Accepted Manuscript

Title: Chromium adsorption using waste tire and conditions optimization by response surface methodology

Authors: Ijaz Ahamd Bhatti, Naseer Ahmad, Nida Iqbal, Muhammad Zahid, Munawar Iqbal

 PII:
 S2213-3437(17)30188-4

 DOI:
 http://dx.doi.org/doi:10.1016/j.jece.2017.04.051

 Reference:
 JECE 1601

To appear in:

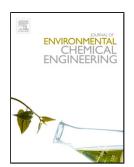
 Received date:
 4-3-2016

 Revised date:
 24-4-2017

 Accepted date:
 28-4-2017

Please cite this article as: Ijaz Ahamd Bhatti, Naseer Ahmad, Nida Iqbal, Muhammad Zahid, Munawar Iqbal, Chromium adsorption using waste tire and conditions optimization by response surface methodology, Journal of Environmental Chemical Engineeringhttp://dx.doi.org/10.1016/j.jece.2017.04.051

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

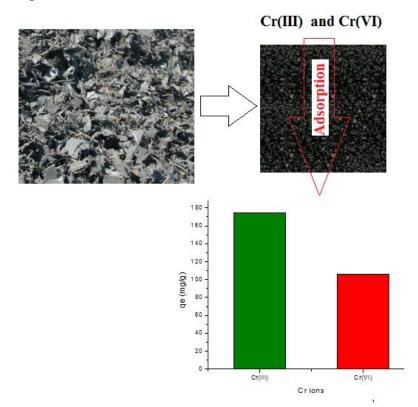
Chromium adsorption using waste tire and conditions optimization by response surface methodology

Ijaz Ahamd Bhatti^a, Naseer Ahmad^a, Nida Iqbal^a, Muhammad Zahid^a, Munawar

Iqbal^{b,*}

^bDepartment of Chemistry, University of Agriculture, Faisalabad 38000, Pakistan ^aDepartment of Chemistry, The University of Lahore, Lahore 54000, Pakistan *Corresponding authors: E-mail: <u>bosalvee@yahoo.com</u>

Graphical Abstract



Highlights

- Waste tire as adsorbent was used for chromium adsorption
- RSM was used to optimize the process variables
- Experimental values showed good agreement with predicted values.
- The adsorption capacities were found as 105.84 mg/g and 174.55 mg/g for Cr(VI) and Cr(III), respectively
- At optimized conditions of process variables, up to 79.6% Cr was removed from tannery wastewater

Download English Version:

https://daneshyari.com/en/article/4908418

Download Persian Version:

https://daneshyari.com/article/4908418

Daneshyari.com