Review Form 1.7

Journal Name:	**Current Journal of Applied Science and Technology**
Manuscript Number:	**Ms_CJAST_101034**
Title of the Manuscript:	**Nondestructive and accurate detection of transparent liquid mass fraction based on Snell's law**
Type of the Article	**Original Research Article**

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:

(https://www.journalcjast.com/index.php/CJAST/editorial-policy)

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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 **1. Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) **2. Is the title of the article suitable?** (If not please suggest an alternative title) **3. Is the abstract of the article comprehensive?** **4. Are subsections and structure of the manuscript appropriate?** **5. Do you think the manuscript is scientifically correct?** **6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	**1) This manuscript is an illustration of how the mass fraction of a solution can be analysed by the refractive index. The usefulness of the manuscript is the detailed overview of the experimental apparatus. I do believe that its publication will add to the current literature of knowledge on how a to measure mass fraction based on changing refractive indexes.** **2) The title of the article is suitable.** **3) The abstract highlights the main points of the article.** **4) It appears that some of the information under section 2.2 "Measurement Fundamentals" are background information and should be considered under introduction. The first 3-4 sentences are background information and are necessary for the paper but should be put in the introduction.** **5) The manuscript appears scientifically correct.** **6) The references are recent and sufficient. Although more literature references linking the concentration and the refractive index should be considered. Of the 16 references, only two were in this important area. Another suggestion is:** Chan-Yuan Tan, Yao-Xiong Huang, Dependence of Refractive Index on Concentration and Temperature in Electrolyte Solution, Polar Solution, Nonpolar Solution, and Protein Solution, *J. Chem. Eng. Data* 2015, 60, 10, 2827–2833 **Extra Comments** **1) I found that the introduction didn't clearly explain the novelty of the designed method presented verses other published methods. The authors may want to revise the background contrasting how their experimental methods differ from other published methods.** **2) The sentence on page 2 (bottom) that reads "Combined with the refractive index of pure water at 20*C,…." needs fixing for better readability.**	
Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	1) The language quality is suitable for scholarly communications.	
Optional/General comments	1) The resolution accuracy was much lower for ethanol, than it was for NaCl, Glucose, and Sucrose. This brings to question of how accuracy of the method varies with the solute. The author could consider addressing this and discussing how the method could be adjusted for nonpolar solutes (ethyl acetate) or solutes that form non-ideal solutions.	

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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:

Name:	**Doba Jackson**
Department, University & Country	**Huntingdon College, US**