## IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 11, March 2025



## Studies on Heavy Metals Removal Observed in Vegetation on Affected River Banks and its Role in River's Self-Purification System.

S. V. Choudhari

Department of Chemistry K.E.S Anandibai Pradhan Science College, Nagothane, Raigad. Maharashtra

Abstract: The self-purification mechanism is very important for every river's health. Many factors like organic and inorganic pollutants, local discharges are responsible for river pollution. Scarcity of potable water is global problem. These studies are an attempt to identify pollution causing factors for rivers and to understand her self-purification points. So, sampling of plants, soil, and water was done site wise and season wise for their metal concentrations and biomagnification of metals is observed. Pollutant sources and distance from them is considered. It is observed that Cu and Zn are more accumulated in some plants, making soil and water cleaner, But Ni is less absorbed by plants indicating plants tolerance. plants are tolerant to metals in soil and help in the river's self-purifying system. Thus, vegetation plays important role in river's self-purification along with its geographical characteristics.

Keywords: Self-purification system, river, vegetation, bioremediation

Copyright to IJARSCT www.ijarsct.co.in



DOI: 10.48175/IJARSCT-26525



134