



## (Nano)cellulose: Extraction, Characterizations, Application

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### Message from the Guest Editor

Dear Colleagues,

Cellulose is a major polysaccharide that forms the cell walls of higher plants. It can be extracted from cotton, bast, wood pulp and colorants, or by microorganisms. The extracted (nano)cellulose is not purely molecular in its form, but a continuous and repeated polymerization of crystalline and amorphous structure. The crystalline regions have strong mechanical properties through glucosidic bonds, van der Waals force and hydrogen bonds, and the amorphous regions bring properties of flexibility and swelling. Based on this particular structure, the (nano)cellulose is being studied explosively in various fields, either in its pure form, or via chemical surface treatments, or forming composites with various nanomaterials.

This Special Issue is devoted to the most recent research on these topics, and covers all aspects from extraction to application.

Dr. Hyun Chan Kim  
*Guest Editor*





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## Editor-in-Chief

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## Message from the Editor-in-Chief

*Polysaccharides* and their derivatives are ubiquitous biopolymers, and therefore in recent years their potential use has increasingly been explored. *Polysaccharides* are still the biggest class of biopolymers used in classical industries such as the paper and textile industry. The progress and fundamental aspects of the new synthesis pathways and derivatization routes, characterization, properties, as well as processing of polysaccharides is important for their possible application in modern sustainable functional materials and future green technologies.

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