Special Issue

Smart Hydrogels: From Rational Design to Applications

Message from the Guest Editors

In the last few decades, smart hydrogels have been at the forefront of advanced materials because of their outstanding applications in sensors, programmable drug delivery, actuators, and tissue engineering. Smart hydrogels can be prepared by rational design of appropriate peptide sequences, composite material with the help of extracellular matrix (ECM) proteins, biologically suitable polymer, collagen-like peptide (CLP), etc. In addition, the self-assembly propensity of these smart hydrogels to form nanoscale architecture plays an important role in biomedical applications. It is incredibly important to cover all aspects of smart hydrogels in one issue, and this Special Issue will cover a few representative examples, also including review articles of recent findings (preferably within last 5 years) explaining the progress in this advanced field with the aim of helping scientists worldwide. Computational science related to smart hydrogels is also welcomed in this Special Issue.

Guest Editors

Dr. Bapan Pramanik

Department of Chemistry, Ben-Gurion University of the Negev, Beer Sheba 8455902, Israel

Dr. Lucy Vojtová

CEITE—Central European Institute of Technology, Brno University of Technology, 612 00 Brno, Czech Republic

Deadline for manuscript submissions

closed (31 March 2023)



Gels

an Open Access Journal by MDPI

Impact Factor 5.3 CiteScore 7.6 Indexed in PubMed



mdpi.com/si/103736

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





About the Journal

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).

