

Special Issue

Polymer-Based Biomaterials for Soft and Hard Tissue Regeneration Applications

Message from the Guest Editors

The current Special Issue brings together a themed collection of original research articles and reviews that explore the design, synthesis, and application of polymeric biomaterials, focusing on soft and hard tissue engineering. The opportunities for the contributions include a wide spectrum—from bioactive ceramics and biodegradable polymers to composite scaffolds and smart materials—reflecting the interdisciplinary nature of the field. The current goal is to highlight innovative strategies that address persistent challenges in soft and hard tissue regeneration.

While previous studies have often focused on isolated aspects of biomaterial development, this collection aims to offer a holistic view, integrating insights from materials science, bioengineering, and clinical practice.

We hope this Special Issue will serve as a source of inspiration and a guidepost for future research. Through collaboration across disciplines and encouraging translational thinking, we as researchers are committed to contributing meaningfully to the advancement of bone tissue engineering and the broader field of regenerative medicine.

Guest Editors

Prof. Dr. Chi Lee

Division of Pharmaceutical Sciences, University of Missouri at Kansas City, Kansas City, MO 64108, USA

Dr. Probal Basu

1. CÚRAM Research Ireland Centre for Medical Devices, Dublin, Ireland
2. School of Mechanical Engineering, Technological University Dublin, Dublin, Ireland
3. Royal College of Surgeons in Ireland, Dublin, Ireland

Deadline for manuscript submissions

31 March 2026



Journal of Functional Biomaterials

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/254779

*Journal of Functional
Biomaterials*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jfb@mdpi.com

mdpi.com/journal/

[jfb](https://jfb.mdpi.com)





Journal of Functional Biomaterials

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed



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

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



About the Journal

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.

Editor-in-Chief

Prof. Dr. Pankaj Vadgama

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

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, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Biomedical) / CiteScore - Q2 (Biomedical Engineering)