

Special Issue

Nanogels and Microgels: Fundamental Studies, Applications, and Emerging Trends

Message from the Guest Editors

Nanogels and microgels are polymeric materials that have become essential in nanotechnology and biomedicine due to their malleable properties and versatile functionality. Nanogels offer significant advantages in drug delivery by efficiently encapsulating therapeutic agents and facilitating controlled release, while microgels are widely employed in tissue engineering and soft actuator applications due to their high loading capacity and ease of processing. Both nanogels and microgels can be engineered to respond to environmental stimuli, rendering them suitable candidates for “smart materials”.

This Special Issue, titled “Nanogels and Microgels: Fundamental Studies, Applications, and Emerging Trends”, aims to showcase recent advances in this emerging field. Topics of interest include, but are not limited to, the following: the volume phase transition of gels, swelling and collapse dynamics, responsive behaviors to external stimuli, new theoretical/experimental methods for characterizing gels, and novel applications of gels in the broad areas of science and technology. Review papers offering perspectives on nanogels and microgels are also welcome.

Guest Editors

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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. Esmail Jabbari

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