



SDI Review Form 1.6

Journal Name:	International Research Journal of Pure and Applied Chemistry
Manuscript Number:	2013_IRJPAC_6175
Title of the Manuscript:	Kinetics and mechanism of oxidation of gabapentin by N-bromosuccinimide in aqueous alkaline medium. Comparing to the kinetics of oxidation by N-bromosuccinimide in aqueous acid medium
Type of the Article	Research Paper

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: 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	Line 31, use IUPAC name for Gabapentin as 2-[1-(aminomethyl)cyclohexyl]acetic acid. Line 39 define[CAT],Line 40-define[GP],Line42-define[BAB], Line 44-define[DPN]. Line48-Kinetics;K should be small letter. Reaction equation in Line 85, the Author has to define R and also complete the reaction by giving the structure of the possible products. Line 89 and 90-identification of the major product was by spot test—elaborate (was it TLC ?), and using reference standard?because by claiming the product was 1-(hydroxymethyl)cyclohexane acetic acid just by identifying the present of OH and carboxylic acid were not conclusive. Please provide all the structures for equation in Line 85 according to the Author anticipated products. Please define all abbreviation R in Line 233,234,235,and 236 respectively. Standardize the symbol of R radical in Line 235 and Line236 because looks like radical and also anion. The title of the article also include mechanism of oxidation of gabapentin(DID NOT SHOW IN THE ARTICLE HOW THE REACTION PROCEED LEADING TO THE PRODUCTS?)	IUPAC name for gabapentin has been used. [CAT],[GP],[BAB], and[DPN] have been identified. Line48-Kinetics; k hase used as small letter. Reaction equation in Line 85, R has been defined and the structure of the possible products have been completed. The oxidation products were identifed also by IR spectra. R was identifed as cyclohexane group in line233,234,235 and 236 respectively. An inner-sphere mechanism for the oxidation pathway was suggested and this has been written in the conclusion.



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<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	The article is publishable provided additional information requested are given.	