



gels



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Advanced Gels for Oil Recovery

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Message from the Guest Editors

Various gels have been used in oil fields for many years to control fluid flow in reservoirs. Viscoelastic gels can effectively block reservoirs with a high permeability, resulting in a greatly increased sweep efficiency. Recently, many studies further modified the viscosity and reduced the filtration loss of gel-forming fluids, controlling the gel-forming time of these gels to achieve deep and stable water plugging. Moreover, gels with a high viscosity, good shear recovery and facile gel breaking can also be used as fracturing fluids. Their significant properties were widely investigated to meet the requirements of the practical applications. With the exploration and development of unconventional oil and gas, gels are beginning to play increasingly essential roles in various fields of research, and advanced gels are still highly desired for use in harsh conditions. We look forward to submissions of the latest research achievements on the advanced gels for oil recovery, for which theoretical, experimental, and application studies are welcome.

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Special Issue



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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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