Special Issue

Gels in the Oil Field

Message from the Guest Editor

As functional materials, gels play an important role in promoting the efficient exploitation of oil fields, in processes such as gel plugging during drilling to prevent the loss of drilling fluid, the improvement of the effects of acidizing and fracturing, conformance control and water plugging, enhanced oil recovery using gels during oil production, and the improvement of the treatment effect using gels during oil and water treatment and separation. There are also important research efforts and applications in the CCUS field. With the developments achieved in recent years, gel technologies have become increasingly mature, making gels important products in oil field chemistry. These technologies include the research and development of new gels and the evaluation of gel properties and applications in the traditional oil and gas field, the new energy field, and the CCUS field. Therefore, this Special Issue is dedicated to reporting gel research and applications in the oil and related fields, providing practitioners with a more comprehensive research report and promoting the development of gel technology.

Guest Editor

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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

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