

## Special Issue

# Advances and Application of Polymer Gels for Subsurface Energy and Storage

### Message from the Guest Editors

Oil production remains crucial for sustaining our energy supply cost-effectively. Simultaneously, substantial efforts are being made in carbon storage to reduce carbon levels. While these pursuits may seem conflicting, both are vital for addressing the needs of our current society. Investing in and developing material technologies during the process of hydrocarbon development or geologic carbon storage has become a critical focus for industries as new challenges and opportunities emerge. This Special Issue on advanced technologies in polymeric gel design and applications for hydrocarbon development and geologic carbon storage in gels provides a platform for sharing the latest research and practices in this area. These technologies help the petroleum industry address the challenges of the energy transition. The Special Issue that concentrates on the latest innovations in polymeric gels helps advance the development and improve the best practices in these technologies.

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### Guest Editors

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### Deadline for manuscript submissions

closed (15 May 2026)



## Gels

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## About the Journal

### Message from the Editorial Board

*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.

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### Editors-in-Chief

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