Special Issue

Removing Hazardous Materials from Water Using Polymer Hydrogel

Message from the Guest Editors

In recent years, hazardous materials such as heavy metal ions, metalloid ions, pesticides, and pharmaceuticals dissolved in water have damaged human beings and other living organisms. Polymer adsorbents have been the most popular approaches for metal and metalloid removal from industrial wastewater. Among them, hydrogels have attracted much research interest due to their high potential for removing hazardous materials because of the availability of many functional groups which enhance their absorption capability. Hydrogels are easy to separate from water after adsorption via simple filtering because it is easy to control their shape and size in preparation. Therefore, hydrogels are important and smart materials for the field of water treatment. This Special Issue focuses on the preparation of physical and chemical gels, including composites, and the mechanism of adsorption, for example, electrostatic interaction, hydrophobic interaction, and molecular interaction for applications in the removal of hazardous materials from water.

Guest Editors

Dr. Takehiko Gotoh

Department of Chemical Engineering, Hiroshima University, Higashihiroshima 739-8527, Japan

Prof. Dr. Yoshimi Seida

Natural Science Laboratory, Toyo University, Tokyo 112–8606, Japan

Deadline for manuscript submissions

closed (21 January 2022)

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/92782

Gels
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
gels@mdpi.com

mdpi.com/journal/gels

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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. Esmaiel Jabbari
Biomimetic Materials and Tissue Engineering Laboratory, Department of Chemical Engineering, University of South Carolina, Columbia, SC 29208, USA

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