

# Special Issue

## *Rhodococcus* Species, Their Resistance to Stress and Biotechnological Potential

### Message from the Guest Editors

The genus *Rhodococcus* is formed by a group of diverse bacteria, which show great promise for biotechnological applications such as biodegradation, biotransformation, bioremediation, and biosynthesis. These strains are capable of degrading various organic compounds, such as aliphatic and aromatic hydrocarbons, as well as oxygenated and halogenated compounds. Their ability to resist antibiotics and toxic metal(loid)s may be the basis for their use in detoxification processes. Various *Rhodococcus* species are known to produce acrylamide, triacylglycerols (TAGs), polyhydroxyalkanoates (PHAs), biosurfactants, and carotenoids. Many rhodococci are extremophiles, being able to survive and thrive under hostile conditions, where they can be used for the bioremediation of toxic pollutants. Studies of cell response to diverse types of stress may therefore provide essential knowledge regarding the use of rhodococci in adverse conditions. In addition, some species of this genus are able to thrive under oligotrophic conditions. The editors of this Special Issue invite you to submit manuscripts concerning any aspect of the biotechnology and stress response of relevant *Rhodococcus* species.

### Guest Editors

Dr. Miroslav Pátek

Dr. Carla C. C. R. de Carvalho

Dr. Martina Cappelletti

Prof. Dr. Héctor M. Alvarez

### Deadline for manuscript submissions

closed (31 December 2022)



**Microorganisms**

an Open Access Journal  
by MDPI

Impact Factor 4.2  
CiteScore 7.7  
Indexed in PubMed



[mdpi.com/si/105970](https://mdpi.com/si/105970)

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

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





## Microorganisms

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.2  
CiteScore 7.7  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

---

### Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Toxicology, UFZ-Helmholtz Centre for  
Environmental Research, 04318 Leipzig, Germany

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

#### Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).