

عنوان مقاله:

Investigation the effects of pulp density on the uranium bioleaching in stirred tank reactor

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Uranium bioleaching was carried out with low grade uranium ore from anomaly II of Saghand in Yazd. The bacterial which was used for these experiments was the native strain of *Acidithiobacillus ferrooxidans*. In these experiments, the effect of pulp density on the efficiency of uranium bioleaching was examined. It is observed that increasing the pulp density cause increasing the lag time of bacterial growth and leaching time and in a given time cause lower uranium extraction. In these experiments the uranium extraction percentage reached to 99% after 7 days for 5% (w/v) pulp density at both agitation speeds of 400 (rpm) and 600 (rpm) and 96% and 97% after 8 and 9 days for 15% (w/v) pulp density at agitation speeds of 400 (rpm) and 600 (rpm), respectively.

کلمات کلیدی:

uranium, bioleaching, pulp density, *Acidithiobacillus ferrooxidans*, stirred tank reactor

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