



## Advances and Current Challenges in Marine Biotoxins Monitoring

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### Message from the Guest Editor

Programs for monitoring marine biotoxins, aiming at minimize the risk of acute intoxication after consumption of seafood, are being challenged by: i) emergence of new toxins, ii) moving away from biological methods for official control and, iii) harmonization of detection methods and regulatory limits in a world of global trade. Harmful algal blooms have been pointed out as an increasing phenomenon with higher frequency, intensity and geographical distribution. New toxins, such as Tetrodotoxins, Ciguatoxins, and Palytoxins, may represent new environmental threats. In addition to the implementation of liquid chromatography based methods for official control, several other methods characterized by being cost effective, high-throughput, *in situ*, real-time monitoring, semi-quantitative, or technically less complex, have been recently developed, which can be used to support regulators and seafood business operators. This Special Issue aims to initiate a forum on current challenges and advances on marine biotoxins monitoring bringing to light new data on toxic phytoplankton occurrence, toxins dynamics in seafood, their toxicological potential and detection methods.





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## Message from the Editor-in-Chief

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