



SDI Review Form 1.6

Journal Name:	International Research Journal of Pure and Applied Chemistry
Manuscript Number:	2014_IRJPAC_14823
Title of the Manuscript:	Kinetics, Isothermal and Thermodynamics Study of Batch Adsorption of Cr (VI) ions onto Modified Activated Carbon from endocarp of <i>Canarium schweinfurthii</i>.
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>)



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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)
Compulsory REVISION comments	4.2 Contact Time: This exp. should be revised. The results at time less than 30 min. are missing. The nature of the curve is not given the clear conclusion of optimum time as 30 min. Why there is a drop in adsorption at 60 and 120 min? Give proper justifications. In 3.2 Effect of pH contact time was kept as 1 hour and 3.3 Effect of temperature, 3.4 Effect of adsorbent dose, 3.5 Effect of initial metal ion concentration, contact time is not clear as it is contradicting with 30 min. Or 1 hour contact time. 4.4 Adsorbent dosage: Give the value of optimum dose. The author has mentioned that "At dosage of 3g, 100% removal of metal ion was obtained" but from fig it is seen that 100% removal of metal ion was obtained at 1.5g, 2g, 2.5g and 3g also. Kindly correct. So what is optimum dose? Fig 4: Effect of metal ion concentration variation on adsorption of Cr (VI). Kindly include the value at 5 mg/l also. Kindly check the Pseudo- first order parameters. The R^2 value for very low. Kindly provide the curves . Langmuir isotherm should also be studied. Add this and Kindly provide the curves also. Conclusion: It fails to conclude the results. Add more lines.	Corrected in the text. Variation in percentage of Cr ions is due to adsorption-desorption of the metal ions from adsorption sites. This was an oversight from authors. Optimum contact time of 30 min was used. Corrected Corrected Authors decided to investigate just two isotherm
Minor REVISION comments	Table 1: How Hardness was measured and what is the significance in adsorption study.	Hardness provides an insight of activated carbon to withstand deterioration and



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		abrasion
<u>Optional/General</u> comments	Revise the paper as suggested. It is a good study but it can be presented in a better way. The adsorption capacity should be compared in a tabular form with other adsorbents for Cr.	