

Special Issue

Emerging Biomaterials and Technologies for Cardiovascular Disease

Message from the Guest Editor

Cardiovascular devices have relied on the same materials for almost 70 years, with few innovations in biomaterials successfully translating into clinical use, despite extensive research in the field. This issue emphasizes novel biomaterials, including advanced polymers, nanostructured composites, bioactive coatings, and tissue-engineered constructs that offer enhanced biocompatibility and performance. Additionally, the scope extends to emerging cardiovascular diagnostics, featuring new biomarkers and state-of-the-art testing methods that promise earlier detection and improved disease management. By integrating these topics, the issue seeks to address both translational challenges and technological breakthroughs in cardiovascular care. Positioned with a view of the current literature, this compilation critically examines historical limitations and contrasts traditional materials and diagnostic approaches with recent developments. Contributions will span fundamental research to clinical applications, fostering interdisciplinary dialogue and paving the way for future innovations.

Guest Editor

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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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