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Research on Microbial Biodegradation of Crude Oil in Marine Environment

Guest Editors:

Prof. Dr. Bo-Zhong Mu

Institute of Applied Chemistry, East China University of Science and Technology, Shanghai 200237, China

Prof. Dr. Ruiyong Zhang

Institute of Oceanology, Chinese Academy of Sciences, Qingdao 266071, China

Prof. Dr. Wolfgang Sand

Institute of Biosciences, Freiberg University of Mining and Technology, 09599 Freiberg, Germany

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Message from the Guest Editors

It is estimated that about 1.0×10^{10} kg of oil enters the marine environment each year worldwide. It is essential to understand how microorganisms degrade hydrocarbons in marine ecosystems, as the biodegradation of oil pollution has great potential for the remediation of marine environments. The microbial degradation of marine petroleum pollutants is a complex process, which is constrained by many factors such as petroleum composition and physical and chemical properties, environmental conditions, and microbial community composition. The ecology, physiology, biochemistry, and genetics of oil-degrading microorganisms have been increasingly explored in recent decades.

This Special Issue will collect recent works that address a wide range of research topics listed below:

- (1) microbial diversity and functionality of crude-oil-degrading microorganisms in marine environments;
- (2) metabolic pathways involved in the biodegradation (aerobic/anaerobic) of petroleum hydrocarbons in marine environments;
- (3) recent advances of bioremediation approaches for crude oil contamination in marine environments.













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Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Systems Biology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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