



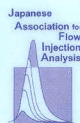
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USE OF RHODAMINE LABELLED IRON CHELATORS FOR THE SEQUENTIAL INJECTION FLUORIMETRIC DETERMINATION OF IRON IN COASTAL WATERS

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The determination of iron in marine samples is quite a challenge due to its low content and to matrix interferences. Moreover, if speciation is targeted, the choice of a suitable wet chemistry procedure (preferably non-toxic), associated to a sufficiently sensitive detection system, can be rather tricky.

In this context, we present some studies on the potential use of rhodamine labelled iron chelators for spectrophotometric and/or fluorimetric determination of iron. Since one of the available chelators only responds to iron(III) distinction between the content of the two most common forms of iron is achievable.

To reduce this ligand consumption, and to easily handle the reaction process and detection, a sequential injection system was set-up for this purpose.

The developed method is expected to provide iron speciation in complex matrix samples, namely coastal waters.

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