Accepted Manuscript

Title: Chitosan-rectorite nanospheres immobilized on polystyrene fibrous mats via alternate electrospraying/electrospinning techniques for copper ions adsorption



Authors: Hu Tu, Mengtian Huang, Yang Yi, Zhenshun Li, Yingfei Zhan, Jiajia Chen, Yang Wu, Xiaowen Shi, Hongbing Deng, Yumin Du

PII:	S0169-4332(17)32160-8
DOI:	http://dx.doi.org/doi:10.1016/j.apsusc.2017.07.159
Reference:	APSUSC 36693
To appear in:	APSUSC
Received date:	28-3-2017
Revised date:	14-7-2017
Accepted date:	18-7-2017

Please cite this article as: Hu Tu, Mengtian Huang, Yang Yi, Zhenshun Li, Yingfei Zhan, Jiajia Chen, Yang Wu, Xiaowen Shi, Hongbing Deng, Yumin Du, Chitosan-rectorite nanospheres immobilized on polystyrene fibrous mats via alternate electrospraying/electrospinning techniques for copper ions adsorption, Applied Surface Sciencehttp://dx.doi.org/10.1016/j.apsusc.2017.07.159

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

Chitosan-rectorite nanospheres immobilized on polystyrene fibrous mats via alternate electrospraying/electrospinning techniques for copper ions adsorption

Hu Tu^a, Mengtian Huang^b, Yang Yi^a, Zhenshun Li^c, Yingfei Zhan^a, Jiajia Chen^a, Yang Wu^a, Xiaowen Shi^a, Hongbing Deng^{a,*}, Yumin Du^a

- ^a Hubei International Scientific and Technological Cooperation Base of Sustainable Resource and Energy, Hubei Key Lab of Biomass Resource Chemistry and Environmental Biotechnology, School of Resource and Environmental Science, Wuhan University, Wuhan 430079, China
- ^b School of Chemistry and Chemical Engineering, Guangxi Key Laboratory of Petrochemical Resource Processing and Process Intensification Technology, Guangxi University, Nanning 530004, China
- ^c College of Life Science, Yangtze University, Jingzhou 434025, China

*Corresponding author

Fax: +86 27 68778501; Tel: +86 27 68778501

E-mail: hbdeng@whu.edu.cn; alphabeita@yahoo.com; (H. Deng)

Highlights

- CS or CS-REC was electrosprayed to nanospheres to enlarge their surface area.
- CS-REC immobilized on PS mats could improve the hydrophilicity.
- The intercalation of CS chains with REC interlayers was helpful for adsorption.

Download English Version:

https://daneshyari.com/en/article/5349544

Download Persian Version:

https://daneshyari.com/article/5349544

Daneshyari.com