

Abstract

Heavy metals, derived from industrial wastewater discharge, present a serious threat to human health and to natural water. Biosorption is regarded as a cost-effective biotechnology for the treatment of high volume and low concentration wastewaters containing heavy metal(s) in the order of 1 to 100 mg L⁻¹. Among the biomaterials for heavy metal removal which have been researched during the past decades is the *Streptomyces* species, a by-product of an industrial antibiotic fermentation process. This paper describes the hazards posed by heavy metals effluents on the environment and use of various *Streptomyces* species to remove heavy metals from aqueous solution. Characterization of *Streptomyces* species, factors affecting biosorption, biosorption isotherms and biosorption kinetics is discussed