



SDI Review Form 1.5

PART A:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	MS: 2012/BJAST/1901
Title of the Manuscript:	PHOTOCATALYTIC DETOXIFICATION OF CHLOROBENZENE IN AQUEOUS SOLUTIONS

(Note: Title of different sections as proposed below may differ in case of review paper)



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PART B: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part and write here 'Corrected' if not agreed, give suitable justifications)
General comment:	This work presents results of rather preliminary experiments, thus they are not sufficient for well-established conclusions.	Further experiments had been conducted to substantiate the conclusions reached
Specific comments:	This manuscript needs a substantial improvement involving both experimental and theoretical works as well as much better presentation of the results. Even the usage of some words is not appropriate.	The theoretical as well as the experimental aspect of the study have been upgraded substantially
Title and abstract	"detoxification" is not the right word, degradation would be more suitable (their meanings are quite different).	We have used degradation instead of detoxification
Introduction (Is the problem/objective of this study original, important and well defined?)	Acceptable, but not complete.	The introduction has been re-written in line with the objective of the study. More reference works are now consulted
Are all the references cited relevant, adequate? Are there any other suitable current references authors need to cite?	The number of the references cited in the manuscript is very low, i.e., a much more thorough survey of the relevant literature is needed.	Thorough surveys have been carried out and appropriate references cited
Materials & methods (Kindly comment on the suitability of the methods. Sufficient details of the methods should be provided to allow peers to evaluate and/or replicate the work)	Description of the methods applied is rather insufficient and superficial. Besides, the spectrophotometric determination of CB is questionable because at 221.5 nm other substrates in the systems studied (e.g., intermediates) also absorb. The measure of unit is missing from the density. The phrase "sunlight adsorption" is not suitable. The catalyst concentration of 2g/100mL was given for the dark-adsorption measurements. However, no concentrations were given for the photocatalytic experiments. (Beside the description of the methods, figure captions are very deficient anyway.)	The experimental procedure have been reversed and the conduct of the experiments thoroughly monitored by authors 1 and 2 who supervised the work.. The spectrophotometric determination of CB absorption was at 258 nm. At this wavelength no intermediates are absorbed. "sunlight adsorption" is replaced with "sunlight irradiation", Concentrations of all catalysts used are uniform and well specified. The measure of units are now specified
Results & discussion (Kindly comment on: 1. Are the data well controlled and robust? 2. Authors should provide relevant references during discussion. 3. Discussion and conclusions should be based on actual facts and figures. Biased claims should be pointed out. 4. Are statistical analyses must for this paper? If yes, have sufficient and appropriate statistical analyses been carried out?)	Very few data are given, thus they cannot be compared, hence no reliable tendencies and conclusions can be established and drawn, respectively. Unfortunately, it is a hatch-patch work, e.g., no unit of measure is given in Table 1, there is no degradation in the dark (!), only adsorption, the initial part of the plot in Fig 4 is of too low resolution for showing any tendency, 10mg/400mL catalyst seems to be extremely low, while 500mg/L CB is rather high (!), Fig 5 is not informative (a bit misleading); the absolute degradation rate ought to be displayed, the role of the functional groups of SSA and PSA ought	The results are now well reported and discussed. All views raised here have been noted and taken care off.



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	to be elucidated from the viewpoints of both adsorption and photocatalysis, no indication was given which catalyst Figs 5-7 regard, etc.	
Are there any ethical or competing interest issues?	no	
Conclusion (Is the conclusion supported by the data, discussed inside the manuscript? Conclusions should not be biased and should be based on the data, presented inside the manuscript only)	The conclusions are not in accordance with the results, e.g. hydrogen peroxide was not even mentioned (either in the Materials or in the Discussion) .	Proper conclusion have been drawn based on the results of the re-conducted experiments
References	There are several errors in the reference, e.g. Sabin F., Türk T. (instead of Frank S, Thomas T.).	All errors in referencing have been corrected