

# A Review on Bioremediation: An Overview of Present and future Perspective

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## Abstract

Bioremediation is an ecologically sound and state of the art technique that employs natural biological processes to completely eliminate toxic contaminants. Any process uses microorganisms, fungi, green plants or their enzymes to return the natural environment altered by contaminants to its original condition. Many contemporary methods such as physical, chemical and biological are currently being used, but they are not sufficient to clean the environment. The enzyme based bioremediation is an easy, quick, eco-friendly and socially acceptable approach used for the bioremediation of these recalcitrant xenobiotic compounds from the natural environment. Bioremediation of contaminated groundwater or soil is currently the cheapest and the least harmful method of removing xenobiotics from the environment. Immobilization of microorganisms capable of degrading specific contaminants significantly promotes bioremediation processes, reduces their costs, and also allows for the multiple uses of biocatalysts.