

Special Issue

Cellulose and Its Applications

Message from the Guest Editor

Exponential growth in the use of synthetic polymers has led to the accumulation of plastic wastes in the environment, which is causing significant ecological and environmental pollution problems. Such problems can only be solved by finding substitutes for synthetic polymers, which are biodegradable and nontoxic in nature. Cellulose is a naturally abundant polymer with many interesting properties; both natural cellulose and its chemically modified derivatives are used in areas such as biomedical science, environmental science, catalysis, and sustainable packaging. Such wide use of cellulose is facilitated by its easy accessibility, biocompatibility, high mechanical stability, and unique physiochemical properties. Cellulose has been employed in water purifications as functional fibers, nanoadsorbents, membranes, and hydrogels to remove all types of dissolved pollutants. In addition to cellulose, many other natural polymers, such as starch, alginate, and chitin, are used to mitigate the environmental problems and as a potential substitute to synthetic polymers. This Special Issue will cover all cellulose-related materials and biopolymers used in various applications.

Guest Editor

Dr. Suresh Valiyaveetil

Department of Chemistry, National University of Singapore, 3 Science Drive 3, Singapore 117543, Singapore

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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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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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