



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:	In this paper, four types of catalysts were used to degrade chlorobenzene under natural ultraviolet. The experiments appear to be well executed, including the effect of catalyst dosage, substrate concentration, pH and time variation. However, The experimental data didn't sufficiently support the conclusion. The content of this study is lack of depth and novelty. Therefore, I have to reject the publication of this paper in the present status.	
Specific comments:	1. The major objective of this manuscript is the photocatalytic detoxification of chlorobenzene. However, the description on the present status of studies on the degradation of pollutants is lack in the Introduction section. 2. For results and discussion especially for sections 3.2-3.6, the authors only give some simple descriptions of experimental results in the lack of deep discussion with the citation of relevant references. 3. For section 3.2, the authors conclude that the percentage degradation for sunlight adsorption was far more promising than dark adsorption. The sufficient explanation should be provided for this conclusion. 4. From section 3.2, the activity order was titanium dioxide > zinc oxide > PSA > SSA. I wonder why the authors conclude that PSA and SSA have the potential for photocatalytic degradation of chlorobenzene in aqueous solution in the conclusion section. 5. Sections 3.2-3.6 didn't define the type of the used catalysts. Moreover, for section 3.6, it seemed that the effect of time variation to the degradation of CB was studied with only one type of catalyst. However, in the conclusion section, the authors concluded that over 89% degradation of chlorobenzene can be obtained on two catalysts with PSA and SSA.	1. In-depth description of the subject matter in the introduction had been done 2. Deep discussion of results with appropriate citation of relevant references have now been done 3. This conclusion is done in line with results obtained, and sufficient explanation is given for the conclusion 4. This conclusion is erroneous and had therefore been expunged 5. The five types of catalysts studied in the re-conducted experiments are adequately discussed. Better results based on further experimentation now replaced the superficial conclusion down in the original manuscript.
Title and abstract		
Introduction (Is the problem/objective of this study original, important and well defined?)	The authors need to expand the description of the recent progresses in the studies on catalytic degradation of organic pollutants.	This had been done
Are all the references cited relevant, adequate? Are there any other suitable current references authors need to cite?	The references listed in this paper are not adequate and update.	More up-to-date references have been consulted and cited



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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)	This part is suitable.	
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?)	1. For results and discussion especially for sections 3.2-3.6, there are simple descriptions of experimental results in the lack of deep discussion with the citation of relevant references. 2. For section 3.2, the authors conclude that the percentage degradation for sunlight adsorption was far more promising than dark adsorption. The sufficient explanation should be provided for this conclusion.	Better results based on further experimentation have been obtained and appropriately discussed
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 experimental data didn't sufficiently support the conclusion. 1. From section 3.2, the activity order was titanium dioxide > zinc oxide> PSA > SSA. I wonder why the authors conclude that PSA and SSA have the potential for photocatalytic degradation of chlorobenzene in aqueous solution in the conclusion section. 2. Sections 3.2-3.6 didn't define the type of the used catalysts. Moreover, for section 3.6, it seemed that the effect of time variation to the degradation of CB was studied with only one type of catalyst. However, in the conclusion section, the authors concluded that over 89% degradation of chlorobenzen can be obtained on two catalysts with PSA and SSA.	Conclusion drawn are now based on the results obtained
References	More relevant references should be cited for the discussion in order to increase the depth of manuscript.	The references have been updated with more recent citations