



SDI Review Form 1.6

Journal Name:	<u>British Journal of Applied Science & Technology</u>
Manuscript Number:	Ms_BJAST_29880
Title of the Manuscript:	REMOVAL OF CONGO RED FROM AQUEOUS SOLUTIONS USING FLY ASH MODIFIED WITH HYDROCHLORIC ACID
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
Compulsory REVISION comments	<ol style="list-style-type: none"> 1. EDS result for <u>modified</u> ash should be presented alongside with EDS for unmodified ash (figure2). 2. The amount of dye absorbed and adsorption isotherm parameters of <u>unmodified</u> ash should be presented alongside with modified ash (table1,2 and 3). Otherwise there is nothing to compare. 3. The discussion section of paper should be improved using several reports on using ash fly for dye removal. Here are some literatures: http://pubs.acs.org/doi/abs/10.1021/ie010667%2B http://www.sciencedirect.com/science/article/pii/S0043135404004592 http://www.sciencedirect.com/science/article/pii/S0045653505002663 4. Ash fly modification by acid have been reported for several years (for example third paper on above list). The authors should compare their results with given results in literatures and explain similarity and differences. 5. Positive ΔG means no absorption but desorption! Other words the positive values of ΔG you got, if correct, indicate that adsorption did not occur. You must check your calculations again. Or you must analyze your experimental results again. Check this link for clarity: https://www.researchgate.net/post/what_happens_when_gibbs_free_energy_value_is_positive_in_adsorption_thermodynamic_stadiues/2 	<p>The EDS results indicates that the fly ash used for this study is a class C fly ash (the sum major elements Si, Al, O and Fe is less than 70%)</p> <p>Experimental results were re-evaluated and necessary corrections have been effected</p>
Minor REVISION comments	<ol style="list-style-type: none"> 1. It is mentioned that "0.3 g of Congo Red powder was dissolved in 1000ml of distilled water (3000mg/L)". However, 0.3 g per liter equals to 300 mg/L not 3000 mg/L. 2. Figure 3,4,5, and 6 can be easily combined into one collective figure. The graph should be enlarged to improve readability. <p>In introduction section, existing reports on this topic should be acknowledged.</p>	<p>It has been corrected to read 300Mg/L</p> <p>Graphs can be removed if they are not readable.</p>
Optional/General comments	<p>This manuscript reports application of acid-treated fly ash for removal of CR dye. Generally, paper is well written and easy to read. However, the data for control sample (unmodified ash fly) is totally missing in adsorption experiments which make it impossible to compare effect of acid modification. In addition, authors should use existing literatures on this topic to explain, compare and justify their results.</p>	