



Short Communication

Response to comment on “Adsorption of direct dyes from aqueous solutions by carbon nanotubes: Determination of equilibrium, kinetics and thermodynamics parameter” by Dr. Ho

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ABSTRACT

This letter is a response to the comment of Dr. Ho on “Adsorption of direct dyes from aqueous solutions by carbon nanotubes: Determination of equilibrium, kinetics and thermodynamics parameters.” First, we would like to thank Dr. Ho for his interest in, and kind comments on, our recent article [C.Y. Kuo, C.H. Wu, J.Y. Wu, *J. Colloid Interface Sci.* 327 (2008) 308]. This reply responds to the issues raised by Dr. Ho. We will indicate the miscitation of the intraparticle diffusion model and clarify the correct citation of the pseudo-second-order model.

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We agree with Dr. Ho’s comment about the use of the intraparticle diffusion model, which was originally proposed by Weber and Morris [1]. My earlier paper [2] cited the work of Weber and Morris [1] on the intraparticle diffusion model, but erroneously cited secondarily the work of Wu [2] on this model in Kuo et al. [3]. Our manuscript has already been published in the *Journal of Colloid and Interface Science* and new corrections can no longer be made. Therefore, we would like to indicate to readers that the intraparticle diffusion model was originally developed by Weber and Morris [1].

Dr. Ho has claimed that the pseudo-second-order model was original developed by him [4] and suggested that we cite his paper on pseudo-second-order kinetics. Dr. Ho has requested numerous authors who have utilized the pseudo-second-order model to cite his paper, such as in comments published in *Journal of Colloid and Interface Science* [5–8], *Journal of Hazardous Materials* [9–12], *Water Research* [13], *Biochemical Engineering Journal* [14–16], *Journal of Membrane Science* [17], *International Journal of Biological Macromolecules* [18] and *Dyes and Pigments* [19]. However, Kumar [20,21], Kumar and Guha [22], Kumar and Favere [23] and Kumar and Rattanaphani [24] has pointed out that the pseudo-second-order model was not proposed by Dr. Ho, but by Blanchard et al. [25]. Kumar’s related paper [20–24] indicated that Blanchard et al. [25] first proposed the pseudo-second-order kinetic expression in 1984, while Dr. Ho [4] presented only a linearized

form of the pseudo-second-order kinetic model in 1995. Kumar and Sivanesan [26] have proven that the expressions of Blanchard et al. [25] and Dr. Ho [4] are the same for the adsorption kinetics of safranin onto rice husk particles. Additionally, Ozacar [27] and Arica [28] demonstrated that the second-order and pseudo-second-order equations were not originally developed by Dr. Ho nor applied for the first time by him to adsorption systems for kinetic analysis. Ozacar [27] also suggested that since equations like the second-order equation are generally known, the original paper need not be cited all the time. However, the authors who first proposed the theoretical model should always be given due credit. Kumar and Kumar’s colleagues [20–24] suggested that researchers should cite the paper of Blanchard et al. [25] for the pseudo-second-order kinetic model. Based on the above, we would like to cite the work of Blanchard et al. [25] regarding the pseudo-second-order kinetic model to correct the citation error in our original manuscript [3]. Furthermore, we would like to alert researchers to be careful in citing the original and correct work, in the light of the comments of Dr. Ho.

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