

## Special Issue

# Carbohydrate Polymers as Sustainable and Green Materials: Biosynthesis, Functionalization, and Emerging Applications

### Message from the Guest Editor

Carbohydrate polymers, such as sugar, starch, cellulose, hemicellulose and chitosan, are the most abundant biomolecules on our planet. Recently, carbohydrate polymers have been used in various biological and environmental applications due to their strong tendency to form supramolecular networks such as nanoparticles, hydrogels or aerogels, thin films and membranes, allowing for their application in drug delivery, bioimaging, biosensing and tissue engineering, with scientists over time modifying their functionalities to suit many other biomedical applications. In this Special Issue, we aim to highlight the novel designs (particles, gels, foams, films and membranes) and diverse applications of carbohydrate-polymer-based systems in drug delivery, tissue engineering, medical diagnostics and therapy, biosensors, catalysis, energy materials, etc. We encourage the submission of contributions (original research articles as well as reviews) dealing with novel designs and novel applications of carbohydrate polymers.

### Guest Editor

Dr. Ahmed Barhoum

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### Deadline for manuscript submissions

closed (25 October 2023)



## Polymers

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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.

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### Editor-in-Chief

Prof. Dr. Alexander Böker

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