



gels



an Open Access Journal by MDPI

State-of-the Art Gel Research in USA

Guest Editors:

Prof. Dr. Esmail Jabbari

Biomimetic Materials and Tissue Engineering Laboratory, Department of Chemical Engineering, University of South Carolina, Columbia, SC 29208, USA

Dr. Nasim Annabi

Department of Chemical and Biomolecular Engineering, University of California Los Angeles, Los Angeles, CA 90095, USA

Deadline for manuscript submissions:

31 December 2025

Message from the Guest Editors

Dear Colleague,

Gels are composed of a three-dimensional macromolecular solid phase that retains a large fraction of a liquid phase without dissolving. Due to their solid-like (elasticity) as well as liquid-like (permeability and flexibility) properties, gels are used extensively in many products and industries. The macromolecules in the gel network can be physically linked via hydrogen bonding, electrostatic interaction, or crystallization like polyvinyl alcohol gel or chemically linked via covalent bonding like polyethylene glycol gels. A gel may be a colloid, a water-based hydrogel, an organic solvent-based organogel, a highly porous solid xerogel, or a composite network of chains in a liquid phase. This Special Issue invites manuscripts from scientists and researchers from the USA on the recent advances in all aspects of gels from synthesis and chemistry to physiochemical, biochemical, and biological properties, processing, and all their applications. Applications include food, medical, pharmaceutical, health care, cosmetic, and agricultural products as well as applications in the energy and chemical industries.



mdpi.com/si/209066

Special Issue



gels



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Esmail Jabbari

Biomimetic Materials and Tissue Engineering Laboratory,
Department of Chemical Engineering, University of South Carolina, Columbia, SC 29208, USA

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.

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](#), [CAPlus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q1 (Polymer Science) / CiteScore - Q2 (Polymers and Plastics)

Contact Us

Gels Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/gels
gels@mdpi.com
[X@Gels_MDPI](https://twitter.com/Gels_MDPI)