

## Accepted Manuscript

Simultaneous reduction of copper and toxicity in semiconductor wastewater using protonated alginate beads

Sunghwan Bang, Jae-Woo Choi, Kangwoo Cho, Chongmin Chung, Hojeong Kang, Seok Won Hong

PII: S1385-8947(15)01696-4  
DOI: <http://dx.doi.org/10.1016/j.cej.2015.12.025>  
Reference: CEJ 14534

To appear in: *Chemical Engineering Journal*

Received Date: 6 October 2015  
Revised Date: 30 November 2015  
Accepted Date: 10 December 2015

Please cite this article as: S. Bang, J-W. Choi, K. Cho, C. Chung, H. Kang, S.W. Hong, Simultaneous reduction of copper and toxicity in semiconductor wastewater using protonated alginate beads, *Chemical Engineering Journal* (2015), doi: <http://dx.doi.org/10.1016/j.cej.2015.12.025>

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.



## Simultaneous reduction of copper and toxicity in semiconductor wastewater using protonated alginate beads

Sunghwan Bang<sup>a,b</sup>, Jae-Woo Choi<sup>a,c</sup>, Kangwoo Cho<sup>a,c</sup>, Chongmin Chung<sup>d</sup>, Hojeong Kang<sup>b</sup>,  
Seok Won Hong<sup>a,c,\*</sup>

<sup>a</sup> Center for Water Resource Cycle Research, Korea Institute of Science and Technology, Seoul 136-791,  
Republic of Korea

<sup>b</sup> School of Civil and Environmental Engineering, Yonsei University, Seoul 120-749, Republic of Korea

<sup>c</sup> Energy and Environmental Engineering, Korea University of Science and Technology, Seoul 136-791,  
Republic of Korea

<sup>d</sup> GiheungHwaseong Complex, Device Solution Business, Samsung Electronics Co., Ltd, 95, Samsung 2-  
ro, Giheung-gu, Yongin-si, Gyeonggi-do 446-811, Republic of Korea

\* Corresponding author. Tel.: +82 (2) 958 5844; fax: +82 (2) 958 5839.

E-mail address: swhong@kist.re.kr (S.W. Hong).

Download English Version:

<https://daneshyari.com/en/article/6582169>

Download Persian Version:

<https://daneshyari.com/article/6582169>

[Daneshyari.com](https://daneshyari.com)