

Special Issue

Advancing Green Chemistry in Hydrogel Development: Design, Synthesis, and Characterization

Message from the Guest Editors

Recent studies have highlighted a growing interest in hydrogels. This is due to their remarkable properties, which include their high water content, porosity, and flexibility, rendering them highly promising in a variety of biomedical applications. These three-dimensional polymeric networks, either physically or chemically cross-linked, possess hydrophilic properties that enable them to absorb and retain water and biological fluids.

These polymeric mixtures play a significant role in diverse applications such as wound healing, contact lenses, implant coating, drug delivery, tissue engineering, agriculture, bio-sensors, and various hygiene products. Choosing naturally derived cross-linking agents not only ensures the safety of biomedical applications but also contributes to both scientific and environmental goals for medical advancement.

Consequently, in this Special Issue, we aim to collect studies on "Advancing Green Chemistry in Hydrogel Development: Design, Synthesis, and Characterization". We welcome investigations into synthesizing eco-friendly hydrogel compounds, particularly utilizing biodegradable and biocompatible materials.

Guest Editors

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Gels

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About the Journal

Message from the Editor-in-Chief

Gels (ISSN 2310-2861) is recently established international, open access journal on physical and chemical gel-based materials. The journal aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. General topics include but not limited to synthesis, characterization and applications of new organogels, hydrogels and ionic gels made either from low molecular weight compounds or polymers, composite and hybrid materials where a metal is by some means incorporated into the gel network, and computational studies of these materials in order to provide a better understanding of gelation mechanism. We cordially invite you to consider publishing with us and contribute with your own grain of sand to the advance in this fascinating field.

Editor-in-Chief

Prof. Dr. Esmaeil Jabbari

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