



**SDI Review Form 1.6**

Journal Name:	<a href="#">Physical Science International Journal</a>
Manuscript Number:	Ms_PSIJ_19439
Title of the Manuscript:	High Microwave Absorption of Multi-Walled Carbon Nanotubes (Outer Diameter 10 - 20 nm)-Epoxy Composites in R-Band
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.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<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)
<b>Compulsory</b> REVISION comments		
<b>Minor</b> REVISION comments	<ul style="list-style-type: none"> <li>It would be helpful if the authors discussed the reasoning behind the choices of thickness and nanotube percentage they chose to investigate.</li> <li>It was not clear if multiple samples for each parameter set were investigated, and if so, how many?</li> <li>lines 122-124: it is not at all obvious from the spectra in Figure 2 that the peak positions are shifting.</li> <li>Figure 2: I see remnants of the MWCNT (100) and (002) peaks in the composites but this was not</li> </ul>	<ul style="list-style-type: none"> <li>Two sentence are added to discuss these two items in Section 2.2.</li> <li>Because the samples sizes of the CNT-epoxy composites used in the microwave measurements were quite large as discussed in the manuscript. We did not find a fluctuation of the physical properties in the samples with the same parameter. This is the reason that we did not perform a systematical investigation of the effect of multiple samples for each parameter.</li> <li>Yes, the peak shift is small. Section 3.2 is revised to address the change of the XRD peak shape, including the peak width and the appearance of a shoulder structure around <math>2\theta = 18.9^\circ</math>.</li> <li>Yes. Thanks for the suggestion. Two sentence are added to discuss these features. See the end of the first paragraph of Section 3.2.</li> </ul>



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	<p>discussed in the paper. This is worth mentioning.</p> <ul style="list-style-type: none"> <li>• lines 138-140: This statement is rather obvious and does not warrant italics.</li> <li>• Figure 3: there was no explanation offered for the relatively large increases in the permittivities for the 9% and 10% composites. This should be addressed.</li> <li>• Do the authors have an explanation for the high adsorption in the 37-40 GHz range?</li> </ul>	<ul style="list-style-type: none"> <li>• Yes. The statement in italics on these lines is changed to normal font.</li> <li>• The presentation and discussions as well as some explanations for the relatively large increases in the permittivities for the 9% and 10% composites are presented in the revised Section 3.3. More theoretical explanation for the experimental data of MWCNT-epoxy composites still remain for further research, that go beyond our current research capability.</li> <li>• The presentation and discussions as well as some explanations for the high microwave absorption in the composites are presented in the last three paragraphs in Section 3.5. More theoretical explanation for the high absorption in the 37-40 GHz range in the 3mm MWCNTs-epoxy samples with 7 and 8 wt.% MWCNTs still remain for further theoretical research, that we cannot solve them at present. This manuscript mainly reports the results of our experimental work on the subject.</li> </ul>
<b><u>Optional/General</u></b> comments		