**Abstract**

The potential of tamarind hull, a low cost agricultural waste, to remove copper ions from aqueous solutions is evaluated in a batch process. The tamarind hulls are crushed, powdered and modified using 0.5 N sulfuric acid and formaldehyde. The experiments were performed to assess sorption capacity of the sorbent. The influences of variable parameters viz., particle sizes and doses of the sorbent material, agitation time and the pH are studied for Cu(II)-MTHP system. The optimum conditions form the maximum removal of Cu(II) ions by modified tamarind hull powder is established, from the experimental results and is presented in this paper.