

Special Issue

New Trends and Challenges in Polysaccharide Biomaterials

Message from the Guest Editors

Polysaccharide-based materials exhibit excellent natural biocompatibility and biodegradability, and they have received increased research attention due to their unique structural diversity. Due to their ability to form cross-linked multidimensional structures, they are widely used as components in pharmaceutical, biomedical, biotechnological products, and as materials for environmental purposes. The field of application of polysaccharides is very wide, ranging from their use in medicine, through food products, to cosmetics and biomedical usage, and still meets new targets. The presence of numerous hydroxyl and optionally carboxyl or amino groups along the polymer chains enables their chemical functionalization, thus extending their exploitation opportunities. This Special Issue aims to highlight the basic as well as applied aspects of advanced polysaccharide research in various research areas and present new trends and challenges related to the use of polysaccharide biomaterials, including, but not limited to, medicine, biochemistry, food chemistry, drug delivery, and environmental science, in the paper industry and biorefinery.

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