



Letter to the Editor

Keywords:
Plagiarism
Pseudo-second-order

Comments on "Recognition of molecularly imprinted polymers for a quaternary alkaloid of berberine"

Recently, Chen et al. [1] published the paper noted above. In Section 3.4, Adsorption analysis and recognition mechanism, the authors noticed first order and second order equations without any citations.

In fact, it was Lagergren who first presented the first order rate equation for the adsorption of oalic acid and malonic acid onto charcoal [2]. Lagergren's kinetics equation has been most widely used for the adsorption of an adsorbate from an aqueous solution, and citation review of Lagergren's kinetic rate equation on adsorption reactions has also been reported [3]. The correct reference citing the original Lagergren paper was firstly presented by Ho and McKay in 1998 [3,4]: "S. Lagergren, zur theorie der sogenannten adsorption gelöster stoffe, Kungliga Svenska Vetenskapsakademiens, Handlingar, Band 24, No. 4 (1898), 1–39." Its English translation is "S. Lagergren, about the theory of so-called adsorption of soluble substances, Kungliga Svenska Vetenskapsakademiens, Handlingar, Band 24, No. 4 (1898), 1–39", and the abbreviation style is "S. Lagergren, zur theorie der sogenannten adsorption gelöster stoffe, K. Sven. Vetenskapsakad. Handl., Band 24, No. 4 (1898), 1–39." In order to distinguish the kinetics equation based on the adsorption capacity of solid from the concentration of solution, Lagergren's first order rate equation has been called pseudo-first-order since 1998 [4].

In the case of the second order equation, the same kinetic expression for the adsorption systems of divalent metal ions using sphagnum peat moss was presented by Ho [5], and this expression has also been published in 1996 [6]. To distinguish the kinetic equation based on the adsorption capacity of a solid from the

concentration of the solution, the second-order rate expression has been named pseudo-second-order [3,6,7]. A corrected second order model was presented in 1998, because a mistake was included in the previous paper that was published in 1996 [4]. In addition, a review of second-order models for adsorption systems has also been presented for more details for the kinetic models [8].

When a scientific publication duplicate previously published idea, text, equations, or figures without any citations, it frequently is regarded as a sign of possible plagiarism [9]. It is necessary to avoid being misconstrued and to provide more accurate information. In my view, Chen et al. should have cited the original paper for the first order and second order equations and thereby provided greater accuracy and information details about the kinetic expression they employed.

References

- [1] C.Y. Chen, C.H. Wang, A.H. Chen, *Talanta* 84 (2011) 1038–1046.
- [2] S. Lagergren, K. Sven, *Vetenskapsakad. Handl.* 24 (1898) 1–39.
- [3] Y.S. Ho, *Scientometrics* 59 (2004) 171–177.
- [4] Y.S. Ho, G. McKay, *Chem. Eng. J.* 70 (1998) 115–124.
- [5] Y.S. Ho, Ph.D. Thesis, The University of Birmingham, Birmingham, U.K., 1995.
- [6] Y.S. Ho, D.A.J. Wase, C.F. Forster, *Environ. Technol.* 17 (1996) 71–77.
- [7] Y.S. Ho, G. McKay, *Water Res.* 34 (2000) 735–742.
- [8] Y.S. Ho, *J. Hazard. Mater.* 136 (2006) 681–689.
- [9] L.F. Noe, D.J. Batten, *Palaeontology* 49 (2006) 1365–1367.

Ho Yuh-Shan*

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

* Corresponding author. Tel.: +86 10 62751923; fax: +86 10 62751923.

E-mail address: dr.ysho@hotmail.com

19 September 2011

Available online 12 October 2011