Response to the comments of Y. S. Ho to the paper “Sorption of radionickel to goethite: effect of water quality parameters and temperature”

Baowei Hu · Wen Cheng ·
Hui Zhang · Guodong Sheng

Received: 9 November 2010 / Published online: 4 January 2011
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In our published paper entitled “Sorption of radionickel to goethite: effect of water quality parameters and temperature” published in JRNC 285 (2010) 389–398 [1], the sorption of radionickel to goethite as affected by various environmental conditions such as pH, humic substances, ionic strength and temperature on radionickel sorption has been investigated by using batch technique. The sorption mechanism of radionickel on goethite was discussed according to the experimental data and the fitting results of sorption isotherms by Langmuir, Freundlich and D-R models. Kinetic sorption data was fitted by a pseudo-second-order rate equation. Ho et al. firstly reported the pseudo-second-order rate equation [2, 3], and then further developed this frame work in their following works [4, 5]. In our previous research, we had ever cited the original paper about the sorption isotherms such as Langmuir or Freundlich models. However, the reviewers gave the comments that the models had been widely used and it was not necessary for us to cite the original paper about the sorption isotherm. Similar condition can be also observed for carbon nanotubes that there are a lot of papers about carbon nanotubes not citing the original paper reported by

Iijima [6]. In our published paper [1], we think that the pseudo-second-order rate equation has been widely applied and the equation is now a famous model to fit the sorption kinetic data. However, it is essential for us to cite all the relative references accurately so as to transmit scientific knowledge more effectively. We are so sorry to the fact that the original papers [2, 3] were not cited in our published paper [1], but it is not meant to show the disrespect to the author Ho [2]. In our future work, we wish to cite the papers published by Ho whose work are interesting and useful to simulate the sorption kinetic data of metal ions at solid–water interfaces.

The physicochemical behavior of radionickel in environment is quite important to understand the potential pollution of radionickel in natural environment. In our published paper [1], the macroscopic data is helpful to understand the sorption mechanism of radionickel at solid–water interfaces. However, the information at microscopic level such as microstructures and chemical species of radionickel can be more accurate to assess the potential physicochemical behavior of radionickel in the environment. This information can be obtained from spectroscopy studies such as XPS, TRLFS and EXAFS.

B. Hu · W. Cheng
Key Laboratory of Northwest Water Resources and
Environmental Ecology of Education Ministry, Xi'an University
of Technology, Xi'an 710048, People's Republic of China

B. Hu · G. Sheng
School of Life Science, ShaoXing University, ShaoXing,
Zhejiang 312000, People's Republic of China

H. Zhang · G. Sheng (✉)
Key Laboratory of Novel Thin Film Solar Cells, Institute
of Plasma Physics, Chinese Academy of Sciences,
P.O. Box 1126, Hefei 230031, People's Republic of China
e-mail: gdsheng@ipp.ac.cn

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