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Use of sorbent materials in flow-based modes for the determination of metal ions in recreational waters

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In this communication, some methods developed for the spectrophotometric quantification of metal ions in recreational waters are discussed. The major analytical challenges were related to the low analytes concentration, space and time variability of the matrix composition and salinity interference. To address this problem, flow-based systems were developed using different sorbents (Chelex-100, NTA, polymer inclusion membranes) for retaining/separating the target species. The methods were developed and applied to recreational waters (maritime, fluvial ports and beaches) due to their social-economic importance for Portugal. This work is part of a project (named MOPPWATER) addressing the problem of devising novel monitoring tools for inorganic pollutants in recreational waters.

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