



## Biomimetic Biomaterials-Based Scaffolds for Tissue Engineering

Guest Editor:

**Dr. Sylvie Ribeiro**

1. Centre of Physics, University of Minho, 4710-058 Braga, Portugal  
2. IB-S—Institute for Research and Innovation on Bio-Sustainability, University of Minho, 4710-057 Braga, Portugal

Deadline for manuscript submissions:  
**closed (30 June 2023)**

### Message from the Guest Editor

The aim of this Special Issue, “Biomimetic Biomaterials-Based Scaffolds for Tissue Engineering”, is to cover a variety of recent research trends in the field of biomaterials, tissue engineering and regeneration approaches. Reviews on specific topics within this field will also be accepted.

Mimicking the microenvironment present in cells represents a needed approach to obtain effective strategies for tissue engineering. In this sense, the field of tissue engineering is advancing rapidly, and many of these advances would not be possible without the design and development of innovative biomaterials as a way of responding most closely in the mimicry of the organs or tissues present in human body. In this way, for better and more efficient TE approaches, biomaterials design must take into consideration the mechanobiological and electrobiological niche of each tissue.

### Keywords

- regenerative medicine
- tissue engineering
- tissues and organs
- biomaterials
- 3D biomimetic scaffolds
- cell-biomaterial interface





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Pankaj Vadgama

School of Engineering and  
Materials Science, Queen Mary  
University of London, London, UK

## Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the *Journal of Functional Biomaterials (JFB)* is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. *JFB* seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

## 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, PMC, Embase, Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Engineering, Biomedical) / CiteScore - Q2 (Biomedical Engineering)

## Contact Us

---

*Journal of Functional Biomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/jfb](http://mdpi.com/journal/jfb)  
[jfb@mdpi.com](mailto:jfb@mdpi.com)  
[X@JFB\\_MDPI](https://twitter.com/JFB_MDPI)