



SDI Review Form 1.6

Journal Name:	<u>Asian Journal of Chemical Sciences</u>
Manuscript Number:	Ms_AJOCS_32418
Title of the Manuscript:	Building a Visible Light Spectrophotometer From NaI Detector
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:

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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	In this manuscript the Authors make an attempt to address the basic aspects of developing a light sensing spectrophotometer appropriate for excitation/emission spectra, on the basis of properties of ethylene glycol and NaI detectors. The latter are interesting and useful materials in many applications of chemical/physical sciences (gamma-ray, visible light, UV spectroscopy), nuclear medicine, etc. Even though the topic it sounds, the paper has to be improved in a number of ways, as I state below, before suggesting its publication in the Asian Journal of Chemical Sciences. 1). The Introduction is rather poor. The background and open problems of the field addressed in the paper are very shortly discussed. Only one reference is cited!!! Usually up to about 40-60% of the total number of Refs. are cited in the Introduction of a regular paper. 2). The behavior of the Absorbance, A, versus the concentration, C, of Ethylene Glycol (EG), which is the most important result of this manuscript, is not discussed in a global way throughout the entire region of C. The Authors should create (e.g. using ORIGIN, Gnuplot, etc.), first, a 'bell like curve'. The separation in two regions ($0 < C < 60\%$, $60 < C < 100\%$) has no real grounds. Also, in this Figure, the X and Y labellings are not readable and the outer frame is not useful. 3). Throughout the paper, Authors discuss abstractly 'the determination of EG' and only in the Section 'Conclusion' they specify it as: '... in antifreeze	First of all I would like to thank the review for his Patience and deep concern to come out the manuscript in a better design. I believe it is alright now, after corrections. I agree even the previous fig. shows the same behaviour, any way I change it to bell like curve. This was due to the way of capturing. I do change it. More details are added even the determination of EG are given in a references. I supported the references by three more



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	samples'. An explanation of the 'determination', a significant aspect of the paper, should be done appropriately. 4). The Reference list is rather poor (some of the references, e.g. [2,3,4,6], are weak). In their Ref. [10] Authors may find some necessary articles to be employed for the documentation of the paper. 5). Please, disentangle clearly the concepts: 'emission spectrum', 'excitation spectrum' and 'absorption spectrum'. 6). In Section 'Experiment', the phrase 'is prepared' is used three times. What procedure do the Authors mean? It is not clear, please, explain. 7). Figure Captions should, in general, contain more information (especially Figs. 3, 4, 5). In Fig. 2, the X and Y labelling and units are absent. 8). In Table 1, please, replace mol.L^{-1} with mol/L. 9). In L-169: I think the words 'increases' and 'decreases' should be interchanged.	Done Done, clarified Done Done It is correct, see the difference between absorbance and intensity
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<u>Minor</u> REVISION comments	1). The last paragraph in the Section 'Conclusion' rather reduces, instead of enhancing, the value of the paper. I would suggest it to be moved at the end of Section 'Results and Discussion', e.g. starting as 'Before closing this discussion, it is worth mentioning that ... (such an improvement will be addressed in a future work)'. 2). Please, correct the great number of typos existing throughout the paper (see examples below): – L-11: ... there are a wide range ... => : ... there is a wide range ... – L-17: ... is mainly depends on ... => ... is mainly dependent on ... – L-105: ... (Knauer ... Nr. 81521) ... => Within the text, we never make use of postal addresses! Please, keep only device Nr, if necessary. – L-148: ... effecting on the ... => ... effecting the ... – L-180: ... is the fundamental ... => ... is a fundamental ... – L-181: ... applied ... => ... is applied ...	All points are corrected 1. Moved 2. All done Yes Yes Yes Yes but affecting the... Yes No it is correct
<u>Optional/General</u> comments	1). The first two paragraphs of the Abstract contain information that should be included (or even repeated and) in the Introduction. 2). In the keywords: "photocathode" is very general. 3). The first paragraph of the Introduction, as it is, it makes a rather bad impression (it may be replaced by a short parenthetical sentence in the next paragraph). 4). I recommend the first two paragraphs of the Section 'Instrumentation ...' to be preferably moved into the Introduction Section.	Yes you are absolutely correct Indeed I mean it Yes you are absolutely correct



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	5). In Section 'Conclusion' change heading preferably to 'Summary and Conclusions'. 6) I would also suggest the change: – L-81: ... (University ... Irak) ... => ... (Zakho University, Irak) ... More details, if Authors wish, they may provide in a Section of Acknowledgements.	Yes partially Ok Internationally we use Iraq I have no Acknowledgements
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