticas e Nucleares, IPEN-CNEN, Sao Paulo, Brazil

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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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