Accepted Manuscript

Title: Activated carbon—clay composite as an effective adsorbent from the spent bleaching sorbent of olive pomace oil: Process optimization and adsorption of acid blue 29 and methylene blue

Authors: F. Marrakchi, M. Bouaziz, B.H. Hameed

PII: S0263-8762(17)30580-4

DOI: https://doi.org/10.1016/j.cherd.2017.10.015

Reference: CHERD 2856

To appear in:

Received date: 8-5-2017 Revised date: 5-9-2017 Accepted date: 12-10-2017

Please cite this article as: Marrakchi, F., Bouaziz, M., Hameed, B.H., Activated carbon–clay composite as an effective adsorbent from the spent bleaching sorbent of olive pomace oil: Process optimization and adsorption of acid blue 29 and methylene blue. Chemical Engineering Research and Design https://doi.org/10.1016/j.cherd.2017.10.015

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

Activated carbon-clay composite as an effective adsorbent from the spent bleaching sorbent of olive pomace oil: Process optimization and adsorption of acid blue 29 and methylene blue

F. Marrakchi^{a,b}, M. Bouaziz^{b,c}, B.H. Hameed^{a,*}

^aSchool of Chemical Engineering, Engineering Campus,

University of Science Malaysia, 14300 Nibong Tebal,

Penang, Malaysia

^bLaboratoire d'Electrochimie et Environnement, Ecole Nationale d'Ingénieurs de Sfax, Université de Sfax, BP 1173, 3038 Sfax, Tunisia

^cInstitut Supérieur de Biotechnologie de Sfax, Université de Sfax, BP 1175, 3038 Sfax, Tunisia

* Corresponding author. Tel.: +6045996422; Fax: +6045941013

E-mail address: chbassim@usm.my (B.H. Hameed)

Highlights

- Activated carbon–clay composite from the spent bleaching sorbent of pomace oil.
- Langmuir model best fitted the isotherm data.
- Pseudo-second-order model fits the kinetic data for both dyes.

Download English Version:

https://daneshyari.com/en/article/7006389

Download Persian Version:

https://daneshyari.com/article/7006389

<u>Daneshyari.com</u>