

عنوان مقاله:

DETERMINATION OF OPTIMUM PH FOR REMOVAL OF Pb^{2+} IONS BY CHITOSAN NANOPARTICLES

محل انتشار:

کنفرانس بین المللی کشاورزی، محیط زیست و منابع طبیعی در هزاره سوم (سال: 1396)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Maede Mozaffari - *Mazandaran University of Science & Technology, Behshahr, Iran*

Mohsen Ghorbani - *Faculty of chemical engineering, Babol Noshirvani University of Technology, Babol, Iran*

Mohammad reza Sarmasti emami - *Chemical Engineering Department, Mazandaran University of Science and Technology, Behshahr, Iran*

خلاصه مقاله:

In the present work, thiosemicarbazide modified chitosan nanoparticles structure (TCS NPs) have been successfully synthesized for the removal of highly toxic Pb^{2+} ions and its properties were characterized. Prepared nanocomposite properties were characterized by Fourier transform infrared (FTIR) spectroscopy. The results showed that the TCS nanoparticles were successfully synthesized. The Pb^{2+} removal by the TCS adsorbent was investigated using batch adsorption technique and The effect of pH on Pb^{2+} removal was considered in the pH range of 2-5 at the contact time of 3 h, adsorbent amount 22 mg and all stages were performed at room temperature. Adsorption of Pb^{2+} ions on the surface of the adsorbent depends on the pH of the solution. In this study, pH 5.2 was chosen as an optimum pH for Pb^{2+} ions rejection.

کلمات کلیدی:

Pb^{2+} ions, Thiosemicarbazide, Removal

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/638003>

