



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:	The photochemical decomposition of chlorobenzene in aqueous media in the presence of the periwinkle shell ash (PSA) and snail shell ash (SSA) as potential catalysts was studied.	
Specific comments:	General conclusion: The data presented by the authors are incomplete. This paper can be accepted for publication only after the completion by necessary data and general revision.	We have conducted more experiments to give complete data and to arrive an appropriate conclusion
Title and abstract	Detoxification is the removal of toxic compounds from a living organism. It is a term usually used in medicine, physiology, etc., but not in chemistry. This paper is devoted to the photochemical process of decomposition or degradation of chlorobenzene. From this point of view, the title of the paper is not correct.	The title of the paper had been changed in line with the objective of the study. Detoxification, though used by some authors in relation to similar studies had been replaced with degradation
Introduction (Is the problem/objective of this study original, important and well defined?)	Yes, it is an important problem.	The introduction has been re-written to bring out the objective of the study in relation with previous studies in the field
Are all the references cited relevant, adequate? Are there any other suitable current references authors need to cite?		We have carried out more literature survey and cite references appropriately
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)	Absence of the relevant reference to the analytical method for chlorobenzene	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 done at 258 nm. All analytical methods employed are well specified.



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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?)	The absence of the following information does not permit the reader to determine the accuracy of conclusions of the authors: 1. Qualitative and quantitative analysis of the products of reaction exhibiting the photochemical process or “dark” reaction 2. FTIR- spectra after the reaction 3. Control experiments without PSA and SSA showing the effect of the catalyst in the “dark” or under sun light irradiation 3. Some important characteristics, such as the specific area, porosity, size of particle of the applied samples 4. Complete element analysis and composition of PSA and SSA. All comparisons of the catalytic activity were done on the basis of the weights of the applied samples, without consideration of its differences in specific areas or other important surface parameters. This kind of comparison of the obtained data is incorrect. Table 1 contains some incorrect presentations of the symbols or names of the chemical elements (named in the table as “parameters “, that is also incorrect), such as <table><tr><td>Chromium(Cn)</td><td>must be Cr</td></tr><tr><td>Selenium (Sc)</td><td>Se</td></tr><tr><td>Cadium</td><td>Cadmium</td></tr><tr><td>Asenium</td><td>Arsenic (this line may be eliminated from the table)</td></tr></table> In the table 1 the unity of the presented values is not marked.	Chromium(Cn)	must be Cr	Selenium (Sc)	Se	Cadium	Cad m ium	Asenium	Arsenic (this line may be eliminated from the table)	The results are now well reported and discussed. All views raised here have been noted and taken care off. 1. The study is a comparative one, therefore, qualitative and quantitative analysis of product of reaction is not required to a reach a conclusion 2. FTIR-spectra of SSA and PSA were done before the experiments to determine the presence of transition metals in these powders and their effects on the photocatalytic activities of the powders. FTIR-spectra after reaction was not necessary 3. All experiments involving the five catalysts were done independent and as such no control was required since the catalysts were not mixed 4. specific area of the catalysts were determined this time around because of its importance in catalysis The chemical names and symbols of the metal in the table have been corrected accordingly. The units of measure are now indicated
Chromium(Cn)	must be Cr									
Selenium (Sc)	Se									
Cadium	Cad m ium									
Asenium	Arsenic (this line may be eliminated from the table)									



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Are there any ethical or competing interest issues?		
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)	See the above comments	Conclusion is now drawn based on the results of re-conducted experiments and analyses
References	See the comment in "Materials & methods"	All consulted works have been cited appropriately