# **Special Issue**

# Recent Developments and Emerging Trends in Polyelectrolyte Gels

Message from the Guest Editors

Polyelectrolyte (PE) gels, recognized for their ionizable functional groups, consist of charged monomers and counterions. They are stabilized through various interactions, including electrostatic, van der Waals forces, ionic, hydrogen bonding, and chemical crosslinking. Over the past few decades, these PE gels have been intensely studied, both experimentally and theoretically, to understand the complex relationship between their electrostatics and polymer nature.

This Special Issue, entitled "Recent Developments and Emerging Trends in Polyelectrolyte Gels", is dedicated to highlighting the latest advancements in the fabrication, characterization, and analysis of PE gels through innovative approaches. It also showcases their advanced applications. We invite submissions of new findings on the development of PE gels and warmly welcome both theoretical and experimental studies.

### **Guest Editors**

Dr. Zhuoyuan Zheng

School of Energy Science and Engineering, Nanjing Tech University, Nanjing 210009, China

Dr. Jie Zhou

School of Energy Science and Engineering, Nanjing Tech University, Nanjing 210009, China

### Deadline for manuscript submissions

closed (30 December 2024)



Gels

an Open Access Journal by MDPI

Impact Factor 5.3 CiteScore 7.6 Indexed in PubMed



mdpi.com/si/197518

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).

