

Editorial

Rebuttal to: Using Adsorption Kinetic Models and Initial Adsorption Rate in E-Journal of Chemistry

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Chowdhury et al. published the paper entitled "Equilibrium isotherm modeling, kinetics and thermodynamics study for removal of lead from waste water" [1]. In section of "Study of adsorption kinetics", the author presented "pseudo-second order kinetic model" and "initial adsorption rate" without any citations.

Revathi et al. published the paper entitled "Removal of direct yellow-12 dye from water by adsorption on activated carbon prepared from *Ficus Racemosa L*" [2]. In section of "Influence of initial dye concentration", the author presented "pseudo-second order kinetic model" and "pseudo-first order kinetic model" without any citations.

Mahvi et al. published the paper entitled "Fluoride adsorption by pumice from aqueous solutions" [3]. In section of "Adsorption Kinetics", the author presented "pseudo-second order kinetic model" without any citations.

Baseri et al. published the paper entitled "Comparative studies of the adsorption of direct dye on activated carbon and conducting polymer composite" [4]. In section of "Kinetics Studies", the author presented "pseudo-second order kinetic model" and cited Chatterjee et al. [5]. In the reference, Chatterjee et al. presented "pseudo-second order kinetic model" and "initial adsorption rate" without any citations. It is possible plagiarism.

In fact, it is Lagergren who first presented the first order rate equation for the adsorption of oxalic acid and malonic acid onto charcoal [6]. In order to distinguish kinetics equation based on adsorption capacity of solid from concentration of solution, Lagergren's first order rate equation has been called pseudo-first order since 1998 [7,8]. In addition, citation review of Lagergren kinetic rate equation on adsorption reactions has also been presented [9].

The second order kinetic expression for the adsorption systems of divalent metal ions using sphagnum moss peat has been reported by Ho [10]. In order to distinguish kinetics equation based on adsorption capacity of solid from concentration of solution, Ho's

second order rate expression has been named pseudo-second order [7,8,10]. A modification of this model was also further made in 1998 to correct the mistake in the original publication in 1995 [7,8,11]. In addition, the review of second-order models for adsorption systems was published in 2006 [11].

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 [12]. In my view, Chowdhury et al. [1], Revathi et al. [2], Mahvi et al. [3], and Baseri et al. [4] should have cited the original paper for the pseudo-first order and the pseudo-second order adsorption kinetic models as well as the initial adsorption rate equation; and thereby provided greater accuracy and information details about their expression they employed.

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