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

Guest Editor:

Dr. Ahmed Barhoum

1. NanoStruc Research Group, Chemistry Department, Faculty of Science, Helwan University, Cairo 11795, Egypt 2. School of Chemical Sciences, Dublin City University, Dublin 9, D09 Y074 Dublin, Ireland

Deadline for manuscript submissions:

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Message from the Guest Editor

Dear Colleagues,

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.













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Editor-in-Chief

Prof. Dr. Alexander Böker

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

Message from the Editor-in-Chief

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