



SDI Review Form 1.6

PART 1:

Journal Name:	Physical Science International Journal
Manuscript Number:	2013_PSIJ_4768
Title of the Manuscript:	Structural and Optical Properties of Polymer Blend Nanocomposites Based on Poly (vinyl acetate-co-vinyl alcohol)/TiO₂ Nanoparticles
Type of the Article	Research paper

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.



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PART 2: Review Comments

	Reviewer's comment	Author's comment <i>(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)</i>
<u>Compulsory</u> REVISION comments	<p>This paper reports on the optical performance of polymer blend nanocomposites. It contains morphological and characterization data.though this work is useful, in my opinion, a major revision is needed before it can be accepted for publication.</p> <ol style="list-style-type: none"> 1. The letters in Figures were blurry, please retype with right font and size. 2. All SEM images should include clear scale bars. 3. SEM images are not clearly enough to show the morphology of polymer blend nanocomposites. At least one more magnification SEM image is needed to show the morphology of polymer blend nanocomposites. 4. In Fig. 4 XRD patterns of polymer blend nanocomposites, each peak need to be marked clearly. 	<ol style="list-style-type: none"> 1. The qualities of all the figures have been improved. 2. SEM images with clear scale bars have been incorporated appropriately 3. SEM images of higher magnifications (500X) than 200X have been incorporated appropriately. 4. The phases making up the polymer blend nanocomposites were stated and the corresponding angular positions quoted with references made to Authors from reputable journal. We want to believe that since these materials are not really crystalline in nature, attempts were only



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	<p>5. The authors claimed that the sample with 4% TiO₂ content displayed higher percentage crystallinity compared to other samples, but in Fig.4, the XRD patterns result could not conformed to this opinion.</p> <p>6. In Fig.6, with the increasing of TiO₂ containing 1% to 3%, the absorption edge red shift, why was observed the absorption edge blue-shift of the optical absorption edge from the TiO₂ containing 4%?</p>	<p>made to improve their crystallinity, We don't think there is anything wrong with the interpretation. Finally, it is conventional to interpret the way we have done.</p> <p>5. It is obvious that apart from the peaks occurring at lower 2θ values common to all the patterns, there are other peaks occurring at higher 2θ values for the sample containing 4% TiO₂. Furthermore, the peak analysis (crystallinity determination) was done using Origin 8.0 that automatically dictates the results with the associated errors.</p> <p>6. This is obvious because of the increasing content of TiO₂ in the Polymer blend nanocomposites.</p>
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		