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Journal Name:	**Chemical Science International Journal**
Manuscript Number:	**Ms_CSIJ_38363**
Title of the Manuscript:	**STUDY OF BIO SORBENTS BY BOTTOM UP APPROACH AND THEIR APPLICATIONS FOR THE TREATMENT OF SIMULATED DYES WASTE WATER**
Type of the 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	**Summary and general comments:** **Authors used several adsorbents to study adsorption of dyes CR and MGO.** **The paper needs a lot of improvements in every single section. Current quality is extremely poor, and there seem to be something wrong with the calculation for isotherm modelling and adsorption did not seem to have reached equilibrium as seen in the kinetics plots. The presentation of the data is not done correctly.** **Specific comments:** **Title should be rewritten and expressed what this research is really about. It should be more focused. Current title is too misleading** **Abstract is too long. It should be brief and showing only what really matter. There is no need to mention machine/instrument model. Please check journal format for the limit of words. Use google scholar and look up for some good examples.** **Introduction is unfocused and not highlighting the main points. Introduction should set up the background, provide basic understanding, and then emphasize on aims and objectives, and then explain why you do what you do. Including too much writing about unrelated issues will not add value, but instead hide the main content of your work.** **Methodology. Decide the format of the unit and be consistent. I see author using "/" and "-1" simultaneously. E.g. 1/mol and then M^{-1}.** **Line 72. $1*10^5$? There is no need to include molar extinction coef. Reporting the wavelength is good enough.** **All the headers. There is no need for capital block letter for every word. Example. Optimization of Adsorbent Dosage. Author should just type "Optimization of adsorbent dosage".** **Take note. Basically the unit M is equal to mol/dm^3 or mol/L. Please only use one of them and not all of them simultaneously. Inconsistency steal the quality of your manuscript.** **Optimization of adsorbent dosage should be written more concisely. Too much unnecessary detail. Authors can just mentioned briefly with the essential details such as initial dye concentration, agitation time, dye volume, agitation speed in brackets.** **Line 107: stay time? Or is it suppose to be shaking time?** **line 109: MgO nanoparticles? Are you sure?** **Method section too much repetition.** **Please be brief.** **Please delete unnecessary figures. Please see Figure and table format as required by the journal. If detail is already included in the table, there is no need for the figures.**	Thank you for your valuable comments, kindly recheck my manuscript, now I have improved it. I have corrected all the mistakes. Thanks for your help and consideration. Title is changed. Abstract is shortened. Introduction is improved and rewritten. I have corrected all my mistakes. Kindly recheck my research again. I have deleted all unnecessary figures. Units and headings are rewritten. Thank you again.

	Delete all the figures related to isotherm models because the details is already included in Table 4,5. **Combine figure 1-4 as 1. Plot all the adsorbent in a single plot. The axis labels are distorted. Remove KD. %R is enough.** **Do the same for the figure in optimisation of contact time.** **Something doesn't seem right with Figure 9. Recheck calculation** **Delete Figure 9 to 40.** **Something is wrong with Figure 41 to 44. Why is the value so huge? The adsorption did not seem to have achieve equilibrium. Author should have carried experiment beyond the set time.** **Put all the SEM images together and labelled them a,b,c,d,e….etc.** **Line 368 to 378. Authors merely describe the data. Author should interpret them and provide scientific explanations** **recheck Langmuir eq. it should be** $\frac{C_e}{q_e} = \frac{1}{b\,q_m} + \frac{C_e}{q_m}$ **Line 390 – 428. Too repetitive. Please be brief and summarised them into one paragraph.** **Do the same for freundlich** **try use this eqn for freundlich** $lnq_e = \frac{1}{n_F}\, lnC_e + lnK_F$ Please do not use the same variable K for both Langmuir and Freundlich. **Author only need to abbreviate Malachite green and congo red once. After that author should faithfully use the abbreviated form MGO and CR, rather than use the full term again and again.** **line 443. Inconsistent decimal number** **For your info, pseudo second order will always get good linearity despite the error. The main point is, authors merely describe fitting of data into kinetics model. But authors did not explain what does it mean if data fitted into 2nd order.** **line 512. $t^{1/2}$, not $t_{1/2}$** **line 511-515. This is not how you explain intraparticle diffusion.** **Conclusion should be in one paragraph and can be better. Please only include what really matters.** **Authors should cite all the isotherm and kinetics models to the original authors whose work should deserve all the credit. If authors had read Reference# 6**	

	comments by Prof Y.S Ho, authors should understand that it is a serious issues of not citing original work correctly. **Lastly. PH and effect of initial dye concentration are very important in adsorption studies and from there you can obtain a lot of insight. Without them, the adsorption study basically failed greatly. Data of the effect of initial dye concentration should be used to fit into the isotherm models, and not data from kinetics studies.**	
Minor REVISION comments		
Optional/General comments		