

# Environmental Behavior and Ecotoxicological Effects of Micro(nano)plastics

## Guest Editors:



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## Special Issue Introduction:

Due to their ubiquity and potential ecotoxicological consequences, microplastics (<5mm) have become the focus of increasing attention and research. Their distribution across the various ecosystems is currently a subject of major concern, which is exacerbated by a differentiated behavior than that of their bulk counterparts, thus impairing our full understanding of their sources, fate, and behavior in the environment, as well as their potential consequences for human health. These issues are compounded by the demonstrated ability of microplastics and smaller plastic particles to release toxic chemicals, as plastic additives, and to adsorb various chemicals, thereby serving as de facto sinks for various poisonous compounds, enhancing their bioavailability, toxicity, and transportation, including across trophic levels.

In this Special Issue, “Environmental Behavior and Ecotoxicological Effects of Micro(nano)plastics”, a broad selection of topics will be covered, including the development of analytical methodologies, studying the sources and fate of these materials, proposing new and environmentally friendly solutions, assessing their effects to the environment and human health, and even weighing the current legislative and regulatory landscapes.

This Special Issue is expected to make a positive contribution to the collection of key knowledge and insights on the occurrence, fate, and risks of microplastics, with the participation of researchers worldwide, to better ascertain the present status of (micro)plastic pollution and to identify knowledge gaps and future challenges.

## Proposed topics include, but are not limited to:

1. Microplastic pollution sources, migration process, and ecotoxicological effects in ecosystems;
2. Systematic ecological assessment, monitoring, and biological impact of microplastics on aquatic organisms;
3. Interactions and effects of microplastics with other emerging contaminants in the water environment;
4. Screening and quantitative analysis of microplastics, including analytical advances for identification, characterization, and quantification of (micro)plastics;
5. Understanding the leaching of plastic additives and subsequent risks to ecosystems;
6. Current and prospective legislative and regulatory initiatives combatting plastic pollution.

## Keywords:

microplastics; plastic additives; analytical chemistry; ecotoxicity; laws and regulations

## Benefits to Authors:

- The APCs (\$600) will be WAIVED;
- Enjoy faster publication than regular submissions;
- Authors will be invited as Guest Speakers to our journal webinars. The webinar will be held via Zoom and it will also be broadcast live on Youtube and the Chinese WeChat Official Account, Video Account, Bilibili;
- A special interview will be provided to authors and will be promoted on the journal homepage and all media promotion platforms of both via the journal and publisher.

**Submission Deadline: 8 Apr 2023**