

## Special Issue

# Medical Devices and Implants, 2nd Edition

### Message from the Guest Editors

We invite contributions to a Special Issue of Bioengineering focused on the design, prototyping, manufacturing, and experimentation of medical devices and implants. Considering the increased demand for these devices and thus increased healthcare costs, the clinical deployment of these solutions results in many challenges that need to be overcome. Embedded artificial intelligence in diagnostic tools, big-data-driven design processes, wireless communications for real-time monitoring, and finite element modeling for verification and validation are all examples of novel but now well-established technologies that have positively impacted product development. Further, the widespread use of additive manufacturing has boosted patient-specific design and implant development. More recently, bioprinting has been used in medicine to help to study or recreate almost every tissue and organ in the body. Therefore, this Special Issue aims to collect studies performed on medical devices and implants, strictly related to their development, prototyping, efficacy, and safety. Discussions and critical analyses of existing testing methods and standards are welcome.

---

### Guest Editors

Dr. Tanvir Faisal

Dr. Christine Walck

Dr. Donald Sorrells

---

### Deadline for manuscript submissions

31 October 2025



## Bioengineering

---

an Open Access Journal  
by MDPI

---

**Impact Factor 3.7**  
**CiteScore 5.3**  
**Indexed in PubMed**



[mdpi.com/si/202336](https://mdpi.com/si/202336)

*Bioengineering*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[bioengineering@mdpi.com](mailto:bioengineering@mdpi.com)

[mdpi.com/journal/  
bioengineering](https://mdpi.com/journal/bioengineering)





## Bioengineering

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.7  
CiteScore 5.3  
Indexed in PubMed



[mdpi.com/journal/  
bioengineering](https://mdpi.com/journal/bioengineering)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

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

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPIus / 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 19.2 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).

#### Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.