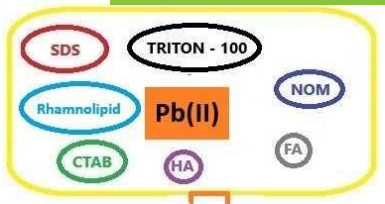
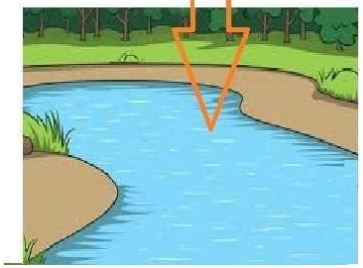
Short Term Scientific Mission funded by the COST Action CA22131

Supramolecular LUminescent Chemosensors for Environmental Security

Investigating the influence of a natural water matrix on the performance of an HDES-based electrochemical sensor dedicated to the determination of Pb(II) in the environment





A natural sample containing the Pb(II) to be determined and substances that interfere with the operation of the sensor, such as surfactants and humic substances

Amberlite XAD-7 resin (20-60 mesh)

Mixing the sample with the resin

Sample cleaned from interferences, ready for Pb(II) determination using the sensor

Surfactants present in natural samples that cause interferences with the sensor (lead ion-selective electrodes with a polymer membrane containing HDES), ranked from the most to the least disturbing:

CTAB > Triton X-100 > Rhamnolipid > SDS

Humic substances present in natural samples that cause interferences with the sensor (lead ion-selective electrodes with a polymer membrane containing HDES), ranked from the most to the least disturbing:

HA > NOM > FA

UMCS

THANK YOU !
DZIĘKUJEMY !
HVALA !

Malgorzata GRABARCZYK

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Period: 09.10.2024 to 15.10.2024

cost EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

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