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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.

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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	Comments to the Authors This research article on Kinetics, Isothermal and Thermodynamics Study of Batch Adsorption of Cr (VI) ions onto Modified Activated Carbon from endocarp of <i>Canarium schweinfurthii</i> need to be completely rewritten so that the research work done by the author could be appreciated. From the topic and reading through the introduction, the paper is based on a good-looking experimental approach, but it is essential that the authors carefully take into consideration the following aspects: → The abstract is brief and did not fully give the insight to the content of the article. For this reason I suggest the abstract for this manuscript be re-	Authors have adjusted the abstract and title of the work



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	written or restructured to give the exact perception of what the paper is all about. → The taciturnity of the results and discussions as presented makes the whole research article too shabby for publication in an international journal. I suggest the authors critically look at their data for thorough elucidation. →The authors could analyze the carbonized adsorbent (<i>Canarium schweinfurthii</i>) to be able to characterize it in terms of SSA, CEC, Surface functionalities etc., using some simple instruments to make this research work be of standard acceptable internationally → The types of isotherm to be used in fitting their data were not introduced with their formulas or expressions earlier but was used in the result and discussion neither were the kinetic formulas well-articulated. →The authors should try as much as possible to leave a space between all the numerical values and	Characterization of adsorbent was limited to the physical properties mention by authors in the text. Corrected Corrected
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	their units → In addition, the conclusion is completely dismissed as it seems not to contain any fact from the whole research work. I suggest the authors use this section to tell the facts deduced from the discussed results.	corrected
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Minor REVISION comments	SUGGESTED CORRECTIONS: Lines 10 and 11;.....Hence the adsorbent will be effective in column or fixed-bed reactor for removal of the studied ion in industrial effluents. <i>.....this last part of the abstract is not necessary.</i> Line 13; the keywords are verbose <i>.....the authors should make it less wordy and with at least five keywords</i> Lines 18 – 20;.....Excessive release of heavy metals into the environment through metal plating, mining operation, tanneries, chloroalkali, radiator manufacturing, smelting, alloy and storage batteries industries due to industrialization [3] and urbanization activities has posed a great problem worldwide. Line 25; metals can cause severe effects, including disruption of the biosynthesis of hemoglobin, anemia, rise. Line 26 - 28; blood pressure, kidney damage, subtle abortion, birth defects, and disruption of nervous system.Others include, decline fertility of men through sperm damage, liver dysfunction, adrenal insufficiency, blindness, cardiovascular Line 105; UAC and MAC.....was not defined I suggest the author give the meaning of these terminology earlier and be consistent in usage throughout the text. Line 105; of prepared UAC and MAC was added to 40ml of	Corrected Corrected Corrected
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	aqueous solution in Lines 113, 118, 123, 127, and 137;.....<i>I suggest all the equations be numbered using a squared bracket '[X]'</i> Lines 126 and 121;.....<i>Even though the authors method of describing this model is odd I suggest the reference number be attached to these and not on the formulas</i> Line 128;K_2 is equilibrium rate constant of second order kinetics model (g/mg/min), ...<i>that is correct.....but the notation of this constant is not in the equation/formula of lines 127</i> Lines 131; Some of the parameters such as 'free energy (ΔG_0)', mentioned have no basis and the way the whole description in <u>lines 130 -136</u> was discussed should be restructured Line 132;.....relation below as proposed by [24-25]. T (K) denotes<i>this method of referring to a particular author is wrong I suggest the authors use: ,,,,,,et al., (date)[23] and ,,,,,,et al., (date)[25].....Or better still use: Proposed by other researchers [24, 25].</i> Line 134;.....following equation: $K_c = C_{ad}/ C_e$, where: Cd and Ce are the equilibrium concentrations of metal ions (mg/g). <i>Authors can write this equation separately and number it and not to mix it within the sentence</i> Line 146; reported by Metcalf and Long [26,	Corrected Corrected Corrected Corrected
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	27]. <i>This format of referencing is wrong I suggest the following examples and I wish the authors could also apply it to others like it (either Metcalf and Eddy (2003)[26] and Long and Criscione (2003)[27] Or better still use reported in literatures [26, 27])</i> Table 1 <i>This table has no appropriate units for the parameters listed in it.</i> Table 2 <i>Apart from the fact that this table was not discussed, it does not contain all the necessary kinetic parameters exhaustively.</i> Table 3 <i>This table and its discussion did not convey any information telling us which of the isotherms best fit the adsorption equilibrium experimental data</i> Figure 1 <i>the authors should please discuss the irregular nature of the curve at the variation of the contact time.</i>	Corrected
<u>Optional/General</u> comments		