### Special Issue

## Biomaterials for Management of Dental Caries and Periodontal Disease

#### Message from the Guest Editors

According to the World Health Organization's Global Oral Health Status Report 2022, dental caries in permanent teeth is the most common health condition worldwide, affecting approximately 2.5 billion people. Untreated caries in primary teeth remains a pressing concern in children, with over 514 million cases reported globally. At the same time, severe periodontal diseases affect around 1 billion people and are a major cause of tooth loss in adults, with serious implications for systemic health, including links to diabetes, cardiovascular disease, and adverse pregnancy outcomes. This Special Issue brings together pioneering research and translational studies on multifunctional biomaterials that exhibit antimicrobial, remineralizing, and regenerative properties. By bridging innovations in cariology and periodontology, this Special Issue aims to foster interdisciplinary collaboration and contribute to global efforts in reducing the burden of oral diseases through advanced, evidence-based biomaterial science.

#### **Guest Editors**

Dr. Mohammed Zahedul Islam Nizami ADA Forsyth Institute, Somerville, MA 02143, USA

Prof. Dr. Shogo Takashiba

Department of Pathophysiology-Periodontal Science, Faculty of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, 2-5-1 Shikata-cho, Kita-ku, Okayama 700-8525, Japan

#### Deadline for manuscript submissions

15 December 2025



# Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/243498

Journal of Functional Biomaterials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 jfb@mdpi.com

mdpi.com/journal/ jfb





## Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 6.8 Indexed in PubMed





#### 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

School of Engineering and Materials Science, Queen Mary University of London, London, UK

#### **Author Benefits**

#### **Open Access:**

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### **High Visibility:**

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Engineering, Biomedical) / CiteScore - Q2 (Biomedical Engineering)

