



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Chemical Science International Journal
Manuscript Number:	Ms_CSIJ_43499
Title of the Manuscript:	Adsorption of 2,4-dinitrophenol on activated carbon prepared from cotton cakes: non-linear isotherm modeling
Type of Article:	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
Although there are some improvements, some syntax problems remain throughout the manuscript. For examples: - In Abstract: "The activated carbon will be characterized by Fourier transform-infrared (FTIR) spectroscopy, scanning electron microscopy (SEM) and proximate analysis (pHZCN, pH, Bulk density, moisture content, ash content, volatile mater, fix carbon content and matter soluble in water)." Should be "<i>The activated carbon was/is characterized by Fourier transform-infrared (FTIR) spectroscopy, scanning electron microscopy (SEM) and proximate analysis (pHZCN, pH, Bulk density, moisture content, ash content, volatile mater, fix carbon content and matter soluble in water).</i>" - INTRODUCTION: • Line 16: "... that phenol and its derivatives present the-most dangerous ..." must be "... <i>that phenol and its derivatives present dangerous</i> ..." as there is no statistic work on it. • Line 18: "Among these compounds, is 2,4-dinitrophenol, which is ranked by the US ..." should be "<i>Among these compounds, 2,4-dinitrophenol is ranked by the US</i>" as there is no statiscal work on it. • Line 29 to 31: "Some of the precursors for activated carbon such as Sugarcane bagasse [5], Banana Empty Fruit Bunch and Delonixregia Fruit Pod [6], Fagopyrum esculentum [7], coffee husks [8], rice husk [8], [9]. Plant Manihot Esculenta [10], pistachio-nut shell [11], Cola Nut Shells [12]." <i>There are no verbs in these two sentences. The authors have to correct them.</i> • Line 40 to 42: "In this study, we shall to examined nonlinear isotherms regressions method in more details and use these models to describe the adsorption 2,4-dinitrophenol by activated carbon obtained from cotton cakes." Should be "<i>In this study, we have to examined nonlinear isotherms regressions method in more details and use these models to describe the adsorption 2,4-dinitrophenol by activated carbon obtained from cotton cakes.</i>" - Material and methods • Line 45 to 46: "Processed cotton cake was collected from Zamay, Department of Mayo-Tsanaga, far Nord region Cameroon [6]." Should be "<i>Processed cotton cake was collected from Zamay, Department of Mayo-Tsanaga, far Nord region of Cameroon [6].</i>" • Line 57 to 58: "... carbon based H₃PO₄ and KOH was-achieved. Later, the carbon paste was dried in an oven at 110°C for at least 24 h which-were-later converted to powder ..." should be "... carbon based H₃PO₄ and KOH. Later, the carbon paste was dried in an oven at 110°C for at least 24 h and then converted to powder ..." - Results and discussion • Line 151: "The progress of the activation may be followed by ..." should be "<i>The progress of the activation can be followed by ...</i>" • Line 158 to 163: "It is deduced from this table that the yield obtained in the ... ranges from 57 to 66 % which indicates ..." should be "<i>It is deduced from this table</i>"	We thank the reviewer for this proof reading. All the corrections have been taken into account as indicated in the manuscript in yellow



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that the obtained yield in the ... ranges from 57 to 66 % indicating ..." - Line 204: "This results is according to Ahmedna <i>et al.</i>, ..." should be "This result is according to Ahmedna <i>et al.</i>, ..." - Line 212 to 213: "This table shows us-respectively that the ash content, volatile matter and fixed carbon content for these carbons between 8 and 17%; 25 and 32; 55 and 59." should be "This table shows that the ash content, volatile matter and fixed carbon content for these carbons are between 8 and 17%; 25 and 32; 55 and 59 respectively." - Everywhere there is "figures x below", "below" should be deleted as there is no "figure x" elsewhere again. It should be the same for the Tables - Line 264 to 267: "A large amount of acidic groups were detected on the adsorbents CCK1 and CCK2 such as carboxyl, phenolic, lactonic, and on the absorbents CCK3 such as carboxyl carboxyl which was consistent with the results of FTIR, pH and pHpzc." should be "A large amount of acidic groups such as carboxyl, phenolic, lactonic were detected on the adsorbents CCK1 and CCK2 while acidic group such as carboxyl carboxyl is observed on the absorbents CCK3. These results are consistent with those of FTIR, pH and pHpzc." - Line 277 to 279: "Figure 4 to 12 below shows the fitting values of non-linear regression analysis, in addition to the error calculations, are mentioned in Table 7 to 9 below." should be "Figures 4 to 12 show the fitting values of non-linear regression analysis. In addition, the error calculations are mentioned in Table 7 to 9." - - Line 347 to 350 and 357 to 359: "... very good (>0.94) and the low Chi-square (χ^2), ARE, EABS and Root mean square error (RMSE) values, thus it indicates ..." should be "... very good (>0.94) with low Chi-square (χ^2), ARE, EABS and Root mean square error (RMSE) values, thus indicating ..." Conclusion - Line 370 to 375: "The higher Iodine number of the activated carbon has been attributed to the presence of large micropore structure which might have resulted due to the reactivity of the activating agent KOH. The functional groups of the three carbons were determined using FTIR spectroscopy which was confirmed by using Boehm's titration. The best textural characteristics were obtained for the activation of carbonized cotton cakes a KOH/carbon weight ratio of 2/1 and with activating agent 1.5M." should be "The higher Iodine number of the activated carbon has been attributed to the presence of large micropore structure which may be due to the reactivity of the activating agent KOH. The functional groups of the three carbons were determined using FTIR spectroscopy which was confirmed by Boehm's titration. The best textural characteristics were obtained for the activation of carbonized cotton cakes with a KOH/carbon weight ratio of 2/1 and with activating agent 1.5M."	
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