



The impact in environment by presence in soil of Chrome ions

ROBU Brîndușa, BULGARIU Laura, M MACOVEANU - Universitatea Tehnică "Gheorghe Asachi"
Iași

Soil pollution is increasing day by day resulting in poor crop stand along with health hazards of human beings and animals. Major sources of soil pollution are: industrial effluents, sewage sludge, fertilizers and pesticides application, etc. Agricultural recycling of waste is growing too, and can be very worthwhile in both economic and agronomic terms, but it is crucial to minimize its environmental impact. In effect, it can cause contamination. Various pollutants are involved, including heavy metals (HMs) such as cadmium (Cd), chromium (Cr), mercury (Hg), lead (Pb), copper (Cu), nickel (Ni) and zinc (Zn), which need to be studied closely, since they are generally toxic to animals and plants. The purpose of this paper was to analyze soil samples from industrial area and observe if heavy metals ions as chromium can influence the environmental components. Six soil samples from 5 and 30 cm deep were analyzed in order to estimate the impact and risk for environment. The values of impact induced on soil (samples 3 and 4) underlay the fact that the environment is highly modified by the presence of chromium ions, causing a degraded environment, not proper for life forms (ecosystems). Mainly, the impact on soil is induced by the presence of chromium [VI]. The associated risk shows that all activities which involve uses of heavy metals should be stopped.