

Removal Of Heavy Metals: A Review

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Abstract

Waste water contamination is ever increasing problem which the whole world is now facing. Industrialization and globalization has led to production and disposal of large amount of heavy metals in the environment. The tremendous increase in use of heavy metals over the past decades has inevitably resulted in an increase flux of metallic substances in the aquatic environment. Heavy metals are major pollutants in marine, ground, industrial and even treated wastewaters. Mining activities, agricultural runoff, domestic and industrial effluents are mainly responsible for the increase of the metals released into the environment. Efficient methods have been reviewed for the removal of heavy metals such as chemical precipitation, ion exchange, reverse osmosis,

electrodialysis, ultrafiltration, nanofiltration, coagulation, flocculation, floatation, etc. The use of various readily available natural materials as adsorbents of heavy metals from industrial wastewater were considered.

Keywords: Heavy metals, Adsorption, Activated carbon, Low cost adsorbents.

1. Introdution

The quality of our environment is deteriorating day by day with the largest cities reaching saturation points and unable to cope with the increasing pressure on their infrastructure. Industrial effluents, sewage and farm wastes are the major pollutants contaminating the environment.

In fact, environmental pollution is currently one of the most important issues facing humanity. It was increased exponentially in the past few years and reached alarming levels in terms of