

Review Form 1.6

Journal Name:	Asian Journal of Physical and Chemical Sciences
Manuscript Number:	Ms_AJOPACS_94010
Title of the Manuscript:	Design and Performance Evaluation of Photovoltaic systems with Automatic Dust Wiper in a Natural Dusty Environment
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:

(<https://www.journalajopacs.com/index.php/AJOPACS/editorial-policy>)

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>Below are comments related to a manuscript under the title: Design and Performance Evaluation of Photovoltaic systems with Automatic Dust Wiper in a Natural Dusty Environment</p> <p>Manuscript Number: Ms_AJOPACS_94010</p> <p>The article is interesting as the authors addressed the good trend regarding the Design and Performance Evaluation of Photovoltaic systems with Automatic Dust Wiper in a Natural Dusty Environment. The authors have highlighted the effect of water cooling and external reflectors or both on the solar PV module performance. The information obtained in this manuscript may add useful knowledge on the influence Automatic Dust Wiper on the PV panels in a Natural Dusty Environment. The article needs a major revision, as in the comments below, which must address. Kind regards</p> <ul style="list-style-type: none"> - English is weak and needs to be improved. There are typos and grammatical errors in the paper that need to be fixed. -The study adopts water to clean the surface of the PV panels. Is this method feasible for the long term? What about water consumption? - The authors mention using an intelligent maximum power point (MPP) tracker for tracking the maximum power points of the panels. It is better to enrich the introduction with state-of-the-art studies such as "Power output enhancement of grid-connected PV system using dual-axis tracking" and "Evaluation Of An Off-grid Photovoltaic Technology For Household Application In Iraq." - Subsection 2.1 has been presented badly; it is better presented briefly by giving a model, accuracy and range of the devices used in a table. - In subsection 2.2 Experimental setup, it is better to add a view of the experimental setup with the schematic diagram shown in Figure 3. - Figures should be clearer and some of them should be explained in more detail with reasons -The authors refer to the automatic dust-wiping mechanism leading to an increase of 16%, 32.5%, 43.40% and 43.37% in average voltage, average current, average power and average efficiency, respectively, over the dusty panel. How can the authors explain this increase? Is this increase due to the removal of the dust?, or due to the use of water that cools the PV panels at the same time and thus increases their efficiency? - The conclusion section needs to be totally revised. This section should clearly demonstrate the results by percentage and compare them with other studies to show the best scenario 	
Minor REVISION comments		
Optional/General comments		

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PART 2:

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

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