

Adsorption Tests of Two Industrial Dyes by Hydroxides of Metals

Authors : R. Berrached, H. Ait Mahamed, A. Iddou

Abstract : Water pollution is nowadays a serious problem, due to the increasing scarcity of water and thus to the impact induced by such pollution on the human health. Various techniques are made use of to deal with water pollution. Among the most used ones, some can be enumerated: the bacterian bed, the activated sludge, lagoons as biological processes and coagulation-flocculation as a physic-chemical process. These processes are very expensive and a decreasing in efficiency treatment with the increase of the initial pollutants concentration. This is the reason why research has been reoriented towards the use of adsorption process as an alternative solution instead of the other traditional processes. In our study, we have tempted to explore the characteristics of hydroxides of Al and Fe to purify contaminated water by two industrial dyes SBL blue and SRL-150 orange. Results have shown the efficiency of the two materials on the blue SBL dye.

Keywords : metallic hydroxides, dyes, purification, adsorption

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