



fishes



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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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Special Issue



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Message from the Editor-in-Chief

Fishes is a multidisciplinary open access journal focusing on reports of original research and critical reviews and synthesis from the broad area of fishes and aquatic animals. The ultimate objective of *Fishes* is to facilitate the discovery of connections between research areas, advancing science and filling knowledge gaps, and providing solutions for all present and future issues encountered in the sector of fisheries and aquaculture. As Editor-in-Chief, I encourage you to consider *Fishes* for your scientific papers and would be pleased to welcome you as one of our authors.

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