



SDI Review Form 1.6

PART 1:

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	MS: 2012/IJBcRR/2458
Title of the Manuscript:	STUDY OF THE TOXICITY OF PARA SUBSTITUTED ANILINES ON METHANE GAS BIOSYNTHESIS BY 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)
<u>Compulsory</u> REVISION comments	1. Introduction There is little amount of information on aniline toxicity and biodegradation studies of aniline in terms of anaerobic and aerobic or chemical treatment in the literature search of the introduction section. And also the potential risks and effects exerted by aniline in the environment are not discussed in the introduction section. The introduction should be rewritten considering the facts mentioned above. 2. MATERIAL AND METHODS 2.1. Biomass Lines 92,93: The specific acetoclastic methanogenic activity is written as 163.40 -210.81 g COD-CH₄/g VSS .d (27±1 °C). Please check the numbers and calculation it seemed to be very high. 3.2. Toxicity of para substituted anilines in anaerobic digestion process Line 165: “Aniline.” Delete dot. Line 198: “toxic Thus” Dot missing. Line 201, 202, 203: “This demonstrates sufficiently that the grafting of hydrophilic substituent on the	Rewritten It is 163.40 – 210.81 mg COD-CH₄ /g VSS .d . Corrected. Corrected Corrected Rewritten



SDI Review Form 1.6

	benzene ring, make the obtained compound less toxic and the number effects of hydrophilic (electron donors) groups such as the hydroxyl group are additives (Debord,2012).” Sentence is not understandable, please rewrite with a better grammer. It is not possible to write in the third column, the table have some problems, our feedback are in red Line 209: “most toxic” sholud be “more toxic” Corrected Line 212: two dots at the end of the sentence. It is better to avoid citing unpublished data. Please try to cite another published reference. This sentence was deleted 3.3. Effect of the para substituted Aniline functional groups on the methanogenic toxicity Line 220: dot missing at the end of the sentence. Corrected Figure 3: please use subscripts in the chemical formulas of the compounds. We tried to do it, but it was not possible because these formulas in the figure come from the Excel spreadsheet, but in axes titles it is possible. The inhibitory effects of functional groups should be discussed considering their effects on the methanogenic culture for e.g. NO₂ toxicity in terms of biochemical reactions. They are discussed according to their effects when substituted on aniline aromatic ring. Line 258: 3.4. Correlation of the methanogenic toxicity with aromatic compounds hydrophobicity. : delete dot Corrected Line 263: “logP_{oct}” oct should be subscript corrected	
--	---	--

303: “(Kobayashi, 979)” correct the date.
Corrected

SDI Review Form 1.6

SCIENCEDOMAIN *international*
www.sciencedomain.org



321: dot missing.
Corrected



SDI Review Form 1.6

<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	The findings of the study are not novel. The authors repeated the well-known scientific facts.	Please, read the revised manuscript, many novel findings are in this paper.