

Algae toxins: Methods and challenges (ACS-Envr)

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Harmful algal blooms (HABs) occur in fresh, marine or brackish water, where toxic compounds can be produced by various microorganisms such as cyanobacteria and dinoflagellates that grow rapidly and massively. These toxins are of very different chemical nature and present diverse severe effects on humans and other organisms exposed to them. Nowadays, national legislations, regulations and guidelines consider algal toxins as serious health risks associated to drinking water, recreational waters and the food web.

With this workshop we aim to open the field of HABs to the scientific community implicated on Chemistry and the Environment. Many recent cases of algal toxin contamination have triggered very active scientific research. While significant progress has been achieved, there are many challenges both on the scientific and technology aspects. The complex nature of the problem requires effective interdisciplinary, multidisciplinary and trans-disciplinary collaboration between the scientific community, national agencies, industry and other stakeholders.

In this symposium we will discuss emerging issues and the latest information available on the following four specific topics of the field of cyanobacteria and cyanotoxins in aquatic environments:

- i) Occurrence, ecology and effects of HABs
- ii) Methods and tools for detection and monitoring
- iii) Prevention and control of HABs in aquatic ecosystems and in water treatment plants
- iv) Regulations, management practices and education