



Cellulose and Its Applications

Guest Editor:

Dr. Suresh Valiyaveetil

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

Deadline for manuscript
submissions:

closed (31 March 2022)

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.





an Open Access Journal by MDPI

Editor-in-Chief

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

Message from the Editor-in-Chief

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI