

## Special Issue

# Marine Origin Polymers as Biomaterials for Bioprinting

### Message from the Guest Editor

Bioprinting is a three-dimensional (3D) fabrication technology used to deposit cell-laden hydrogel bioinks for the fabrication of functional living tissues.

Importantly, 3D bioprinting enables certain tissue engineering applications of the printed tissue or organ for replacements of diseased or damaged organs in patients. Natural and synthetic hydrogels in bioprinting require physical and biological properties to mimic extracellular matrix in tissues. Natural polymers from marine resources are biologically active and abundant compared to polymers from other resources.

Biopolymers from marine resources, including fish, algae, bacteria, and fungi, can be used as a bioink in 3D bioprinting. However, the number of marine materials suitable for 3D bioprinting has been limited for the development of 3D printing materials. This Special Issue aims to provide an overview of the current research in isolation processes, physical or chemical modifications, and hydrogel formation of marine biomaterials for bioprinting. As of this Special Issue, I cordially invite contributions in the form of original research articles or reviews on the subject of this interesting research field.

### Guest Editor

Prof. Dr. Jong-Young Kwak

1. Department of Pharmacology, School of Medicine, Ajou University, Worldcup-Ro 164, Suwon 16499, Republic of Korea
2. 3D Immune System Imaging Core Center, Ajou University, Suwon 16499, Republic of Korea
3. Immune-Network Pioneer Research Center, Ajou University Medical Center, Suwon 16499, Republic of Korea

### Deadline for manuscript submissions

closed (10 February 2022)



## Marine Drugs

an Open Access Journal  
by MDPI

Impact Factor 5.4  
CiteScore 10.1  
Indexed in PubMed



[mdpi.com/si/84678](https://mdpi.com/si/84678)

*Marine Drugs*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[marinedrugs@mdpi.com](mailto:marinedrugs@mdpi.com)

[mdpi.com/journal/  
marinedrugs](https://mdpi.com/journal/marinedrugs)





# Marine Drugs

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.4  
CiteScore 10.1  
Indexed in PubMed



[mdpi.com/journal/  
marinedrugs](https://mdpi.com/journal/marinedrugs)



## About the Journal

### Message from the Editor-in-Chief

During the past few decades there has been an ever increasing number of novel compounds discovered in the marine environment. This is exemplified by the robust preclinical and clinical pipeline that currently exists for marine natural products. *Marine Drugs* is inviting contributions on new advances in marine biotechnology, pharmacology, chemical ecology, synthetic biology, and genomics approaches related to the discovery of therapeutically relevant marine natural products. Our goal is to share your contribution in a timely fashion and in a manner that will be valued by the scientific community.

---

### Editor-in-Chief

Prof. Dr. Bill J. Baker

Department of Chemistry, University of South Florida, 4202 E. Fowler Ave., CHE 205, Tampa, FL 33620-5250, USA

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, MarinLit, AGRIS, and other databases.

#### Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Pharmacology, Toxicology and Pharmaceutics (miscellaneous))