

عنوان مقاله:

Lead removal by modified Iranian natural zeolite with cobalt hexacyanoferrate nanoparticles

محل انتشار:

دومین کنفرانس ملی ژئولیت ایران (سال: 1394)

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خلاصه مقاله:

In the present study, the ability of modified natural zeolite clinoptilolite to remove Pb(II) from aqueous solutions has been investigated in batch method. The modified zeolite was characterized using SEM and FT-IR. The SEM image confirms the present of particles on nanoscale with average size of 60 nm. Adsorption tests of Pb(II) were carried out using a solution concentration between 10 ppm to 100 ppm at pH = 5.7. Modification studies have been performed to improve the sorption efficiency. As a result the Pb(II) removal efficiency was 96.31% using raw clinoptilolite while it was 99.95% using modified clinoptilolite.

کلمات کلیدی:

Adsorption; Nanoparticle; Natural zeolite; Hexacyanoferrate; Modification

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