



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_49639
Title of the Manuscript:	Investigation of extent of Interaction of Thiobarbituric acid and two selected Amino acids with Three Divalent Metal ions in Aqueous-organic medium at different Temperatures
Type of Article:	original research paper

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
<p>The manuscript titled "<i>Investigation of extent of Interaction of Thiobarbituric acid and two selected Amino acids with Three Divalent Metal ions in Aqueous-organic medium at different Temperatures</i>" concerns formation constants of binary and ternary complexes of thiobarbituric acid as primary ligand and L-tyrosine and L-histidine as secondary ligands, which have been examined in ethanol-water mixture and at ionic strength by potentiometric method. The ligands formed 1:1 binary complex with the metal ions. The primary and secondary ligands simultaneously coordinated to the metal ions to form 1:1:1 ternary complexes. The difference in stability constants of binary and ternary complexes were determined by $\Delta \log K$ and RS%. The stability of the complexes decreased with increase in temperature. The thermodynamic parameters such as Gibb's free energy change (ΔG), entropy change (ΔS) and enthalpy change (ΔH) accompany the interactions were evaluated.</p> <p>The manuscript is connected with interesting and modern scientific topic of complexes of thiobarbituric acid used as ligands complexed metal ions, the paper is written rather legible. Finally, the manuscript is ready for publication in <i>Current Journal of Applied Science and Technology</i> as it is.</p>	

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