

عنوان مقاله:

novel use of treated ochre for dye removal from aqueous solution: optimization through response surface methodology

محل انتشار:

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خلاصه مقاله:

Ochre (Ocher) refer to several forms of octahedral iron oxide namely hematite -Fe₂O₃ and goethite -FeOOH it is a type of clay stained with coloring minerals found in natural deposits in many different regions of the world this investigation presented here focused on the transformation of red ochre into an iron -rich powder as a coagulant to remove the acid red 151 in aqueous solution to achieve this purpose ochre was treated in sulfuric acid and water the treatment capability of this new coagulant was determined by investigation of the dye removal efficiency response surface methodology was used to study the effect of the various parameters including initial pH 2 milliequivalent of sulfuric acid per gram of ochre used in preparation of coagulant 3 initial dye concentration and 4 coagulant dosage to optimize the .process conditions for the decolorization of acid red 151 solution

کلمات کلیدی:

ochre , coagulation/ flocculation , RSM, dye removal , acid red 151

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