Accepted Manuscript

Title: Adsorption of aluminum and lead from wastewater by chitosan-tannic acid modified biopolymers: isotherms, kinetics, thermodynamics and process mechanism

Authors: M.A. Badawi, N.A. Negm, M.T.H. Abou Kana, H.H. Hefni, M.M. Abdel Moneem

PII: S0141-8130(17)30164-2

DOI: http://dx.doi.org/doi:10.1016/j.ijbiomac.2017.03.003

Reference: BIOMAC 7166

To appear in: International Journal of Biological Macromolecules

Received date: 11-1-2017 Revised date: 23-2-2017 Accepted date: 1-3-2017

Please cite this article as: M.A.Badawi, N.A.Negm, M.T.H.Abou Kana, H.H.Hefni, M.M.Abdel Moneem, Adsorption of aluminum and lead from wastewater by chitosan-tannic acid modified biopolymers: isotherms, kinetics, thermodynamics and process mechanism, International Journal of Biological Macromolecules http://dx.doi.org/10.1016/j.ijbiomac.2017.03.003

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Adsorption of aluminum and lead from wastewater by chitosan-tannic acid modified biopolymers: isotherms, kinetics, thermodynamics and process mechanism

M.A. Badawi¹, N.A. Negm^{2#}, M.T.H. Abou Kana³, H.H. Hefni¹, M.M. Abdel Moneem¹

1. Chemistry Department, Faculty of Science, Cairo University, Giza, EGYPT.

2. Petrochemicals Department, Egyptian Petroleum Research Institute, Nasr city, Cairo, EGYPT.

3. National Institute of Laser Enhanced Sciences, Cairo University, Giza, EGYPT.

 $\#\ Corresponding\ author: \underline{nabelnegm@hotmail.com}$

Download English Version:

https://daneshyari.com/en/article/5512079

Download Persian Version:

https://daneshyari.com/article/5512079

<u>Daneshyari.com</u>