Polymer Communication

Comments on “Chitosan functionalized with 2[-bis-(pyridylmethyl) aminomethyl]4-methyl-6-formyl-phenol: equilibrium and kinetics of copper (II) adsorption”

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Recently, Justi et al. [1] published the paper entitled as above. In Section 3.3. Adsorption kinetics, the authors mentioned a pseudo-second-order equation in the paper and cited a paper as secondary reference [2]. In the reference [2], the authors cited two papers published by Ho and McKay [3,4] for pseudo-second-order rate equation expression. Indeed, Ho developed a second-order kinetic expression for the sorption systems of divalent metal ions using sphagnum moss peat [5]. 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 [1–15]. The earlier application of the pseudo-second-order equation to the kinetic studies of competitive heavy-metal adsorption by sphagnum moss peat was undertaken by Ho et al. [6]. A modified pseudo-second-order kinetic expression was reported in 1998 [3,7], and has also been presented in the following years [4,9]. In addition, Azizian presented a theoretical analysis of pseudo-second-order equations [8]. The most frequently cited pseudo-second-order kinetic expression papers were published in Environmental Technology [6], Chemical Engineering Journal [7], Process Biochemistry [9], and Water Research [4]. Moreover, similar comments have also been published in Bioresource Technology [10], Environmental Science and Technology [11], Journal of Colloid and Interface Science [12], Journal of Hazardous Materials [13], Water Research [14], and Industrial and Engineering Chemistry Research [15]. The pseudo-second-order rate expression of Ho has been widely applied to the sorption of metal ions, dyes, herbicides, oil and organic substances from aqueous solutions [10–14].

Research papers contribute not only by its originality and creativity, but also by its continuity and development toward subsequent research. Readers of published scientific articles may wish to retrieve cited references to further their follow-up researches and knowledge or to confirm claims made by the researchers [16]. However a reference section can play a key role for researchers who are interested in the paper’s statement and would like to follow the study or find useful information from the paper [17]. I suggest that Justi et al. cite Ho’s original pseudo-second-order kinetic expression paper.

References


