Kinetic Studies of Adsorption of Copper Ion from Aqueous Solution by Palm Kernel Fibre. Taipei Medical University "2005 Academic of Joint Research Conference", 2006.

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Abstract

Palm kernel fibre is a common agricultural waste in West Africa and its use as an adsorbent for the removal of copper ions from aqueous solution has been studied. Batch kinetics studies were carried out based on the assumption of the pseudo-second-order kinetic model, which was developed to predict the rate constant of adsorption, the equilibrium adsorption capacity and initial adsorption rate with the effect of initial copper concentration and reaction temperature. A comparison was made of the linear least-squares method and a trial-and-error non-linear method of the pseudo-second-order kinetic model for the adsorption of copper onto palm kernel fibre.