



**SDI Review Form 1.6**

Journal Name:	<a href="#">Advances in Research</a>
Manuscript Number:	<b>Ms_AIR_26332</b>
Title of the Manuscript:	<b>Calcium ion binding characteristics of porcine pancreatic alpha amylase outside active site domain and implications: Theory and experimentation.</b>
Type of the Article	<b>Original Research Article</b>

**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**

	<b>Reviewer's comment:</b>	<b>Author's comment</b> <i>(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)</i>
<b><u>Compulsory</u></b> REVISION comments	<p><b>According to the comments mentioned just above</b></p> <p>The manuscript entitled as “<b>Calcium ion binding characteristics of porcine pancreatic alpha amylase outside active site domain and implications: Theory and experimentation</b>” is an interesting one by based on its conception; however the experimentation which has been applied by the author(s) did not meet the generally approved standards in the field of enzyme kinetics.</p> <p>In more details: {a} author(s) have performed their analyses under conditions where the well known Michaelis-Menten equation is not valid, i.e. the prerequisite of <math>[E]t \ll [S]t</math> is not fulfilled in this work; {b} as a consequence of the previous {a}, all the estimated rate constants seems more likely that are not valid; {c} potentially, the previously mentioned errors to have been incorporated in the calculations; {d} author(s) do not mention, in the text, the value of the Arrhenius pre-exponential factor in their particular cases; {e} in all cases of linear fittings, which are depicted in the figures 1,3-6, the estimated <math>R^2</math> is very far apart from a unit-value, indicating either a poor fitting and/or considerably few data points; {f} in figure 2, author(s) try to extract information by using quite a few number of data points, in contrast to the well known experimentation in similar cases; {g} in chapter 3.4.2., there is nothing more than a title, and thus I cannot guess both the used statistics, as well as their appropriate use and robustness; {h} authors should ameliorate the syntax of their text and to try to</p>	



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	express more precisely their results and conclusions.	
<b><u>Minor</u></b> REVISION comments		
<b><u>Optional/General</u></b> comments		

**Reviewer Details:**

Name:	<b><i>Emmanuel M. Papamichael</i></b>
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