

# Metals adsorption from aqueous solution by coconut husk

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**SUMMARY :** The presence of heavy metals in the wastewaters is a major concern due to the toxicity to many life forms. Heavy metals will not degrade into harmless end product, unlike organic pollutants. Thus, treatment of wastewaters containing heavy metals requires secured disposal. This paper throws light on results of batch experimentations carried out to evaluate the potential of coconut husk in adsorbing zinc and copper ions from aqueous solutions. The influence of flow rate (contact time), pH of the solution and initial concentration of metal ions (Co) were investigated. Adsorption of metal ions were found to be pH dependent and results indicated the optimum pH of 7 for the removal of copper and zinc ions. The better removal efficiencies were recorded at flow rates of 40 ml/min and initial concentration of metals being 20 mg/l. Removal efficiency increased with increase in pH upto contain pH value and further decreased with increase in pH value. Also decrease in removal efficiency with increase in metal concentration was recorded. The coconut husk exhibited 80 % and 75 % removal of zinc and copper, respectively from aqueous solutions.

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