

عنوان مقاله:

Survey efficiency of dairy wastewater treatment by combined chemical coagulation and fenton oxidation process

محل انتشار:

مجله علمی علوم محیط زیست, دوره 5, شماره 1 (سال: 1394)

تعداد صفحات اصل مقاله: 8

نویسندگان:

f.k Mostafapour - Department of Environmental Health, Health Promotion Research Center, School of Public Health, .Zahedan University of Medical Sciences, Zahedan, Iran

e Bazrafshan - Department of Environmental Health, Health Promotion Research Center, School of Public Health, .Zahedan University of Medical Sciences, Zahedan, Iran

d Balarak - Department of Environmental Health, Health Promotion Research Center, School of Public Health, .Zahedan University of Medical Sciences, Zahedan, Iran

m.j tahsini - Department of Environmental Health, Health Promotion Research Center, School of Public Health, .Zahedan University of Medical Sciences, Zahedan, Iran

خلاصه مقاله:

A large amount of wastewater is produced in the dairy industry. This effluents creates major environmental problems when discharged to surface water. The combined chemical coagulation and Fenton oxidation process was applied for the treatment of dairy wastewater. In the first stage, poly aluminum chloride (PAC) was used as coagulant and optimum dose of coagulant was determined. After that, the effluent of coagulation process was used in Fenton oxidation process. In Fenton process, the influence of pH, reaction time, Fe2+ and hydrogen peroxide on the removal efficiency of COD and BOD from dairy wastewater were studied, and subsequently the optimal values for each parameter were determined. In The combined chemical coagulation and Fenton a huge decrease in COD and BOD concentrations were achieved. Based on the result of this study, coagulation/Fenton as an effective method can be used for dairy wastewater treatment

كلمات كليدى:

Dairy wastewater, Advanced oxidation processes, Coagulation, Fenton, PAC

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/489312

