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Review on Adsorption of Different Heavy Metals on Natural Adsorbent Sawdust

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Abstract: *Natural adsorbent i.e. Sawdust has been proved to be effective low cost adsorbent for removal of metals, dyes from their aqueous solutions. Sawdust is available in ample amounts in nearby area, so its use can be greener way of water purification. This paper reviews the findings of some researchers for the use of saw dust in different forms for heavy metal removal. Reported optimizing factors of adsorption, its isotherm analysis and kinetics are reviewed in this paper. It has been found that generally Langmuir and Freundlich adsorption isotherms fit well to batch experimental data. Pseudo-Second-order kinetic model best describe these processes. In some cases intraparticle and Elovich models are also used. Observations of effectiveness of Saw dust can be useful in future for designing water purification technology.*

Keywords: Adsorption, Sawdust, Heavy Metals, Adsorption Capacity, Isotherms, Kinetics

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