



an Open Access Journal by MDPI

## Engineering of Oral Biofilms

Guest Editors:

**Dr. Kassapa Ellepola**

Department of Oral Biology,  
College of Dentistry, University of  
Illinois at Chicago, Chicago, IL,  
USA

**Dr. Yuan Liu**

School of Dental Medicine,  
University of Pennsylvania,  
Philadelphia, PA, USA

Deadline for manuscript  
submissions:

**closed (20 June 2024)**

### Message from the Guest Editors

The human oral cavity is one of the most diverse microbial ecosystems in the human body, harboring over 700 bacterial species and 100 fungal species as well as viruses and protozoa. It is unique because of its various niches where microbes colonize and form biofilms. Biofilm formation on the hard surfaces of the teeth and the soft tissue of the oral mucosa is a dynamic process of microbial colonization and extracellular polymeric matrix development. Complex polymicrobial interactions within the biofilm as well as the environmental factors determine the oral health outcomes. This Special Issue establishes a platform for discussions on the engineering of oral biofilms to enhance the advancement of its derived applications in dentistry and related oral biological disciplines, where interventional strategies for diagnosis, treatment, and prevention will be utilized to tackle detrimental biofilms and utilize beneficial biofilms in the oral cavity.

This Special Issue invites original research covering various fundamental and applied aspects of oral biofilm engineering and welcomes review articles reporting state-of-the-art developments, current limitations, and future perspectives.



[mdpi.com/si/134256](https://mdpi.com/si/134256)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Anthony Guiseppi-Elie**

Department of Biomedical  
Engineering, Texas A&M  
University, College Station, TX  
77843, USA

## Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

## 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, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Biomedical*)

**Rapid Publication:** manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 3.1 days (median values for papers published in this journal in the first half of 2024).

## Contact Us

*Bioengineering* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/bioengineering](http://mdpi.com/journal/bioengineering)  
[bioengineering@mdpi.com](mailto:bioengineering@mdpi.com)  
[X@Bioeng\\_MDPI](https://twitter.com/Bioeng_MDPI)