

## عنوان مقاله:

Uranium Removal from Its Liquid Waste Using Chemically Treated Rice Husk

## محل انتشار:

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## خلاصه مقاله:

In this study, rice husk (RH) was modified by HCl and HNO<sub>3</sub>, and the activated RHs were used as adsorbents for removal of UO<sub>2</sub><sup>2+</sup> ions from aqueous solutions through batch equilibrium technique. Materials and methods: The influence of pH, equilibrium time, temperature, adsorbent dosage, and initial uranium concentration on adsorption percent was investigated. Results: Obtained results declared that the pH of aqueous solutions had affected UO<sub>2</sub><sup>2+</sup> ions removal, which was indicated by the increased removal efficiency with increasing solution pH till pH 3. Conclusion: Experimental data were verified with Langmuir and other isotherms and were found to be well fitting with Langmuir isotherm models. A feasibility study for the whole process was performed.

## کلمات کلیدی:

Adsorption, feasibility study, isotherm models, modified rice husk, uranium

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