Special Issue

Advanced Biomaterials and Engineered Systems in Endodontics

Message from the Guest Editors

This Special Issue aims to explore cutting-edge advancements in biomaterials and engineered systems that are revolutionizing endodontic therapy and regenerative endodontics. The issue will focus on, but is not limited to, the following key themes:

- **Next-generation root canal and root-end filling materials**
- **Engineered systems for root canal drug delivery**
- **Micro- and nanorobots for root canal debridement and biofilm removal**
- **Intracanal drug delivery systems**
- **Nanomedicine applications**
- **Cell-free therapies**
- **Tissue-engineered dental pulp constructs**

This Special Issue will position itself within the growing body of literature on biomaterial-driven endodontic innovations by highlighting translational research that bridges clinical endodontics with material science, nanotechnology, robotics, and tissue engineering. We invite contributions that address these themes to advance the understanding and application of biomaterials in modern endodontics.

Guest Editors

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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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