



SDI Review Form 1.6

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| Journal Name: | Journal of Materials Science Research and Reviews |
| Manuscript Number: | Ms_JMSRR_47808 |
| Title of the Manuscript: | Activated Carbon for Electrochemical Supercapacitor and Water Filter |
| Type of the Article | Technical report |

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>)

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 | <p>This work requires some revisions before it can be accepted for publication.</p> <ol style="list-style-type: none"> 1- Why the author jumped to call the cell assembly "Super capacitor " ? no evidence before such claim was presented to call it this way? 2- The authors should have presented CV studies before EIS studies because the CV in Figure 7 shows that the assembly possess a tangible capacitive current. I don't know if this capacitive current large enough to call it super capacitor or Not. So CV and other electrochemical techniques should come before EIS. 3- In EIS the vertical line in Nyquist plot is evidence of charge saturation, but also there is a diffusional section in this plot (being ignored). 4- The authors did not show CV or EIS for NiO Filter to see what difference was made by covering it with activated carbon? What was the porosity of the electrode? 5- Using modern techniques without depth in analysis is not enough to give weight to the research work, some calculation can be made to get diffusion coefficient, relaxation time ...etc are needed. | |
| Minor REVISION comments | | |
| Optional/General comments | | |



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PART 2:

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| | <u>Reviewer's comment</u> | <u>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> |
| <u>Are there ethical issues in this manuscript?</u> | <u>(If yes, Kindly please write down the ethical issues here in details)</u> | |

Reviewer Details:

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|----------------------------------|---|
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