

عنوان مقاله:

Treatment of Tire Industry Wastewater through Adsorption Process using Waste Tire Rubber

محل انتشار:

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خلاصه مقاله:

Attempts to use waster rubber powder as an adsorbent of pollutants in wastewater treatment applications is an environmentally friendly, efficient and novel method, especially in the tire industry wastewater treatment process. This study evaluated the efficiency of waste tire rubber powder in adsorbing the tire industry wastewater. The rubber and The wastewater were prepared from Kavir Qom Co. and Artawheel Tire Co., respectively. Comparison of UV-vis spectrophotometer results of the nontreated wastewater with the wastewater data after adsorption under various thermal and temporal conditions indicated that the tire powder adsorbent has the necessary efficiency for treating the tire industry wastewater. Examination of data with pseudo-first- and second-order kinetic models also confirmed the adsorbent's efficiency and showed that the second-order kinetic model had a good correspondence with the obtained .results

کلمات کلیدی:

Adsorption, Waste tire rubber, Wastewater Treatment, Tire Industry

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