

## عنوان مقاله:

Investigation of sorption isotherm and removal kinetics of arsenik onto saw dust

## محل انتشار:

کنفرانس بین المللی پژوهش در علوم و تکنولوژی (سال: 1394)

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## خلاصه مقاله:

In this research the adsorption of arsenic as a pollutant from textile industry onto carbonized sawdust has been investigated. The effect of various operational parameters such as adsorbent dosage , contact time , agitation rate , pH , initial concentration of dye and temperature on removal percentage of dye were studied in a batch system. Thermo dynamics parameters were calculated to know the adsorption nature. Values of  $\Delta G^\circ$  postulate an spontaneous process and calculated Values of  $\Delta H^\circ$  indicate and exothermic process and Values of  $\Delta S^\circ$  show the enhanced disorderliness on the adsorbent surface in comparison to dye solution. Also adsorption isotherms and Kinetics studies revealed that the adsorption of arsenic onto carbonized sawdust obeys Langmuir isotherm and ..pseudo-second-order kinetics

## کلمات کلیدی:

arsenic , drinking water, carbonized sawdust , Thermodynamics parameters , Kinetics

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/447022>

