The performance of nanorods material as adsorbent for removal of azo dyes and heavy metal ions: application of ultrasound wave, optimization and modeling

Ebrahim Alipanahpour Dil, Mehrorang Ghaedi, Arash Asfaram

PII: S1350-4177(16)30256-5
DOI: http://dx.doi.org/10.1016/j.ultsonch.2016.07.015
Reference: ULTSON 3313

To appear in: *Ultrasonics Sonochemistry*

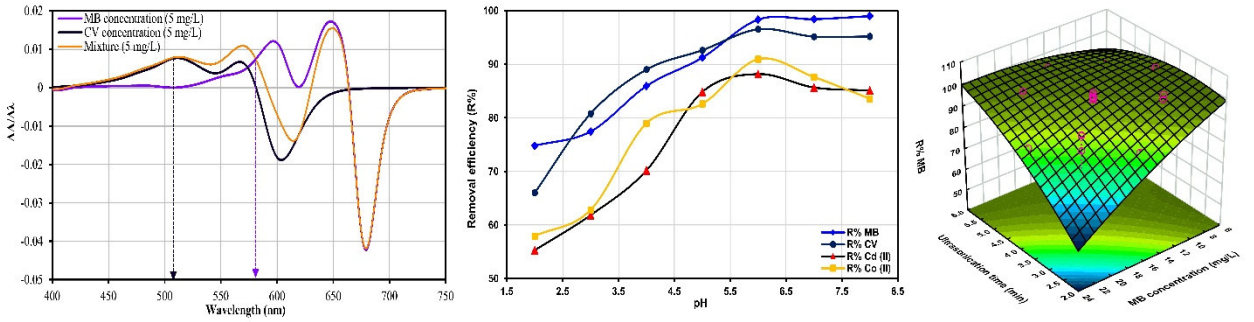
Received Date: 30 May 2016
Revised Date: 21 July 2016
Accepted Date: 22 July 2016

Please cite this article as: E.A. Dil, M. Ghaedi, A. Asfaram, The performance of nanorods material as adsorbent for removal of azo dyes and heavy metal ions: application of ultrasound wave, optimization and modeling, *Ultrasonics Sonochemistry* (2016), doi: http://dx.doi.org/10.1016/j.ultsonch.2016.07.015

The performance of nanorods material as adsorbent for removal of azo dyes and heavy metal ions: application of ultrasound wave, optimization and modeling

Ebrahim Alipanahpour Dil, Mehrorang Ghaedi*, Arash Asfaram

[a] *Department of Chemistry, Yasouj University, Yasouj 75918-74831, Iran.*



Graphical abstract

* Corresponding author at: Tel.: +98 741 2223048; fax: +98 741 2223048.
E-mail address: m_ghaedi@mail.yu.ac.ir (M. Ghaedi)