

## Special Issue

# Engineering with Nature: Bioengineering Innovations for the Environment and Nature- Based Solutions

### Message from the Guest Editor

This Special Issue seeks to showcase advances at the interface of biology and engineering that harness natural processes for environmental sustainability. As global challenges such as pollution, ecosystem degradation, and climate change intensify, the need for innovative, nature-based solutions becomes increasingly urgent. Bioengineering provides powerful tools to design and optimize these solutions, from phytotechnologies that remediate air, water, and soil systems to bio-inspired materials and engineered ecological processes that restore resilience in natural and built environments. We particularly welcome contributions that highlight how biological mechanisms can be leveraged for environmental applications, such as air and water purification, microbial bioremediation, or the integration of living systems into engineered infrastructures. Recent discoveries illustrate how fundamental biological processes can offer novel pathways for improving air and water quality, mitigating climate impacts, and safeguarding public health. Our goal is to highlight bioengineering as a critical enabler of sustainable development and resilient, nature-integrated solutions for the future.

### Guest Editor

Dr. Kristian L. Dubrawski

Geography & Engineering, University of Victoria, Victoria, BC V8W 2Y2, Canada

### Deadline for manuscript submissions

28 February 2026



**Bioengineering**

an Open Access Journal  
by MDPI

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



[mdpi.com/si/253018](https://mdpi.com/si/253018)

*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.