

Special Issue

Polysaccharides: From Extraction to Applications

Message from the Guest Editors

Starches and their derivatives are a commonly available, cheap, sustainable and renewable group of organic compounds. They are considered as attractive raw materials providing access to several novel biodegradable materials applicable in chemical, food, and pharmaceutical industries. Currently, more refined methods and technologies of processing and employing starch are being introduced in order to improve starch functionality. There is a wide range of key parameters offered by starch and its derivatives that are essential for their practical use—for instance, low, medium, and high molecular weights; variable polydispersity; ability to form linear and branched macrostructures; monofunctionality (compounds bearing solely hydroxyl groups) and polyfunctionality (compounds with hydroxyl, carboxylic, and other functional groups); high degree of chirality; either low or high aqueous solubility; and low, if any, toxicity and immunogenicity. These properties allow them to find a wide range of applications in nanotechnology.

Guest Editors

Dr. Gohar Khachatryan
Prof. Dr. Karen Khachatryan
Dr. Wojciech Ciesielski

Deadline for manuscript submissions

closed (10 March 2022)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/54667

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)