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TRACE ELEMENT SPECIATION IN FRESH WATER USING IRON OXIDE GEL TECHNIQUE

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Hydrogels are increasingly being used to control mass transport in the analytical determinetion of trace elements. The present technique of diffusive gradients in thin films (DGT) an in situ means of quantitatively measuring labile species in aqueous systems. In DGT, metals are bounded to a resin layer after passing through a well defined diffusion layer. As was measured in Fe_2O_3 gel layer by ICP-MS after eluated suitable eluent. In this study As speciation was investigated by using new gel layer Fe_2O_3 and the optimum conditions were determined which include pH, ionic streght, different gel thickness and different eluent solution [1].

References:

1. Zhang H., Davison W., Anal. Chem. 72, (2000), 4447-4457.

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