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Effect of adsorption parameters on the Removal of heavy metal cations from water by two Algerian clays

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Abstract : Heavy metal pollution has become one of the most serious environmental problems nowadays. The treatment of heavy metals is of particular concern due to their recalcitrance and persistence in the environment. In recent years, various techniques for heavy metal removal from wastewater have been extensively studied. These technologies include chemical precipitation, ion-exchange, adsorption, membrane filtration, coagulation–flocculation, flotation and electrochemical methods. This paper deals with the factors affecting the use of the Algerian bentonite and kaolinite in the removal of heavy metal cations namely: Equilibration Time, Solid/Liquid ratio and pH.

Keywords : adsorption, metal cations, bentonite, kaolinite.

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