# **Special Issue**

# Functionalized Polymeric Biomaterials: Design and Applications, 2nd Edition

## Message from the Guest Editors

The functionalization of biomaterials offers a promising strategy for improving the response of an organism to an implant. This approach is especially convenient when combined with polymeric materials that may be used in applications such as scaffolds for tissue regeneration and repair, vehicles for drugs and/or stem cell encapsulation and delivery, artificial tendons and ligament development, as structural elements of artificial extracellular matrices, etc. The synthesis of these functionalized biomaterials must consider the employment of biocompatible molecules, such as silk or collagen, that, in addition, should be produced in different formats by using appropriate processing techniques. Since functionalization requires introduction at the surface of the material of reactive groups, it is possible to consider the different crosslinking chemistries compatible with each material and format. In this context, this Special Issue aims to provide an updated view of the main promises and challenges of using this type of material for biomedical applications.

### **Guest Editors**

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## Deadline for manuscript submissions

30 April 2025



# Journal of Functional Biomaterials

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# About the Journal

## Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest arowing 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

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