## **Review Form 2**

Book Name:	Recent Developments in Chemistry and Biochemistry Research
Manuscript Number:	Ms_BPR_3470
Title of the Manuscript:	Thermodynamics of the Second Dissociation Constants (pK2) of Piperazine-N,N'-bis-2-hydroxypropanesulfonic Acid (POPSO Sesquisodium Salt) and Associated Thermodynamic Functions from (278.15 to 328.15) K
Type of the Article	Book Chapter

## **PART 1:** Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that
Compulsory INE VIOLON Comments	Neviewel 3 Comment	part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	Paper shows - the buffer solution of Na3POPSO and Na4POPSO would be a useful pH primary buffer standard for pH control in the region close to that of blood serum. largest difference between the final e.m.f reading at 298.15 K and that collected in the beginning was well within ±0.03 mV which is reproducable by other researchers.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Yes	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	Comparison of the thermodynamic functions for the second acid dissociation constant of Na3POPSO with structurally related compounds in water at 298.15 K is presented. Correlates with the increase in pK2 is being paralleled by the increase in $\Delta H^{\circ}$ .	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Reference are from 1960 to 2014  More details can be added in reference 25; also it is cited in the conclusion section- could be added in any other section	
Minor REVISION comments	Yes	
Is the language/English quality of the article suitable for scholarly communications?		
Optional/General comments	Last line of the conclusion section should be re-written Acceptable with minor corrections	

## PART 2:

	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)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

## **Reviewer Details:**

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Created by: EA Checked by: ME Approved by: CEO Version: 2 (08-07-2024)