



## The Application of Novel Biotechnologies for Removal of Emerging Contaminants

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### Message from the Guest Editor

Currently, the aquatic environment is exposed to severe pollution related to the ubiquity of microplastic, the overuse of antibiotics, and uncontrolled pollution from emerging contaminants. Due to these threats, environmental biotechnology faces a major challenge when it comes to finding solutions to their removal from the water. A significant portion of these pollutants bypass conventional wastewater treatment processes and enter aquatic ecosystems, or accumulate in treatment byproducts (e.g., excess sludge or adsorbents), potentially finding other pathways to environmental dispersion. Therefore, it is of utmost importance to find innovative solutions that enable their effective destruction.

Emerging contaminants include disinfection by-products, pharmaceutical and personal care products, fire retardants, insecticides, and industrial chemicals, as well as their partial degradation products. The evaluation of their residual presence in wastewater treatment plants, effluents, and byproducts is important for determining the risk to the environment.





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## Message from the Editor-in-Chief

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