



**SDI Review Form 1.6**

Journal Name:	<a href="#">Journal of Materials Science Research and Reviews</a>
Manuscript Number:	<b>Ms_JMSRR_47570</b>
Title of the Manuscript:	<b>COMPARATIVE STUDY ON THE PHOTOVOLTAIC PROPERTIES OF DYE-SENSITIZED SOLAR CELLS (DSCs) BASED ON DIFFERENT COUNTER ELECTRODE CONFIGURATIONS</b>
Type of the 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	<p>Paper is of current interest and falls in the scope of Journal, however, there are following serious suggestions without addressing them paper should not be accepted for publication:</p> <ol style="list-style-type: none"> <li>1) Literature review needs to be updated, there are many studies published recently on this subject especially in current years in reputed journals, authors are encouraged to provide a comprehensive literature review. Authors are encouraged to enhance literature review accordingly.</li> </ol> <ul style="list-style-type: none"> <li>• (2014), <u>Comparison of Performance Measurements of Photovoltaic Modules during Winter Months in Taxila, Pakistan</u>, Vol. 2014, Article ID 898414, International Journal of Photoenergy.</li> <li>• (2015), <u>An Experimental Investigation of Performance of a Double Pass Solar Air Heater with Thermal Storage Medium</u>, Vol. 19, Issue 5, Page 1699-1708, J. Thermal Science.</li> <li>• (2015), <u>Enhancement and Integration of Desiccant Evaporative Cooling System Model under Transient Operating Conditions</u>, Vol. 75, Page 1093-1105, Applied Thermal Engineering.</li> <li>• (2015), <u>Performance Investigation of Desiccant Evaporative Cooling System Configurations in Different Climatic Zones</u>, Vol. 97, Page 323-339, Energy Conversion and Management.</li> <li>• (2015), <u>An Experimental Investigation of Performance of Photovoltaic Modules in Pakistan</u>, Vol. 19, Issue Suppl. 2, Page 525-534, J. Thermal Science.</li> <li>• (2015), <u>Performance enhancement of PV cells through micro-channel cooling</u>, Vol. 3(4), Page 699-710, AIMS Energy.</li> <li>• (2016), <u>Outdoor Testing of Photovoltaic Modules during Summer in Taxila, Pakistan</u>, Vol. 20, Issue 1, Page 165-173, J. Thermal Science.</li> <li>• (2017) <u>Performance Analysis of a Low Capacity Solar Tower Water Heating System in Climate of Pakistan</u>, Vol. 143, Page 84-99, Energy and Buildings.</li> <li>• (2017), <u>Effect of Dust Deposition on the Performance of Photovoltaic Modules in Taxila, Pakistan</u>, Vol. 21 (2), Page 915-923, J. Thermal Science.</li> <li>• 2017), <u>Thermal Analysis of a Mini Solar Pond of Small Surface Area while extracting Heat from Lower Convective Layer</u>, Online, J. Thermal Science.</li> <li>• (2017), <u>Experimental and model-based performance investigation of a solid desiccant wheel dehumidifier</u>, Online, J. Thermal Science.</li> <li>• (2017), <u>Performance Investigation of Air Velocity Effects on PV Modules under Controlled Conditions</u>, Vol. 2017, Article ID 3829671 (10 Pages), International Journal of Photoenergy.</li> <li>• <u>Performance Investigation of Photovoltaic Modules by Back Surface Water Cooling</u>, Vol. 21 (2), Page 290, J. Thermal Science.</li> <li>• (2018), <u>Heating and Cooling Degree-Days Maps for Pakistan</u>, 2018, 11(1), 94; doi: 10.3390/en11010094, Energies.</li> <li>• (2018), <u>Experimental investigation of monocrystalline and polycrystalline solar modules at different inclination angles</u>, Vol. 4(2), Page 2137-2148, J. of Thermal Engineering.</li> <li>• (2018), <u>Performance Analysis of Solar Assisted Desiccant Cooling System Cycles in World Climate Zones</u>, Vol. 140(4), 041009, Journal of Solar Energy Engineering: Including Wind Energy and Building Energy Conservation.</li> <li>• (2018), <u>Evaluation of Solar Collectors Designs with Integrated Latent Heat Thermal Energy Storage: A Review</u>, Vol. 166, Page 334-350, Solar Energy.</li> <li>• (2018), <u>Recent advances on thermal conductivity enhancement of phase change</u></li> </ul>	<p>1. Some current literatures relevant to our research work have been reviewed to update and improve our work.</p> <ul style="list-style-type: none"> <li>✓ The references cited herein are not relevant to the current research work. This is because most of them are concerned with performance enhancement of already functioning photovoltaic modules purchased from companies.</li> <li>✓ Our work is centred on lab-test Dye-sensitized Solar Cells. Wherein, we carried out investigation to improve on the counter electrode of the cell in the laboratory before integration and device fabrication.</li> </ul> <p>2&amp;3. The figures have been made bold to make them readable. But these are quality figures; they were only reduced in size so as not to consume space.</p> <p>4. All the captions are now given properly following the convention of the journal and they concisely portrayed the true characteristics of the cells.</p> <p>5. The standard nomenclatures or terminologies and units of parameters as per Dye-sensitized Solar Cells (DSCs) have been adopted. You can peruse some other literatures on DSCs.</p> <p>6. The work is a comparative study and as such the topic suffices and need not be reconsidered.</p> <p>There are standard procedures and conventions for different researches and in our work, we followed the standard procedures and state of the art facilities have been used for developing and characterizing the cells.</p>



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	<p>materials for energy storage system: A review, Vol. 127, Page 836-856, International J. of Heat and Mass Transfer.</p> <ul style="list-style-type: none"> <li>(2016), Experimental investigation of monocrystalline and polycrystalline solar modules at different inclination angles, Online, J. of Thermal Engineering.</li> </ul> <p>2) Figure quality is not good. These should be re drawn or provided with a high resolution with a readable text.</p> <p>3) Please provide larger text in Figures.</p> <p>4) Please see the captions of all figures, these are not given properly in the case of some figures, this should be fixed in revision of the manuscript.</p> <p>5) Nomenclature should be thoroughly rechecked; units should be given in brackets, and there are few units of parameters which are missed, please incorporate it in the revised version as per journal guidelines.</p> <p>6) Title of paper is very generic, need to be reconsidered.</p> <p><b>I shall proofread the revised paper.</b></p>	
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		

**PART 2:**

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