



## The applications of extraction in aqueous two-phase systems to decontamination of polluted soils with heavy metals

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The applicability of electro-kinetics decontamination methods is limited, mainly by the high costs for technologies implementation and by the impact on the further soil quality. Ours studies have followed the amelioration of these inconvenient by coupling the extraction in aqueous two-phase systems with the effects of electric field on the migration capacity of ions. By using as "washing solutions" of some polyethylene glycol (15-20 %) and alkaline metals salts ( $K_2SO_4$ -NaCl,  $Na_2SO_4$ -KCl) mixtures can be realized a selective extraction of the metals with high toxic potential (Cd, Hg, Pb). The extraction efficiency was found by around 90 % from soil solution and around 70 %, from fixed fractions on solid components of soils. By this procedure, the physic-chemical characteristics of soil are little modified.