Special Issue

Biopolymers and Their **Bioengineering Applications**

Message from the Guest Editors

Biopolymers are considered materials with the potential to reduce the demand for conventional plastics of petrochemical origin. They can be derived from plants, animals, or microorganisms. Ecological alternatives are considered in addition to being sustainable. As they are biodegradable and biocompatible, they have been successfully trained in the areas of food packaging and biomedical packaging, among others. This Special Issue is dedicated to fundamental research related to biopolymers and their technological applications. It will serve as a forum for scientific articles in the following areas:

- New methods for the preparation, characterization, and optimization of biopolymers:
- The use of biotechnology to enhance edible coatings and films:
- New biopolymeric blends for food applications;
- Use and recovery of waste to obtain biopolymers:
- New studies in the development of active or intelligent films;
- Non-destructive methods for evaluating edible films and coatings;
- Investigation of biodegradation mechanisms of biopolymers:
- Innovation in magnetic biomaterials.

All manuscripts to be considered for publication in this Special Issue will undergo a rigorous peer review process.

Guest Editors

20 April 2026

Dr. Glória Maria Vinhas

Department of Chemical Engineering, Federal University of Pernambuco (UFPE), Avenida Dos Economistas, S/N, Cidade Universitária, Recife, Pernambuco, Brazil

Prof. Dr. Eduardo Padrón Hernández

Department of Physics, Federal University of Pernambuco (UFPE), Av. Professor Luiz Freire, s/n Cidade Universitária, Recife, PE, Brazil

Deadline for manuscript submissions



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About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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