

## Special Issue

# Old Challenges Meet Novel Tools: Prospects and Aims for Next-Generation Ecotoxicologists and Environmental Toxicologists

### Message from the Guest Editor

The extraordinary pace of our advancing society is a continuous source of new challenges that environmental scientists must keep up with. Emerging pollutants, such as pharmaceuticals and new pesticides, nanomaterials and complex blends of all sorts of noxious chemicals and their metabolites, are just few examples. As we become aware that traditional toxicity testing and biomonitoring versus biomarker approaches are hardly able to objectively determine risk and causality in realistic scenarios (therefore complex), experts are revolutionizing the field by incorporating frontier concepts like ‘Exposome’, ‘Systems Biology’ and ‘Adverse Outcome Pathways’. Consequently, improved methods to determine and validate the presence of chemicals in the environment, high-content screening and bioinformatics are pushing environmental science into its next-generation. We call on specialists worldwide for contributions that integrate such state-of-the-art concepts and technology to respond to the ever-evolving challenges laid before ecotoxicologists and environmental toxicologists.

### Guest Editor

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### Message from the Editor-in-Chief

Addressing the environmental and public health challenges requires engagement and collaboration among clinicians and public health researchers. Scientific discoveries and advances in this research field play a critical role in providing a rational basis for informed decision-making toward control and prevention of human diseases, especially the illnesses that are induced from environmental exposure to health hazards.

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### Editor-in-Chief

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