

Special Issue

Development, Evaluation and Biomedical Applications of Novel Biomimetic Systems

Message from the Guest Editors

In recent years, biomimetic systems are gaining attention as powerful and efficient technology inspired by biological solutions at the macro and nanoscale. In general, biomimetic systems aim to apply the knowledge gained from biological systems in diverse fields of science. Understanding the principles of nature's design, structure, and function enables the development of novel methods and solutions in various areas, such as biology, medicine, engineering, and physics. This technology is a multidisciplinary approach with a wide range of strategies. In this Special Issue, we wish to focus on **original research papers** describing recent developments, achievements, and biomedical applications inspired by nature. Research topics include drug-delivery systems, regenerative medicine, tissue engineering, organ-on-a-chip systems, biomaterials, and nanotechnology. In this Special Issue, we also welcome review papers covering the requirements of biomimetic systems, the latest advances, and developments in biomimetic systems used for biomedical applications, and the remaining challenges in this field.

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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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