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Letter to the Editor

Comment on "Adsorption of fluoride, phosphate, and arsenate ions on a new type of ion exchange fiber," by R.X. Liu, J.L. Guo, and H.X. Tang

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In a recent publication, Liu et al. [1], in the section 1. Adsorption Kinetics, wrote a pseudo-second-order mechanism from Eq. (2) to Eq. (5). In fact, it is Ho [2] who first developed a pseudo-second-order kinetic expression for the sorption systems of divalent metal ions using sphagnum moss peat in which chemical sorption is the rate-limiting step. 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. [3].

The pseudo-second-order rate expression of Ho has been applied to the sorption of metal ions, dyes, and organic substancesfrom aqueous solutions (Table 1). In addition, Ho's kinetic expression has also been applied to the sorption of dye onto the mixture sorbent sorption processes [4]. Numerous applications of Ho's kinetic expression have been reported in recent years. A list of pseudo-second-order systems is given in Table 1.

I suggest that Liu et al. cite Ho's original pseudo-second-order kinetic expression paper.

Table 1
Pseudo-second-order kinetic model of various related systems from the literature

Sorbent	Sorbate	Reference
Sphagnum moss peat	Cu(II), Ni(II)	[3]
Mixed clay/carbon	Acid Blue 9	[4]
Sphagnum moss peat	Cu(II), Ni(II), Pb(II)	[5]
C. vulgaris	Cd(II)	[6]
Rhizopus arrhizus	Remazol Black B	[7]
Trametes versicolor	Cd(II)	[8]
Arundo canes	Cd(II), Ni(II)	[9]
Zeolite tuff	Pb(II)	[10]
Algae	Lauryl benzyl sulfonate	[11]
Aspergillus niger	Basic Blue 9	[12]
Aspergillus niger	Acid Blue 29	[13]
Wood	Basic Blue 69, Acid Blue 25	[14]
Peat	Basic Blue 69, Acid Blue 25	[15]
Sphagnum moss peat	Chrysoidine (BO2), Astrazon Blue (BB3), Astrazone Blue (BB69)	[16]
Pith	Basic Red 22, Acid Red 114	[17]
Fly ash	Omega Chrome Red ME, *o*-cresol, *p*-nitrophenol	[18]
Activated clay	Basic Red 18, Acid Blue 9	[19]
Aspergillus niger	Pb(II), Cd(II), Cu(II), Ni(II)	[20]
Activated carbon	Hg(II)	[21]
Spent grain	Pb(II), Cd(II)	[22]
2-Mercaptobenzimidazole–clay	Hg(II)	[23]
Sago	Cu(II), Pb(II)	[24]
Coir	Cu(II), Pb(II)	[25]
Glass	Cu(II)	[26]
Polysaccharide	Pb(II), Cu(II), Zn(II), Cd(II), Ni(II)	[27]
Microcystis	Ni(II), Cr(VI)	[28]

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