Review Form 3

Journal Name:	**Journal of Scientific Research and Reports**
Manuscript Number:	**Ms_JSRR_123095**
Title of the Manuscript:	**Development and Performance Assessment of an Innovative Solar Still for Water Purification**
Type of the Article	**Original Research Article**

General guidelines for the 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.
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PART 1: Review Comments

Compulsory REVISION comments	**Reviewer's comment**	**Author's Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The manuscript provides a clear and relevant title and abstract, as well as a well-written overview of the study's aim, methodology, and results. The study explores the use of renewable energy to solve the challenge of intensive energy requirements which make traditional water purification methods less sustainable, and that this make the solar stills offer a more versatile and sustainable solution. - Provide specific details about the solar still's design and the experimental process - Add data analysis information and discussion of the results - Mention the significance of the study's findings and their potential impact on water scarcity issues.	
Is the title of the article suitable? (If not please suggest an alternative title)	**Yes**	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is well-written and provides a clear overview of the study's aim and methodology and the results are well presented. - Add specific details about the solar still's design and the details of experimental process. - Mention the significance of the study's findings and their potential impact on water scarcity issues regionally or globally.	
Are subsections and structure of the manuscript appropriate?	The structure and subsections of the reviewed manuscript are generally appropriate, but there are a few areas where improvements could be made: - The introduction - provide more context about the global water crisis and the limitations of traditional water purification methods. Additionally, the historical background of solar stills could be expanded upon to provide a more comprehensive understanding of their development and evolution over time. - Including more details about the experimental setup, such as the specific materials used for the solar still's construction, the type of solar panels employed, and the water quality monitoring system used. - Provide a justification for not measuring other important water quality parameters, such as nitrates, pesticides, microbiological strains or heavy metals, which could provide a more comprehensive understanding of the solar still's performance. - Provide a more detailed analysis of the relationship between solar radiation and environmental conditions, as well as a comparison of the solar still's performance with other water purification methods. Additionally, provide a more detailed explanation of the anomalous results observed on the fifth day of the seawater experiment, including a more thorough analysis of the environmental factors that may have influenced the water yield. - Provide specific recommendations for future research and development, such as exploring different materials or energy sources for the solar still, or investigating the use of artificial intelligence or machine learning algorithms to optimize the system's performance.	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The manuscript addresses an important research area of global scientific interest and could have a significant impact on future studies of water purification processes, particularly those involving clean and renewable energy. - Provide critical discussions on the solar still's performance by comparing it with existing water purification processes. - Assess the use of different materials or energy sources for the solar still and the use of artificial intelligence or machine learning algorithms to optimize the system's performance.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	- Provide atleast 10 additional references to support the arguments and findings, which would help to strengthen the study and make its conclusions more impactful. - Update older references, which are more than 10 years old, to ensure that the study remains relevant	

-	and up-to-date in the field.	
Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	The manuscript displays a high level of clarity. However, some improvements should be considered in the introduction section, such as: - Rewrite sentence three to effectively convey the idea that a large proportion of portable water on Earth is inaccessible due to its location in ice caps and glaciers, and the limited freshwater available is either polluted, contaminated, or occurs as seawater, which is highly saline and not directly usable. - Rewrite sentence four: Highlight the fact that intensive energy requirements make the traditional water purification methods less sustainable..	
Optional/General comments	- Include data variation in figures 4 - 6 and table 3 using standard errors or standard deviations. - Discuss the limitations of the solar still	

PART 2:

	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)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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