



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2013_BJAST_3695
Title of the Manuscript:	Kinetic, Isothermal, and Thermodynamic Studies of the Biosorption of Methylene Blue from Synthetic Wastewater using Cow Hooves

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



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PART 2: 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	- While writing pH values please use one decimal place. For example instead of 2-11 write 2.0-11.0. - Instead of writing "1hour 30 minutes" please write "90 minutes" - In Introduction the reference 8 is not suitable, please cite a reference for each method separately or cite a review which consists all of these methods. - How did the authors centrifuge 100 mL of MB solution to separate the adsorbent and adsorbate? - The characterization of the adsorbent is inadequate. Some of the important characterization parameters including SEM and BET surface area should also be obtained. - Material and Methods part should also include a title "Characterization of adsorbent" In this part the apparatus used for characterization should be given. Also other apparatus used throughout the experiments should also be given in related parts. - In 3.2 Effect of pH, the experiments for obtaining pH_{pzc} should be moved to Material and Methods "Characterization of adsorbent". Only the obtained results should be discussed in Effect of pH title.	Noted and corrected Noted Noted, a review that contains all the methods have been cited. About 10 ml of the mixture was centrifuged. Noted but we believe the IR characterization can still give some useful information about the major functional groups involved in the adsorption process. The description of the experiments for obtaining pH_{zc} has been completely removed as suggested by Reviewer 4



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	• The color of most of the dyes may be changed by the addition of acids or bases. These changes may also change the wavelength of the dye. Did the authors make sure about this circumstance? • Figures should be improved. • The units of the variations in x-axis should be added in all figures. • Fig 4 should be plotted adsorbent dosage both versus removal percentage and adsorption amount (q_e, mg/g). The reason of the the decrease in adsorption amount should also be described clearly. • In 3.5 Effect of initial MB Concentration and Temperature, in line 200, "Figure 4" should be changed as "Figure 5". • The authors should cite following references for Langmuir and Freundlich models; Langmuir, I., 1918. The adsorption of gases on plane surfaces of glass, mica and platinum. J. Am. Chem. Soc. 40, 1361-1403. Freundlich, H.M.F., 1906. Über die adsorption in lösungen, Z. Phys. Chem. 57, 385-470. • The authors should cite following references for pseudo-first-order and pseudo-second order kinetic models; Lagergren, S., 1898. About the theory of so-called adsorption of soluble substance. Kung Sven. Vetén. Hand. 24, 1-39. Ho, Y.S., McKay, G., 1998. Kinetic models for the	since it is a common method Noted Ok Corrections have been effected Suggestions have been taken but are these references not old? Suggestions have been taken but are these references not old?
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	sorption of dye from aqueous solution by wood. J. Environ. Sci. Health Part B: Process Saf. Environ. Prot. 76, 183–191. • In order to clarify the adsorption mechanism the Intraparticle diffusion model must be evaluated. • A comparison Table should be prepared to compare the adsorption capacity of different adsorbents for MB. • The conclusion part should be rewritten by reflecting the important inferences of the study.	Suggestions have been taken
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		