The potential use of kenaf as a bioadsorbent for the removal of Copper and Nickel from single and binary aqueous solution.

ABSTRACT

A series of batch experiment was conducted to study the potential of kenaf to be used as a bioadsorbent for removing copper and nickel from aqueous solution. The isotherm adsorption studies were carried out at 30°C. The single component equilibrium of each metal was analyzed using the Langmuir and Freundlich models. The modified extended Langmuir and modified extended Freundlich equations were used to match the binary adsorption equilibrium. The article presents the results of the experiments.

Keyword: Adsorption; Binary aqueous; Bioadsorbent; Heavy metal; Kenaf; Modified extended freundlich; Modified extended langmuir.