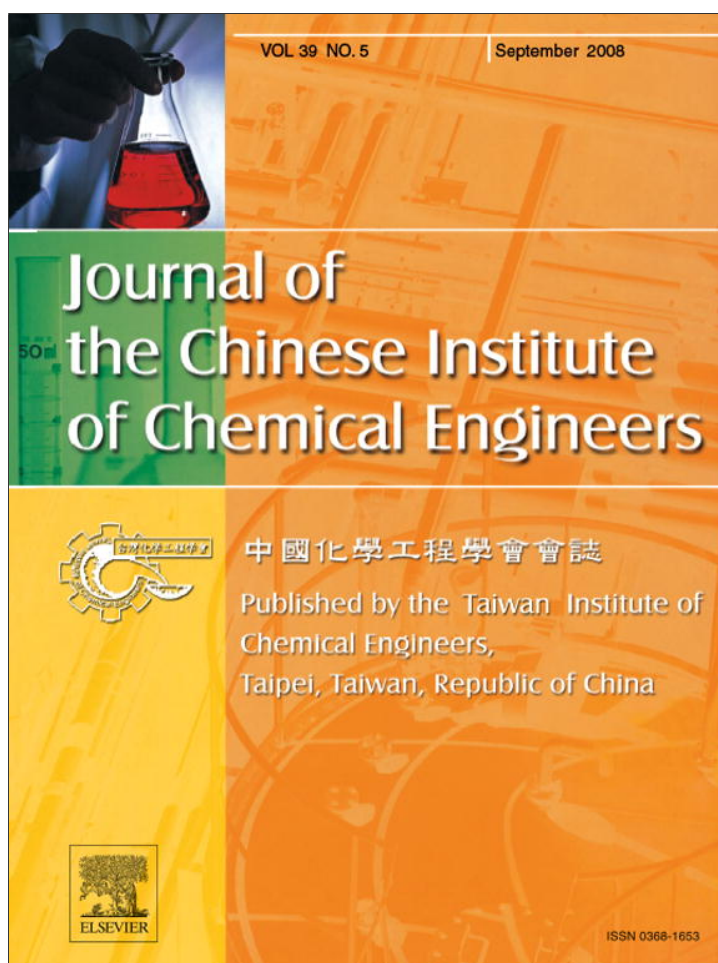


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Letter to the Editor

 Comments on “Sol–gel-immobilized recombinant *E. coli* for biosorption of Cd²⁺”

Keywords: Adsorption; Kinetics; Quotation error; Pseudo-first order; Pseudo-second order

Recently, Chen and Lin (2007) published the paper with the title above. In Section 3.1 the authors presented the kinetics of the adsorption process with “pseudo-first-order and pseudo-second-order model” and cited Cruz *et al.* (2004) and de França *et al.* (2002) as secondary references. There is a quotation error and reference missing for these two models in these two references. A citation review of the Lagergren rate equation for adsorption reactions has been presented by Ho (2004). That is “Lagergren, S. (1898), Zur theorie der sogenannten adsorption gelöster stoffe. Kungliga Svenska Vetenskapsakademiens Handlingar, Band 24, No. 4, 1–39” [“Lagergren, S. (1898), About the theory of so-called adsorption of soluble substances. Kungliga Svenska Vetenskapsakademiens Handlingar, Band 24, No. 4, 1–39”], and the abbreviated style is “Lagergren, S. (1898), Zur theorie der sogenannten adsorption gelöster stoffe. K. Sven. Vetenskapskad. Handl., Band 24, No. 4, 1–39.” Ho pointed that Lagergren’s equation has been widely cited, but there are many mistakes made in the reference sections of papers than anywhere else, including the authors’ name, journal title, year, volume, and page number (Ho, 2004). The second-order kinetic expression for the adsorption systems of divalent metal ions using sphagnum moss peat has been presented by Ho (1995). In order to distinguish kinetics equation based on adsorption capacity of solid from concentration of solution, Lagergren’s first-order and Ho’s second-order rate expression have been named pseudo-first-order and pseudo-second-order (Ho and McKay, 1998; Ho, 2006). As the results of the above review, I suggest that Chen and Lin cite the original papers to have accuracy information for the models.

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