



Production and Functional Properties of Exopolymers

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Message from the Guest Editors

Dear Colleagues,

It is a well-known fact that polymers are an important part of modern society. Along with the benefits, synthetic polymers are also a major environmental pollutant. One of the possible solutions to this problem is offered by exopolysaccharides (EPS), synthesized by microorganisms due to their non-toxicity, biodegradability, and biocompatibility, which makes them desirable for use in pharmacy, biomedicine, the food industry, cosmetics, etc. Moreover, they are an eco-friendly and quickly renewable resource compared to that produced by plants. Exopolymers have a markedly important biological role for cells and a wide variety in monosaccharide composition, suggesting different physico-chemical properties. Hence, it is important to describe new species that are able to produce exopolysaccharides, as well as to gain knowledge about the fundamental understanding of genes and mechanisms involved in EPS biosynthesis and regulation of their structures.

The aim of this Special Issue is to encourage the publication of new studies on the production, biological role, functional properties, and possible applications of exopolysaccharides produced by microorganisms.





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