



## Effects of Trace Elements on Aquatic Animals

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### Message from the Guest Editors

Trace elements are introduced in aquatic systems from diffuse and local sources, often resulting in their uptake, accumulation and toxic effects on organisms. While the exposure of aquatic organisms to classic metals such as mercury and lead has been extensively studied, as well as related toxicity, information is still missing on their effects at more integrative levels (e.g., reproduction; behaviour). On the other hand, the recent OMICs approaches can provide valuable contributions to the understanding of those metals' toxicity. Moreover, technology-critical elements (TCEs), such as some rare earth elements (REE), and platinum-group elements (PGEs) remain poorly investigated for their toxicokinetics and toxicodynamics in aquatic organisms. These are just some of the topics that are covered by this Special Issue of *Fishes* that is dedicated to the effects of classic trace elements and contaminants of emergent concern on aquatic species, covering both controlled experimental designs and field-based studies, and focusing on organisms' wellbeing.





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## Message from the Editor-in-Chief

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