



This article appeared in a journal published by Elsevier. The attached copy is furnished to the author for internal non-commercial research and education use, including for instruction at the authors institution and sharing with colleagues.

Other uses, including reproduction and distribution, or selling or licensing copies, or posting to personal, institutional or third party websites are prohibited.

In most cases authors are permitted to post their version of the article (e.g. in Word or Tex form) to their personal website or institutional repository. Authors requiring further information regarding Elsevier's archiving and manuscript policies are encouraged to visit:

<http://www.elsevier.com/copyright>



Contents lists available at ScienceDirect

Journal of Colloid and Interface Science

www.elsevier.com/locate/jcis



Short Communication

Comments on “Adsorption of direct dyes from aqueous solutions by carbon nanotubes: Determination of equilibrium, kinetics and thermodynamics parameters”

Yuh-Shan Ho*

Department of Environmental Sciences, College of Environmental Science and Engineering, Peking University, Beijing, 100871, People's Republic of China

ARTICLE INFO

Article history:

Received 10 December 2008

Accepted 11 January 2009

Available online 12 February 2009

Keywords:

Initial adsorption rate

Pseudo-second-order kinetic model

Intraparticle diffusion model

Quotation error

ABSTRACT

Two most suggested papers for pseudo-second-order kinetic model were published in 1984 and 1995 by Blanchard et al. and Ho, respectively. Blanchard et al. noted the overall exchange reaction of NH_4^+ ions fixed in zeolite by divalent metallic ions in the solution using a second-order kinetic model. Ho used the pseudo-second-order kinetic model to the copper ion/peat adsorption system. The adsorption involved chemical bonding and cation exchange. In this comment citation error and quotation error were pointed.

© 2009 Elsevier Inc. All rights reserved.

Recently, Kuo et al. [1] published the paper noted above. In Section 3.2.1, Effects of dye concentration, the authors noted a pseudo-second-order model, initial adsorption rate h , and intraparticle diffusion model. In the case of the pseudo-second-order model the authors cited two secondary materials as references [2,3]. In fact, the pseudo-second-order kinetic expression for the adsorption systems of divalent metal ions using sphagnum moss peat has been presented by Ho [4] and this kinetic expression has also been published in 1996 [5]. At the same time Ho has presented a definition for the initial adsorption rate from the pseudo-second-order model. A modified model has been made in the following years because a mistake was included in the paper published in 1996 [6–8]. However, in the case of initial adsorption rate, the authors noted that “the initial adsorption rate h (mg/g min) can be determined by using the equation $h = k_2 q_e^2$ ” without any citations. In the case of the intraparticle diffusion model, the authors cited the same two secondary materials as references [2,3]. A quotation error of the intraparticle diffusion model was contained in

both references. The equation presented in the paper could not be found in the original paper of Weber and Morris [9].

Accuracy of quotations and citations is very important for the transmission of scientific knowledge. I suggest that Kuo et al. cite the original or the most frequently cited papers for the kinetic models to have more accuracy and details of information about kinetic expression.

References

- [1] C.Y. Kuo, C.H. Wu, J.Y. Wu, J. Colloid Interface Sci. 327 (2008) 308.
- [2] C.H. Wu, J. Hazard. Mater. 144 (2007) 93.
- [3] I.D. Mall, V.C. Srivastava, N.K. Agarwal, Dyes Pigments 69 (2006) 210.
- [4] Y.S. Ho, Ph.D. thesis, University of Birmingham, Birmingham, UK, 1995.
- [5] Y.S. Ho, D.A.J. Wase, C.F. Forster, Environ. Technol. 17 (1996) 71.
- [6] Y.S. Ho, G. McKay, Chem. Eng. J. 70 (1998) 115.
- [7] Y.S. Ho, G. McKay, Water Res. 34 (2000) 735.
- [8] Y.S. Ho, J. Hazard. Mater. 136 (2006) 681.
- [9] W.J. Weber Jr., J.C. Morris, J. Sanit. Eng. Div. ASCE 89 (1963) 31.

DOI of original article: 10.1016/j.jcis.2008.08.038.

* Fax: +86 10 62751923.

E-mail address: dr_ysho@hotmail.com.

0021-9797/\$ – see front matter © 2009 Elsevier Inc. All rights reserved.

doi:10.1016/j.jcis.2009.01.025