



SDI Review Form 1.6

Journal Name:	American Chemical Science Journal
Manuscript Number:	2015_ACSj_17636
Title of the Manuscript:	Kinetic Studies of Bio-sorption of Cyanide ions from Aqueous Solution using Shea Butter Seed Husk as Adsorbent
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>)



SDI Review Form 1.6

PART 1: Review Comments

	Reviewer's comment	Author's comment <i>(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)</i>
Compulsory REVISION comments	Title of the Paper : Kinetic Studies of Bio-sorption of Cyanide ions from Aqueous Solution using Shea Butter Seed Husk as Adsorbent Manuscript ID no. : 2015_ACSj_17636 Recommendations : This paper may be accepted for publication after incorporating the following suggestions into the present manuscript Suggestions / Comments: 1. The title of the paper may be changed as " Kinetic Studies of Bio-sorption of Cyanide ions from Aqueous Solution using carbon black developed from Shea Butter Seed Husk as an Adsorbent 2. Mention units for Q_e and k_2 in abstract of the present manuscript. 3. Before 'casava' (in 10th sentence of page 1) 'full stop' may be required and then next sentence may be started. 4. The authors are advised to write/mention the reference(s) in which they have seen the name of Freundlich isotherm as Halsey-Taylor isotherm and Temkin isotherm as Slygin-Frumkin isotherm. 5. In the first sentence (in page no. 4) under '1.1 Materials', the authors have written 'shea butter (Vitellaria paradoxa) seed fruits'. Is it seed fruits or	Corrected Corrected Corrected Corrected Corrected



SDI Review Form 1.6

	fruits? Check and correct it. 6. The authors have failed to explain that the material (shea butter fruits) would be collected free of cost or purchased from the market. How much money they have spent for transporting the materials from the market to the laboratory. These information is required to make cost comparison with commercial adsorbent, activated carbon and doing some cost analysis. 7. The authors are advised to mention some more physical properties like apparent density, tap density, specific gravity, water soluble, acid soluble, surface area etc., for getting clear idea about the material. 8. What kind of filtration technique is used for separating the material from solution after the experiment. 9. The unit written for Freundlich parameter, K_f is not correct. Unit is also not mentioned for Temkin parameter also. Check and correct it. 10. In some figures, units are not mentioned on X- and Y-axes. Check and correct it. 11. The experimental conditions should be mentioned in the captions of the figures and tables. 12. The value of separation factor (R_L) is given as 0.37 (in page no. 7). Is it average value? Or otherwise, how it will be? As per the equation 3, different R_L values are obtained for different initial concentrations (C_0). Therefore, it is a range of values unless otherwise average value is taken. 13. Write units in table 4 / table 5 (in column 3, where ever required)/(in column 2, where ever required) for clear understanding. 14. In some places of the present manuscript, it is written as 'shea butter seed husk' and in some other places it is written as 'shea butter activated carbon'. Check and write uniformly throughout the manuscript to avoid	Corrected Tap Density and Specific Gravity added Corrected Corrected Corrected Corrected Average taken by the authors Corrected Corrected to SBSH Carbon Black all through.
--	--	--



SDI Review Form 1.6

	confusion. It is better to make a comparison between 'shea butter seed husk' and 'shea butter seed husk carbon' for better understanding the efficiency of the material in removal of cyanide from aqueous solution. 15. In table 3, it is mentioned that the initial cyanide concentrations (ICC) are 100 - 600 mg/L. But, figure 5, 6 and 7 are drawn for only one initial cyanide concentration. Therefore, it is advised to include other concentrations also in figure 5, 6 and 7 for getting better understanding about the interactions between cyanide and SBSH. 16. The experimental and calculated q_e values for all initial cyanide concentrations (ICC) may be incorporated into table 5 for better clarity. 17. The adsorption capacity of the present material (SBSH) for the removal of cyanide may be compared with that of other adsorbents along with references and arrange them in the form of table.	The Authors decided to use only one that gives the maximum adsorption efficiency Authors decided to use only the calculated Corrected and presented in Table 6.
<u>Minor</u> REVISION comments	No	
<u>Optional/General</u> comments	No	