Letter to the Editor

Comments on using of “initial adsorption rate” [J. Hazard. Mater. 173]

In *Journal of Hazardous Materials*, Volume 173, two articles, entitled “removal of fluoride from aqueous media by Fe₃O₄@Al(OH)₃ magnetic nanoparticles” [1] and “removal of Congo Red from aqueous solution by cattail root” [2], presented the idea of “initial adsorption rate” without citing appropriate reference, and thus, were in the position of committing possible plagiarism article.

In these two articles, the authors presented the term “initial adsorption rate” as “the initial sorption rate, \( h_0 \) (mg g⁻¹ min⁻¹) can be defined as: \( h_0 = k_2 q_2^i \) (t → 0),” and “\( h \) is the initial adsorption rate at time approaching 0 (mg g⁻¹ min⁻¹) with equation \( h_0 = k_2 q_2^i \)” respectively without any citations, while in fact, the definition of initial adsorption rate for the adsorption systems of divalent metal ions using sphagnum moss peat has been presented by Ho [3], and this expression has also been published in 1996 [4]. A modified equation has been presented in 1998 to correct a mistake in the previous paper that was published in 1996 [5]. Furthermore, the equation and expression of the initial adsorption rate in Zhao et al. could also be found in the article entitled “sorption of lead ions from aqueous solution using tree fern as a sorbent” [6], and the expression in Hu et al. could also be found in the article entitled “second-order kinetic model for the sorption of cadmium onto tree fern: a comparison of linear and non-linear methods” [7].

Plagiarism is defined as when the authors of a scientific publication duplicate previously published idea, text, or figures in the scientific literature without any citations [8]. I strongly suggest that the authors cite the original paper for the initial adsorption rate not only to accurately present the equation but also to avoid committing possible plagiarism.

References


Yuh-Shan Ho
Water Research Centre, Asia University, No. 500, Lioufeng Road, Wufeng, Taichung County 41354, Taiwan

Tel.: +866 4 2332 3456x1797;
Fax: +866 4 2330 5834.
E-mail address: ysho@asia.edu.tw

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