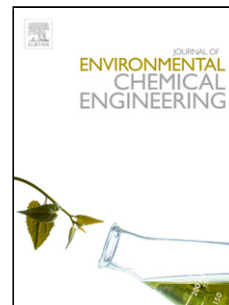


Accepted Manuscript

Title: Surface modified pineapple crown leaf for adsorption of Cr(VI) and Cr(III) ions from aqueous solution

Authors: Swastika Gogoi, Sutopa Chakraborty, Monali Dutta Saikia



PII: S2213-3437(18)30161-1
DOI: <https://doi.org/10.1016/j.jece.2018.03.040>
Reference: JECE 2281

To appear in:

Received date: 19-1-2018
Revised date: 2-3-2018
Accepted date: 19-3-2018

Please cite this article as: Swastika Gogoi, Sutopa Chakraborty, Monali Dutta Saikia, Surface modified pineapple crown leaf for adsorption of Cr(VI) and Cr(III) ions from aqueous solution, Journal of Environmental Chemical Engineering <https://doi.org/10.1016/j.jece.2018.03.040>

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.

Title: Surface modified pineapple crown leaf for adsorption of Cr(VI) and Cr(III) ions from aqueous solution

Swastika Gogoi, Sutopa Chakraborty, Monali Dutta Saikia*

Department of Chemistry, Arya Vidyapeeth College, Guwahati 781 016, Assam, India

Tel.: +91 361 2584316; Fax: +91 361 244065

E-mail: monalisaikia@hotmail.com

*Corresponding author

GRAPHICAL ABSTRACT



HIGHLIGHTS

- Modified PCL is an effective bioadsorbent for adsorption of chromium ions.
- FTIR study indicates complexation of Cr(VI) with –OH group of modified PCL.
- Electrostatic interaction contributes to chromium ion adsorption on PCL.
- Adsorption energy value suggests better interaction of Cr(VI) than Cr(III).

Abstract

Download English Version:

<https://daneshyari.com/en/article/6664048>

Download Persian Version:

<https://daneshyari.com/article/6664048>

[Daneshyari.com](https://daneshyari.com)