

Special Issue

Advanced Analytical Technologies in Mycotoxins Detection for the One-Health

Message from the Guest Editors

The detection and quantification of mycotoxins remain a critical challenge in analytical chemistry. Current methodologies often struggle with sensitivity, selectivity, matrix complexity, and the simultaneous detection of multiple mycotoxins. This Special Issue aims to address these challenges by showcasing state-of-the-art analytical strategies and fostering innovation in the field, focusing on new applications beyond ensuring food safety and regulatory compliance. This Special Issue will explore the development and application of advanced techniques such as high-resolution mass spectrometry, novel chromatographic systems, biosensors, and immunoassays. It will also highlight emerging trends in sample preparation, miniaturization, automation, and the use of nanomaterials and synthetic receptors (i.e., molecularly imprinted polymers, aptamers, synthetic peptides, etc.). In line with the One Health approach, this Special Issue will also emphasize the importance of detecting mycotoxins in non-conventional matrices, including environmental samples and biological fluids from humans and animals. Researchers are invited to submit original research articles, reviews, and technical notes.

Guest Editors

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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

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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).