# Special Issue

# Advanced Soft Gels with Enhanced Functionality for Biomedical and Additive Manufacturing Applications

## Message from the Guest Editors

Soft gels, also known as hydrogels, microgels, and nanogels, are on the rise in the biomedical field. Soft gels, with their three-dimensional network and high water content, are not prone to disintegration or dissolution in excess water. They can be combined with cells to create two or three-dimensional scaffolds, eliminating the need for complicated fabrication processes or surgical procedures. Moreover, soft gels offer tunable mechanical properties, biodegradability, and biocompatibility, making them a beacon of hope for biomedical applications such as drug delivery, biosensors, 3D cell culture, tissue engineering, 3D bioprinting, and wound healing. This special issue, a platform to showcase the latest advancements in soft gel technology, holds the potential to influence the field significantly. It encompasses natural, synthetic, and derivative gels applicable to advanced manufacturing techniques, drug delivery, and tissue engineering. We eagerly await submissions that delve into essential aspects of hydrogels, such as gel synthesis and development, characterization, biocompatibility, and practical application research.

## Guest Editors

Dr. Ing Kong

Advanced Polymer and Composite Materials Laboratory, Department of Engineering, School of Computing, Engineering and Mathematical Sciences, La Trobe University, Bendigo, VIC 3552, Australia

Dr. Akesh Babu Kakarla

Advanced Polymer and Composite Materials Laboratory, Department of Engineering, School of Computing, Engineering and Mathematical Sciences, La Trobe University, Bendigo, VIC 3552, Australia

## Deadline for manuscript submissions

31 August 2025

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/202449

*Gels*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
gels@mdpi.com

mdpi.com/journal/gels

# Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/journal/gels

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

## Author Benefits

**High visibility:**

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

**Journal Rank:**

JCR - Q1 (Polymer Science) / CiteScore - Q1 (Organic Chemistry)

**Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 12.5 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

MDPI