

1° Ciclo de Seminarios Doctorales eide mar

(Escuela Internacional de Doctorado en Estudios del Mar)

"Tailored ionic liquids - in search of green metal extractants"



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The ongoing global pollution of waterbodies with heavy metals from anthropogenic sources reinforces the search for new, effective, simple as well as economical methods for the extraction of these pollutants. Ionic liquids (IL), which are salts in the liquid state under 100°C, have been proposed as an alternative to traditional extracting agents as they possess many environmentally favorable properties. This work includes the green synthesis of novel ILs with high selectivity towards heavy metals like silver, cadmium or lead and a high stability during extraction. In order to enable an ecofriendly application, the ILs have been immobilized in capillary fibers to develop methods for micro-extraction in trace metal analysis of natural water samples.





