Investigation into the application of the electroremediation process to the removal of Pb2 + from an artificial soil

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Abstract.

Electroremediation is an in situ technique used to remove organic or inorganic contaminants such as heavy metals or aromatic molecules in soils under the application of an electric field.

In this study, an artificial soil polluted by lead was studied. Two current intensities (0.1 and 0.2 A) were applied. The experimental study was carried out in a Plexiglas cell (volume ~ 2L) consisting of three compartments Anode, cathodic and that of medium separated by a tissue, sulfuric acid H_2SO_4 (0.1 N) was carried out as a study medium for a duration of 240 hours (10 days). All of the results showed the transport of Lead ions from the anode to the cathode.

Keywords: Electroremediation, decontamination, soil artificial, lead.

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