

Special Issue

Functional Scaffolds for Bone and Joint Surgery

Message from the Guest Editors

One of the ultimate goals of bone and joint surgery is reconstruction via the implantation of a device to replace the bone and/or joints affected by disease or traumatic damage or deformity. In the case of reconstruction of large osseous defects, which remains a significant challenge, 3D scaffolds are developed architectures that promote native tissue regeneration and are used as a template for bone tissue engineering.

This Special Issue aims to exhibit and discuss the latest advancements in functional scaffolds for bone and joint surgery. It is our pleasure to invite you to submit a manuscript to this Special Issue. Full papers, communications and reviews are welcome.

Potential topics include, but are not limited to, the following:

- Methods for functionalizing scaffolds to support a variety of in vivo functions;
- Development of functional 3D scaffolds within tissue engineering;
- Novel biomaterials and biofactors for functional scaffolds;
- Conventional and advanced technologies for functional 3D scaffold engineering;
- Applications of functional scaffolds in surgical treatment procedures.

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2025)



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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

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