Accepted Manuscript

Fabricating an enhanced sterilization chitosan-based flocculants: synthesis, characterization, evaluation of sterilization and flocculation

Xiang Li, Huaili Zheng, Yili Wang, Yongjun Sun, Bincheng Xu, Chuanliang Zhao

PII: DOI: Reference:	S1385-8947(17)30326-1 http://dx.doi.org/10.1016/j.cej.2017.02.147 CEJ 16586
To appear in:	Chemical Engineering Journal
Received Date:	14 January 2017
Revised Date:	26 February 2017
Accepted Date:	27 February 2017



Please cite this article as: X. Li, H. Zheng, Y. Wang, Y. Sun, B. Xu, C. Zhao, Fabricating an enhanced sterilization chitosan-based flocculants: synthesis, characterization, evaluation of sterilization and flocculation, *Chemical Engineering Journal* (2017), doi: http://dx.doi.org/10.1016/j.cej.2017.02.147

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

Fabricating an enhanced sterilization chitosan-based

flocculants: synthesis, characterization, evaluation of sterilization

and flocculation

Xiang Li^a, Huaili Zheng^{a, *}, Yili Wang^b, Yongjun Sun^c, Bincheng Xu^a,

Chuanliang Zhao^a

^aKey laboratory of the Three Gorges Reservoir Region's Eco-Environment, State Ministry of Education, Chongqing University, Chongqing 400045, China

^bCollege of Environmental Science and Engineering, Research Center for Water Pollution Source Control and Eco-remediation, Beijing Forestry University, Beijing 100083, China

^cJiangsu Key Laboratory of Industrial water-Conservation & Emission Reduction, College of Urban Construction, Nanjing Tech University, Nanjing, 211800, China.

*Corresponding author. Tel.: +86 23 65120827; fax: +86 23 65120827.

E-mail address: zhl@cqu.edu.cn (Huaili Zheng)

Abstract

Modified natural polymer flocculants has been the focus of research in environmental engineering field. Natural large molecular compound, Chitosan (CTS) with many functional amino and hydroxyl groups can be easily modified to enhance its original functions. This work presents an environmentally friendly chitosan-based cationic polyacrylamide flocculants (CTS-g-PAMA) with enhanced function of Download English Version:

https://daneshyari.com/en/article/4763102

Download Persian Version:

https://daneshyari.com/article/4763102

Daneshyari.com