



SDI Review Form 1.6

Journal Name:	Chemical Science International Journal
Manuscript Number:	Ms_CSIJ_40922
Title of the Manuscript:	Thiourea Doped Silica Composite for Lead Removal: Isotherm, Kinetic, And Thermodynamic Studies
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	(1) The chemical form of lead (II) in aqueous solution should be considered to be one of the important factors to clarify the mechanism of lead (II) adsorption including the pH dependence (Figure 3). It would be better if the authors could mention this kind of consideration or estimation from the viewpoint of chemical engineering aspect. (2) Several ions are included in environmental water. Then, it would be better to examine the removal of lead (II) under the presence of other co-existing cations such as Na ⁺ , K ⁺ , Ca ²⁺ or Mg ²⁺ to evaluate the adsorption efficiency of the adsorbent (thiourea doped silica composite). (3) It would be great if the authors could perform desorption (and regeneration) experiment in addition to adsorption experiment.	(1) The suggestion have been considered (2) The effect of competitive ions have been added (3) Effectuated
<u>Minor</u> REVISION comments	(1) How many replicates do the experimental data represent? There are no errors for data presented in Figures 3-8. Please show experimental errors (i.e., error bars) for measurement results, if possible. (2) Numerical notation corresponding to the scale in the figures of FTIR (Figure 1) is not clear. High-resolution figure should be provided if possible.	(1) The experimental data represented was done in duplicates, therefore error bars for the measurement results cannot be represented (2) A high resolution figure has been replaced
<u>Optional/General</u> comments	The effect of important parameters such as solution pH, adsorbate concentration, and contact time has been studied. The adsorption data were performed by adsorption kinetic analysis and were also analyzed using some isotherm models such as Langmuir, Freundlich and Temkin equations. The paper was well organized, and the results are important for environmental science and ecological studies. There is no problem regarding English. Therefore, I feel this paper should be acceptable after some revision.	