Special Issue

Biological Polysaccharides: Advances and Challenges

Message from the Guest Editor

Biodegradable and renewable, polysaccharides derived from various organisms comprise diverse functional groups and are characterized by unique, physicochemical properties. Moreover, some possess beneficial bioactivities—e.g., anti-inflammatory, anti-viral, antioxidant, immunomodulatory, and antitumor—which render them potential candidates in a variety of biotechnology applications. In addition, they are highly flexible, able to be used in different forms, e.g., as hydrogels, xerogels, fibers, films, and nanoparticles, according to the specific needs of the application. Due to their complex structural forms and biodiversity, however, much work remains to be carried out before their true potential applicability can be realized.

This Special Issue aims to provide the latest advances in renewable polysaccharides as bio-inspired materials, with fundamental knowledge about both the basic and bio-applied sciences, including but not limited to the fundamental study of polysaccharide bioactivities, drug delivery, regenerative medicine, and wound healing.

Guest Editor

Dr. Oshrat Levy-Ontman

Green Processes Center, Department of Chemical Engineering, Sami Shamoon College of Engineering, Beer-Sheva 8410001, Israel

Deadline for manuscript submissions

closed (30 December 2024)



International Journal of Molecular Sciences

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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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