

## Special Issue

# Biochemistry, Pathology and Applications of Venoms

### Message from the Guest Editor

Venoms are complex biochemical mixtures produced by venomous animals such as snakes and invertebrate species, including spiders and scorpions. Venoms can cause pain, paralysis, tissue necrosis, respiratory failure, and coagulation disorders following envenoming in humans. Therefore, researching venoms is vital for developing better antivenoms and medical treatments. Beyond their toxicity, venoms have groundbreaking medical applications. For example, a cone snail venom has led to non-opioid painkillers, specific snake venom peptides have inspired blood pressure medications, and certain venom proteins are being studied for anticoagulants, stroke treatments, and cancer therapy. Additionally, venoms provide better insights into neurological diseases like epilepsy and Alzheimer's disease. Therefore, the study of venoms bridges biochemistry, toxicology, and pharmacology and turns deadly venom toxins into therapeutic tools while improving treatments for envenoming. Hence, I would like to invite researchers to share their novel findings on the biochemistry, pathology, and clinical applications of any venoms or their isolated toxins in this Special Issue.

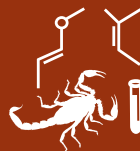
### Guest Editor

Prof. Dr. Sakthivel Vaiyapuri

School of Pharmacy, University of Reading, Reading RG6 6UB, UK

### Deadline for manuscript submissions

31 December 2025



## Toxins

an Open Access Journal  
by MDPI

Impact Factor 4.0  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/231847](https://mdpi.com/si/231847)

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

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





# Toxins

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.0  
CiteScore 8.2  
Indexed in PubMed



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



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Jay Fox

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

---

### Author Benefits

#### 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)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).