Special Issue

Synthetic and Natural Origin Polymers: Synthesis, Characterization, Modification, Functionalized Properties and Applications

Message from the Guest Editors

In the last few decades, especially the use of synthetic polymers has seen significant growth and application, such as medicine, sensors, optical fibers, electronics, and as large-size composites in the automotive and aerospace industries. However, it should be emphasized that the history of synthetic polymers is very short and only slightly exceeds 100 years.
In turn, polymers of natural origin have a long history. Currently, they are widespread in many areas of life and used, among others, in packaging in the automotive and pharmaceutical industries. Various types of modifications are often carried out to obtain polymers with the desired properties. The functional groups present in the structure of the polymers enable hardening, block copolymer formation, functionalization, deactivation, etc. Chemical modification methods have also been found for synthetic polymers without functional groups. The unexpected properties appear even when different polymers are mixed with or active fillers are added.
The aim of this Special Issue is to highlight progress in the manufacturing, characterization, modification, and applications of polymeric materials of natural and synthetic origin.

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Deadline for manuscript submissions

closed (20 October 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/102715

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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