



## Recent Advances in Microcystins

Guest Editor:

**Prof. Dr. Fei Yang**

1. School of Public Health,  
University of South China,  
Hengyang 421001, China

2. Xiangya School of Public  
Health, Central South University,  
Changsha 410078, China

Deadline for manuscript  
submissions:

**closed (20 February 2023)**

### Message from the Guest Editor

In recent decades, harmful cyanobacterial blooms and their secondary metabolites cyanotoxins have occurred all over the world because of global warming and water eutrophication. Microcystins widely distributed in freshwater are the common and most toxic cyanotoxins, which have caused great damage to aquatic ecosystems and threatened public health. To protect humans and animals from the toxicity of MC-LR, The World Health Organization (WHO) stipulated that the concentration of MC-LR in drinking water cannot exceed 1  $\mu\text{g/L}$ . MC-LR can enter the intestine, transport through the blood stream, and distribute into various organs, so it is very important to investigate the toxic effect and mechanisms of microcystins against the liver, brain, kidney, lung, heart, and reproductive system. Moreover, how to control and remove MCs is a matter of great urgency worldwide. The utilization of bacteria is a promising approach to degrade and remove MC from waterbodies owing to its high efficiency, low cost, and environmental friendliness. Nonetheless, obtaining MC-degrading bacteria and understanding their MC-degrading mechanisms are great challenges.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Jay Fox

Department of Microbiology,  
University of Virginia,  
Charlottesville, VA, USA

## Message from the Editor-in-Chief

Toxinology is an incredibly diverse area of study, ranging from field surveys of environmental toxins to the study of toxin action at the molecular level. The editorial board and staff of *Toxins* are dedicated to providing a timely, peer-reviewed outlet for exciting, innovative primary research articles and concise, informative reviews from investigators in the myriad of disciplines contributing to our knowledge on toxins. We are committed to meeting the needs of the toxin research community by offering useful and timely reviews of all manuscripts submitted. Please consider *Toxins* when submitting your work for publication.

## 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, MEDLINE, PMC, Embase, CAPlus / SciFinder, AGRIS, and other databases.**

**Journal Rank:** JCR - Q1 (Toxicology) / CiteScore - Q1 (Toxicology)

## Contact Us

---

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

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

[mdpi.com/journal/toxins](http://mdpi.com/journal/toxins)  
[toxins@mdpi.com](mailto:toxins@mdpi.com)  
[X@Toxins\\_Mdpi](#)