Accepted Manuscript

Title: Design, production and characterisation of granular adsorbent material for arsenic removal from contaminated wastewater

Author: Chirangano Mangwandi Siti N.A. Suhaimi Jiang T. Liu Ranjit M. Dhenge Ahmad B. Albadarin



S0263-8762(16)30043-0 http://dx.doi.org/doi:10.1016/j.cherd.2016.04.004 CHERD 2250

To appear in:

Received date:	31-8-2015
Revised date:	24-3-2016
Accepted date:	3-4-2016

Please cite this article as: Mangwandi, C., Suhaimi, S.N.A., Liu, J.T., Dhenge, R.M., Albadarin, A.B., Design, production and characterisation of granular adsorbent material for arsenic removal from contaminated wastewater, *Chemical Engineering Research and Design* (2016), http://dx.doi.org/10.1016/j.cherd.2016.04.004

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

1 Highlights

• Acetone was identified as suitable binder dissolution medium

- Optimum product yield and granule strength was obtained with acetone as
 binder carrier.
- Highest granule stability was obtained when impeller speed and binder
 concentration were at their highest values.
- High removal efficiencies for arsenic at a loading of 1000ppb were obtained.
- 8

Download English Version:

https://daneshyari.com/en/article/7006563

Download Persian Version:

https://daneshyari.com/article/7006563

Daneshyari.com