



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_10383
Title of the Manuscript:	Effects of /HMDA dual Compatibilizer and Filler loading on Physico-Mechanical and Water Sorption Properties of Natural Rubber/Poly (ethylene terephthalate) (PET)/Dikanut Shell Powder Bio-Composites
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.

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



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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	Section "2.3 Preparation of composite samples" – "The milled samples were then cured into sheets of 2mm thick on a hot press at 5MPa pressure and temperature of 145°C for 20mins.", is not very clear how were determined the curing condition.	These are the optimal curing conditions used after several trials that produced suitable samples without degradation of either the blend components or filler (DSP). DSP, degrades at temperatures above 150°C.
Compulsory REVISION comments	Please state which is the particle size of Dika nutshell powders (DSP) used in blends shown in Figures 1,3, 5, 6, 8, 10 and 12. Comparing the characteristics of blends with : 5 wt. % DSP filler loading , NR/PET= 60/40 and MAPI/HMDA = 8/0.6 from Figures 1,3, 6, 8, 10 and 12 with the same characteristics of blends with similar composition from corresponding figures (figures 2, 4, 7, 9, 11, and 13) there are great differences in the values for the same characteristics – how it is explained?	Filler particle size of 120µm was used in all composite samples that generated Figures 1,3,5,6,8,10, and 12, but was inadvertently omitted. It is added as appropriate in figure captions of Figures 1,3,5,6,8,10, and 12 (see lines 226,279,302,319,345,408, and 416, all highlighted). There was a mix-up in the table of values used in plotting figures for the same characteristics which created the great differences in the values noticed. Corrections are effected as appropriate (see Figures 1 & 2, 3 & 4, 6 & 7, 8 & 9, 10 & 11 and 12 & 13 of the revised paper; all highlighted)
Minor REVISION comments	Regarding "The preparation of dikanut shell powder (DSP) was carried out according to the procedure described in our previous work [22].", please, add briefly "preparation of dikanut shell powder"	Brief preparation of dikanut shell powder is added in the revised paper as recommended (see line 153, highlighted)
Minor REVISION comments	In Figure 6, Unnotched impact strength is in J/m, but in Figure 7, Unnotched Impact Strength is in J/m ² . Please correct	The unit of impact strength is J/m. it is corrected in figure 7 as appropriate in the revised paper (see line 321, highlighted)



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<u>Optional/General</u> comments	Please, replace in the title of the article “Effects of /HMDA” with “Effects of MAPI/HMDA”	MAPI was inadvertently in the title of the original research article. It is appropriately added in the revised version (see line 2, highlighted)
<u>Optional/General</u> comments	Please correct diagram 1 – one valence for N	The valency of Nitrogen (N) is 3. Hydrogen (H) atom was inadvertently omitted in the last chemical structure of scheme 1 in the original research article. It is added in this revised version as appropriate (See line 123, highlighted)
<u>Optional/General</u> comments	In section “2.1. Materials” – please present all the raw materials used, producer and main characteristics.	All the raw material used and their producers were included in section “2.1 materials” in the original research article, except that we added the melt flow index of PET in the revised version which is a major characteristic of PET (see line 143, highlighted).
<u>Optional/General</u> comments	Please check the English	The English was meticulously and any dictated grammatical error corrected.