



Advances in Nanoecotoxicology: From the Molecular to the Biological Level and Back

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Message from the Guest Editors

Nanomaterials can be likened to the sword of Damocles, threatening the well-being of the ecosystems and ultimately of humans. As the flux of nanomaterials into ecosystems increases, it is imperative to study their effects on the (micro)organisms of the ecosystems. Although this field of research has progressed substantially during the last few years, there remains a lot to be done. This Special Issue aims to shed light on the nanoecotoxicity of novel or well-known nanomaterials and to gather data on the latest advances in this field. Research articles as well as review articles are welcome. Topics of the Special Issue include, but are not limited to:

- Toxicity assessments of nanomaterials on prokaryotes, eukaryotes, and more advanced organisms (e.g., animals)
- Effects of nanomaterials on the phenotype of living organisms
- Assessments of interactions of nanomaterials with biomolecules
- Use of -omics techniques to highlight biochemical changes in organisms
- Development or use of in vitro, in vivo, or computational models to assess ecotoxicity

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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