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PART 1:

Journal Name:	Physical Review & Research International
Manuscript Number:	2013_PRRI_3663
Title of the Manuscript:	Characterization of Nanoinclusion in Nanocomposite

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 (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	Line 119-123; It was attempted to maintain the same degree of refinement for all models to obtain consistent results. Delete space The mechanical properties of the a are considered to be isotropicCkeck this sentence. Matrix properties for Young's 121 modulus and Poisson's ratio are 2.6 GPa and 0.3 respectively. For the nanofiber, the properties that are used 200 GPa for Young's modulus and and 0.3 Poisson's ratio. The modulus of elasticity of the nanoinclusion considered as 1/100 of the 123 matrix while 0.3 is adopted for the Poisons' ratio. Any authentic reference or data? Check the results cited in figs 5 and 6 for shear stresses and also correlate these values with longitudinal and transverse stresses. Cite more relevant references to the results and discssion section for validation of the FEA results.	
<u>Minor</u> REVISION comments	Two pairs of identical nanoinclusions located symmetrically around the fiber in addition to a nanoiclusion at the corner of the nanofiber are shown in Fig 2. A tensile load or stress of 10 MPa is applied at the longitudinal direction of the RVE, whereas no lateral load is applied.	

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Optional/General comments	This paper studied the influenec of nano filler	
	embedded in nanocomposite along side a nanofibe as	
	objective. The analysis is done based on 2D, linear	
	elastic finite element using ANSYS to explore the impact	
	of the nanoinclusion. Valid assumptions were made in	
	the analysis. The levels of the interfacial normal and	
	shear stresses along the nanofiber are examined. Uniaxial	
	tensile stress is the principal stress that applied on the	
	nanocomposite is in the longitudinal direction.	
	Implications of the nanoinclusion on the failure of the	
	nanocomposite are studied as well. Finally, they	
	conclused that nanoinclusion has a great influence on the	
	increase in the levels of the interfacial contact stresses	
	along the sides of nanofiber in nanocomposite, which is	
	considered as one of the main reasons of the	
	nanocomposite failure.	
	This paper is carefully written and provides a	
	worthwhile result Because the applications are related to	
	this study, and considering the fact that the results and	
	data comfort the discussion, I recommend the article. But	
	some minor appropriate corrections need to do.	

Note: Anonymous Reviewer