**Abstract**

The adsorption of Cu2+ ions by chitin was studied in alkaline, neutral and acidic media and also under different experimental conditions like contact time, particle size of the adsorbent, pH of the medium and temperature to establish the optimum conditions. The effect of temperature on the adsorption process was verified by batch equilibration method. The experimental results revealed that the adsorption occurred as a spontaneous one. The equilibrium and activation parameters of the adsorption reaction were determined to assess the nature of adsorption. The adsorption increased with temperature. The results imply that the adsorption process is endothermic and spontaneous.