



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	MS: 2012/BJAST/2490
Title of the Manuscript:	EFFECT OF CHLOROANILINE ISOMERISM ON INHIBITION OF METHANE BIOSYNTHESIS BY THE METHANOGENIC BACTERIA.

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 9 parts. Kindly note that you should use all the parts of this review form.



SDI Review Form 1.6

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	The manuscript is investigating the effect of aromatic compounds, known as xenobiotics and their structural chemistry on methanogenic bacteria is of great interest, not only to access their environmental impact but special for the implementation of an efficient biodegradation process. Those organic compounds are widely used in industry and, therefore, the concern on their degradation dictates the development of efficient processes for their removal. On my opinion, the manuscript has great potential for publication. Minor revisions are needed.	Thank you very much.
Minor REVISION comments	Introduction Authors refer that the studied aromatic compounds are easily degradable in the environment, but that is not always true! Sentence: "..., there are easily degradable"- change there by they. Sentence: "The Chloroanilines.... of many products..." – ofmany should be corrected to of many. Experimental: The units for litre that authors refer to l, should be changed by L. In the section 2.3, a figure with the structures could be given, in order to make easier to follow and understand the results.	Corrected Corrected Corrected Changed The structures are now given in the new Fig. 1



SDI Review Form 1.6

	In the section 2.4, "The required quantity....", range studied should be written. Results: Sections 3.1 and 3.2 should be merged, because authors are talking of the samething. I suggest removing title 3.2. and start 3.1 by "The inhibitory effect of....in decreasing order of toxicity". And the paragraph "All concentrations of aromatic amines compounds...", from section 3.1, could be after this paragraph. There is no need for the figure 2, results are already in table 1. In table 1, was does logPoct and b.p. means? This information should be given! In section 3.3, the sentence "The aromatic compound so formed (o-chloroaniline) becomes more toxic..." can be removed, once it is a repetition of what was written before. Fig. 4, the first dot in the graphic corresponds to ortho position?! This value of b.p. for o-chloroaniline (below 150) does not correspond to the one in table 1 (208.8)!! Authors refer the correlation of IC50 versus b.p., what is the importance of that?! Correlation of the aromatic compounds toxicity and boiling temperature?! Please explain the meaning and importance of this!	The range studied is now given in the new table1. Merged. Figure 2 deleted. Meaning included Removed Fig.4 Corrected We are studying the effect of aromatic structure on the inhibition of methane production and the correlation structure- toxicity. The the ultimate goal is the modeling of the effect of structure on the inhibition of the biosynthesis of methane. For example, from the b.p, we can predict which is the most toxic isomers and vice versa
--	--	---



SDI Review Form 1.6

	In general, in the manuscript, authors have too many paragraphs. No need for that. Many of the sentences follow the reasoning of the previous sentence and should be connected. References: Please check the references. There are some errors. All the references should follow the same formatting.	Corrected Corrected
<u>Optional/General</u> comments		