

## Special Issue

# Polymeric Biomaterials: Characterization and Application

### Message from the Guest Editors

Polymeric biomaterials have initially intended to achieve mechanical and structural compatibility and biological inertness. However, the search for ideal polymeric materials for the medical and surgical applications has led to the development of a family of biodegradable and biocompatible polymeric biomaterials. With the growing understanding of the research community of the biological response to current polymeric biomaterials, there is an increased interest in developing tailor-made polymers such as bioactive, biomimetic, and smart polymeric biomaterials. With the advances in manufacturing technologies, there is an increased interest in developing complex three-dimensional (3D) polymeric biomaterials using additive-manufacturing for biomedical applications. As a result, polymeric biomaterials that replicate the function, structure and properties of the real human tissues could be realised, tested, and used in clinical applications. This Special Issue will cover research related to the synthesis and characterisation, biodegradation, biocompatibility, finite-element analysis, mechanical properties of all types of polymeric biomaterials.

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### Guest Editors

Dr. Adel Abdel-Wahab

Prof. Dr. Khamis Essa

Dr. Hany Hassanin

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### Deadline for manuscript submissions

closed (25 September 2024)



## Polymers

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

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### Editor-in-Chief

Prof. Dr. Alexander Böker

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

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