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Kinetic and Equilibrium Studies of Methyl Orange Removal from Aqueous Solution by Adsorption on Activated Rubber Sawdust

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Abstract: *This work investigates the removal of the methyl orange by adsorption using rubber saw dust activated carbon (RSDAC). The application of the adsorbent for methyl orange removal was observed to be influenced by the variation in these parameters like adsorbent dose, contact time and pH .The equilibrium data were analysed based on the Langmuir and Freundlich isotherms. Kinetic data were analysed using the pseudo –first order and pseudo –second order models. The maximum adsorption capacity is 111.11mg/g.*

Keywords: Adsorption, Low Cost Adsorbents, Aqueous Solution, Isotherm, Saw Dust

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