

Comment on “removal of hexavalent chromium by biochar supported nZVI composite : batch and fixed-bed column evaluations, mechanisms, and secondary contamination prevention”

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ABSTRACT

This article aims to discuss (1) the incorrect identification of Cr(III) and Cr(VI) binding energies in the Cr 2p XPS (X-ray photoelectron spectroscopy) spectra of the laden adsorbent (the nZVI-BC sample after Cr(VI) adsorption), (2) misconception regarding the Weber–Morris intraparticle diffusion model, and (3) inconsistency between the experiential data and the Thomas adsorption rate constants. The authors hope that our comments are beneficial for other researchers to avoid the undesirable mistakes.

KEYWORDS

Comment; XPS; Standard Cr(VI) and Cr(III); Intraparticle diffusion model; Thomas model

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Chemosphere, 217 (2019), pp. 85-94