



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2013_BJAST_3803
Title of the Manuscript:	Effect of Sodium Carboxymethyl Cellulose concentration on the Photophysical Properties of Zinc Sulfide Nanoparticles

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



SDI Review Form 1.6

PART 2: 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)
<u>Compulsory</u> REVISION comments	Abstract : (a) Abstract should be a self-contained information/summary of research carried out. The abstract of this work strayed away from this concept. Rather than telling us about the importance of ZnS Nps, the abstract should focus on work done, the characterization and a summary of the outcome of the work (b) The different ratios of the Zn sulphates and CMC were completely absent in the abstract. Introduction. 1. The mention of “nanostructured materials” in line 26 raises a question as weather the authors are introducing rod, tetrapods etc which are not the product of their prepared nanop. 2. Line 28-29 does not make sense 3. Line 38-39, examples of such chalcogenides and ref should be given 4. Line 53 “while strong bonding may not form nanocrystals [9]” HOW?? Not clear 5. Line 62-64 “In this paper, we report the effect of concentration of	Abstract: - The abstract have been rewritten in the recommended format. - The different ratios are now included. Introduction. - The word “nanostructured” is unambiguous, however the sentence have been reversed. - Line 28-29: sentence has been reversed. - Line 38-39: treated - Line 53: Refer to the cited article for details. - Line 62-64: we do not agree, the title in this form agrees with the aim of the work. “Photophysical” is a composite word that consists of the photo (opto-electronic properties) and physical (structural, morphological etc).



SDI Review Form 1.6

	sodium carboxymethyl cellulose (CMC) on the structural and optoelectronic properties of Zns nanoparticles. This does not conform with the title of the paper 6. Last paragraph, Line 65- 76 should come before the objective of the paper Materials and methods 1. Line 83 “In the present approach” Is there any previous approach?? This statement is unnecessary 2. The methodology generally needs restructuring. For example, why 99g of water (weight or volume). The Ph value wasn’t given and the use of “then” several times amount to tautology. Results and discussion 1. Line 105 “(a) 1_1 CMC, (b) 1_2 CMC and (c) 1_3 CMC” samples should be given a more scientific codes like sample a, b..... or 1,2.... 2. Line 128. The use of the phrase “(b of Figure 1)” and “(c in Figure 1)” in line 136 are incoherent 3. Line 176 [Ref....] ???? 4. Line 178. Is smoothness of nanoparticles a proof for good passivation? 5. SEM images only gives the external morphology of the particles, interms of nanoparticles the internal morphology is more relevant and should be provided by given the TEM micrographs 6. EDX- since the same machine was used for same analysis, the prescence of Au,	6. Considered Materials and methods 1. Yes 2. The weight of water is proportional to its volume. pH 4 now included. Results and discussion 1. Sample names are now S₁ (for 1_1CMC), S₂ (for 1_2CMC) and S₃ (for 1_3CMC). 2. Reconsidered. 3. Corrected 4. Just an added description. 5. TEM is appropriate, though we do not have it in Nigeria. However, for the purpose of this work, in my opinion the analysis are sufficient for a good conclusion. 6. There was a mix-up in the sentence. It is
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	Al and Cl in the nanoparticles samples and its absence in the pure/raw CMC indicates the samples are not pure 7. Line 243- incomplete statement 8. INFRA RED- For effective comparison, authors needs to show the IR for the raw CMC also Reference The referencing is carelessly formatted with some journals written in full and other in shortend format.	now corrected. No Al, Cl and Au can be seen in the EDX spectra of the capped ZnS (Fig. 3a). These elements are found in the CMC which was used as purchased without further purification. The absence of these elements in the synthesized sample shows pure ZnS. 7. Line 243-reversed. 8. The FTIR of the raw CMC has been included and compared. Reference: All references have been reformatted according the provided guideline for manuscript preparation.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		