

Special Issue

The Fascinating Story of Natural Polysaccharides in Glycosciences: From Extraction to Applications

Message from the Guest Editor

For a long time, natural biopolymers, such as polysaccharides, have fascinated humanity. Polysaccharides are certainly one of the greatest varied families of bio-polymers in terms of structure and use. Polysaccharides are highly variable and complex biomolecules of which the inventory of structures is still partial, as nature still preserves many of the unexplored biotopes. In this context, many works from all over the world have led to the discovery of original polysaccharides extracted from medicinal plants and algae, or produced from bacteria and microalgae, with high potential as food ingredients or as biological assets. Their main roles in the organism are to either provide structural support as a constituent of a cell wall or to store energy in the cell. Consequently, this Special Issue aims to (i) review and identify the main polysaccharides from all biotopes (plant, bacteria, animal and microalgae), from the past to the present, and (ii) identify the latest bioactive polysaccharides and their techno-functional derivatives (low molecular weight, oligosaccharides, hydrogels, etc.) with advantageous effects in the agricultural, pharmaceutical and food fields.

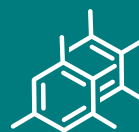
Guest Editor

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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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