Abstract

Tamarind seeds carbon from tamarind (*Tamarindus indica*) seed was used as adsorbent after activation process for the removal of Cr(VI) from aqueous solutions and *tanning* leather waste has been studied. The study was purposed to determination of optimum condition adsorption. The parameters of this study were time soaking (15, 30, 60, 90, and 120 minutes), initial concentration of chromium (30, 50, 100, 200, 250, 300, 500, 700 until 1000 mg/L) and adsorbent amount (0,25; 0,5 and 0,75 gram). The results showed that maximum adsorption occurred at time soaking 60 minutes resulting 88,42% removal of chromium. Maximum adsorption capacity 11,15 mg/g at concentration of chromium 500 mg/L. Adsorbent amount 0,75 gram could removal 95,75% of chromium. The percentage removal of chromium in *tanning* leather waste resulting 21,17%.

**Keywords**: Adsorption, Cr(VI), Tamarind seeds, Batch method, tanning leather waste