



Review

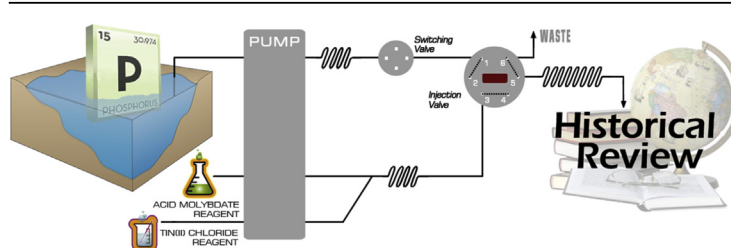
Determination of phosphorus in natural waters: A historical review

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HIGHLIGHTS

- Historical review of the determination of phosphorus in natural waters.
- Sampling and sample treatment procedures summarised.
- Analytical methods for dissolved reactive phosphorus discussed.
- Analytical methods for total and total dissolved phosphorus described.
- Phosphorus speciation considered.

GRAPHICAL ABSTRACT



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ABSTRACT

The aim of this paper is to introduce a virtual special issue that reviews the development of analytical approaches to the determination of phosphorus species in natural waters. The focus is on sampling and sample treatment, analytical methods and quality assurance of the data. The export of phosphorus from anthropogenic activities (from diffuse and point sources) can result in increased primary production and eutrophication, and potentially the seasonal development of toxic algal blooms, which can significantly impact on water quality. Therefore the quantification of phosphorus species in natural waters provides important baseline data for studying aquatic phosphorus biogeochemistry, assessing ecosystem health and monitoring compliance with legislation.

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