



## SDI FINAL EVALUATION FORM 1.1

### PART 1:

Journal Name:	<a href="#">Physical Review &amp; Research International</a>
Manuscript Number:	2013_PRRRI_3663
Title of the Manuscript:	Characterization of Nanoinclusion in Nanocomposite

### PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
<p>The authors made some revisions on the manuscript. But I am still wondering if such a investigation is pratical and necessary. In the FE model, the diameter of the inclusion is 1 nanometer and its Young's modulus is 0.026Gpa. What's the use of such inclusions? Can the authors provide some real application examples of such nano composites?</p>	<p>I would like to clarify that the whole structure of the discussion section including the figures was changed according to the invaluable feedback, suggestions and recommendations of the reviewers, so do appreciate it.</p> <p>Basically, one of the main engineering problems is how to predict the mechanical behaviour of materials, but unfortunately voids, inclusions, defects, irregularities... cannot be avoided (i.e., there is no perfect material), therefore always it is tried to establish limits for the existence of such defects in the material.</p> <p>Many researchers have spent massive amount of effort for developing various analytical as well as numerical techniques for modelling and estimating the impact of the undesired inclusions in different types of materials.</p> <p>The study of inclusions is of significance to the development of advanced materials for aerospace, marine, automotive and many other applications. This is because the presence of inclusions in materials affects their elastic field at the local and the global scale and thus greatly influences their mechanical and physical properties. (2013) [35]. This paper review whatever done of investigation of inclusion effect on the properties of the material, but no one has studies the impact of nano-inclusion exist around a nano-fiber embedded in nano-composite.</p> <p>Regarding the properties of the nano-inclusion, the modulus of elasticity of the nano-inclusion to the matrix stiffness(i.e., <math>E_i/E_m</math>) were selected based on previous investigation of researchers for different range of values (i.e., <math>E_i/E_m=10^{-4}</math> to <math>10^4</math>) [48-51], even the size and geometry of the inclusions were investigated as well.</p> <p>Regarding the application of the nano-composite, actually the recent progress of the inventions in the nano-technology sector is so vast and covers many applications, as mentioned [35].</p>