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Hydrogels for 3D Printing

Guest Editors:

Dr. Enrique Aguilar

Centro de Innovación en Química Avanzada (ORFEO-CINQA), Departamento de Química Orgánica e Inorgánica, Instituto Universitario de Química Organometálica "Enrique Moles", Universidad de Oviedo, C/Julián Clavería 8, 33006 Oviedo, Spain

Dr. Helena Herrada-Manchón

IDONIAL Technological Centre, 1345-33203 Gijón, Asturias, Spain

Deadline for manuscript submissions:

closed (20 April 2024)

Message from the Guest Editors

Dear Colleagues,

Hydrogels are 3D cross-linked networks of flexible polymer chains that contain a large amount of water as the filling solvent. 3D printing, as an emerging versatile manufacturing technology, has been applied in the fabrication of hydrogel constructs with complex structures and potential applications in tissue engineering, regenerative medicine, delivery systems (drugs, proteins, genes, cells), implantable devices, sensors, and diagnostic devices, among others.

This Special Issue aims to present a collection showcasing the recent progress in hydrogels, including natural polymer hydrogels, synthetic polymer hydrogels, and derivative hydrogels to be used in extrusion printing, inkjet printing, laser or light processing printing, 3D bioprinting, and 4D printing. We encourage submissions covering key aspects of hydrogels, including synthesis and design, rheology, characterization, as well as application-focused research.

As Guest Editors, we are inviting you to contribute a research paper or review on any topic related to this thread

Dr. Enrique Aguilar Dr. Helena Herrada-Manchón Guest Editors













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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

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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