

REMOVAL OF COPPER (II) FROM AQUEOUS SOLUTION USING SAWDUST FROM OAK WOOD AS A NEW BIOSORBENT

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Abstract: Sawdust, from oak wood, was evaluated as a new biosorbent of heavy metals. On contacting 0.01 M copper (II) solutions with 12 g sawdust, during contact time 60 min, the heavy metal removal was noted to be 89%. Metal ion sorption increased as the ratio of metal solution to the biomass quantity decreased. The increase in initial metal ion concentration was associated with steep increase in biosorption at lower concentrations, progressively reaching towards plateau at higher metal concentrations.

Key words: sawdust, biosorption, copper (II) solutions removal, wastewater treatment.

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