

# Adsorption of nickel using low cost materials as adsorbents

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**ABSTRACT :** Wastewater from industries must ultimately be return to the receiving bodies or to the land. In these wastewaters metals may be present in both soluble and insoluble forms. The concentration of metals must be reduced to acceptable levels before discharging them into environment. Otherwise these could pose threats to public health and may also affect aesthetic quality of receiving bodies. The removal of nickel from aqueous solution by economically feasible adsorbents was investigated, as a part of research work and presented in this paper. The effects of flow rate (contact time) initial concentration of metal ions (Co) for its removal on the adsorbents *viz.*, coconut husk, saw dust and sugar cane leaves have been studied at pH of 4.0. Maximum and minimum removal efficiency under optimum conditions of experimentations were recorded with coconut husk and sugar cane leaves, respectively.

**KEY WORDS :** Aqueous solution, Nickel, Adsorption, Low cost adsorbents

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