





an Open Access Journal by MDPI

Microfluidics and Sensor Technology in Biomedical Engineering

Guest Editors:

Dr. Bharath Babu Nunna

Department of Mechanical Engineering, Weber State University, Ogden, UT 84408, USA

Dr. Eon Soo Lee

Mechanical and Industrial Engineering Department, New Jersey Institute of Technology, Newark, NJ 07102, USA

Deadline for manuscript submissions:

25 December 2024

Message from the Guest Editors

Dear Colleagues,

The innovative developments made in microfluidic and sensing technologies play a significant role in dynamically evolving biomedical engineering applications, especially in Lab-on-the-Chip, Organ-on-the-Chip and Point-of-Care technologies, among others. The rapidly emerging fabrication techniques in MEMS and NEMS have opened the doors to new sensing technologies with high accuracy. The fascinating microfluidic platforms with the latest 2D and 3D structures may have the ability to precisely define the fluid flow patterns and fluid particle transportation in microchannels with desired accuracy. The synergistic integration of microfluidic and sensing technologies has paved the way for many recent innovations in biomedical engineering, thus contributing to the development of sophisticated equipment for improving human health. This Special Issue will cover the recent and innovative advances made in the development of microfluidic platforms, smart micro/nano-biomedical devices, the integration MEMS/NEMS, and technical and translational challenges. along with a broader impact.

Dr. Eon Soo Lee

Dr. Bharath Babu Nunna

Guest Editors













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