Special Issue

Thixotropic Gels: Mechanisms, Functions and Applications

Message from the Guest Editors

Thixotropy attracts the attention of researchers from fundamental, functional and applied perspectives. In the domain of gels, thixotropy is responsible for numerous functions. Thixotropic organogelators are particularly intriguing because the nature of self-healing has not been extensively explored. Due to the non-covalent interactions underlying the self-assembly of small organic molecules, leading to the formation of nanostructured systems and ultimately forming a gel, the self-healing of the gelator structure after mechanical disruption of the gel structure is unexpected. Hence, in this Special Issue, we aim to summarize contributions in the field, focusing on the mechanistic basis for the formation of thixotropic organogels, various characterization techniques, especially rheological characterization, diverse functional properties, the stimuli-responsive properties responsible for the formation of thixotropic gels in any solvent and, above all, their applications. The application and functionality of thixotropic gelators in materials science, medicine, cosmetics, pharmaceuticals and food underscore the importance of a comprehensive overview of this field.

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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.

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