

**Review Form 1.7**

Journal Name:	<b>Journal of Scientific Research and Reports</b>
Manuscript Number:	<b>Ms_JSRR_112784</b>
Title of the Manuscript:	<b>Design and Development of Solar Thermal-Photovoltaic Hybrid System for Cooking, Drying and Power Application</b>
Type of the Article	

**Review Form 1.7**

**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)
<p><b>Compulsory</b> REVISION comments</p> <p>1. <b>Is the manuscript important for scientific community Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</p> <p>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</p> <p>3. <b>Is the abstract of the article comprehensive?</b></p> <p>4. <b>Are subsections and structure of the manuscript appropriate?</b></p> <p>5. <b>Do you think the manuscript is scientifically correct?</b></p> <p>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></p> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p>	<p>1. The manuscript appears to be important for the scientific community, particularly in the field of renewable energy technologies. Here are some reasons:</p> <p>Relevance of the Topic: The manuscript addresses the design and development of a hybrid solar thermal-photovoltaic system for cooking, drying, and power generation. This focus on renewable energy and practical applications, especially in resource-limited regions, is relevant and contributes to the field of sustainable energy.</p> <p>Experimentation and Results: The manuscript presents experimental data and results from performance tests for cooking, drying, and electrical evaluations. Providing quantitative results and comparisons with conventional technologies adds value to the scientific community interested in solar energy and sustainable domestic applications.</p> <p>Technological Innovation: The integration of solar thermal and photovoltaic technologies in a hybrid system is an innovative approach. The presentation of performance and efficiency data contributes to the literature on renewable technologies and may inspire future developments.</p> <p>Practical Application: The inclusion of cooking and drying tests under real conditions demonstrates the practical application of the proposed system. This aspect can be beneficial for the scientific community interested in practical solutions for energy and food security challenges.</p> <p>In summary, based on the information provided, the manuscript seems to have relevance for the scientific community, particularly in the realm of renewable energy technologies and their practical implementation. However, a comprehensive evaluation would require a more detailed review of the content, considering factors such as originality, methodology, and specific contributions to existing knowledge.</p> <p>2. The title of the article, "Design and Development of Solar Thermal-Photovoltaic Hybrid System for Cooking, Drying, and Power Application", appears to be suitable. Here's why:</p> <p>Descriptive: The title effectively communicates the main focus of the article, indicating that it pertains to the design and development of a hybrid system that integrates solar thermal and photovoltaic technologies.</p> <p>Key Components Mentioned: The title specifies the intended applications of the hybrid system, namely cooking, drying, and power generation. This provides clarity on the system's multifunctional capabilities.</p> <p>Concise: The title is concise while encompassing the primary aspects of the research. It gives potential readers a clear idea of the content and purpose of the article without being overly lengthy.</p> <p>Keywords Included: Relevant keywords such as "solar thermal," "photovoltaic," and the specific applications (cooking, drying) are included in the title, which can enhance discoverability in academic databases and searches.</p> <p>Another suggestion: "Solar Hybrid System: Innovations in Cooking, Drying, and Power Generation". This title focuses on the innovation aspect of the solar hybrid system while still highlighting its applications in cooking, drying, and power generation. It provides a broad overview of the system's capabilities and could potentially draw interest from readers looking</p>	

Review Form 1.7

	<p>for innovative solutions in renewable energy technologies.</p> <p>3. The abstract of the article provides a good overview of the research, but it could be improved in a few aspects to make it more comprehensive:</p> <p>Clarity: The abstract is generally clear, but there are a few sentences that could benefit from slight rephrasing for improved clarity. For example, in the sentence "Solar thermal device which makes the most using infrared radiation out of the solar spectrum," it might be clearer to state how the solar thermal device utilizes infrared radiation.</p> <p>Structure: While the abstract covers the main components of the hybrid system and the key results, it might benefit from a clearer structure. Consider organizing it into distinct sections such as "Objective," "Methodology," "Results," and "Conclusion" to enhance readability.</p> <p>Metrics and Units: Including specific metrics and units in the results section would add precision. For instance, stating the maximum temperature reached in the cooking pot or the efficiency values with their respective units would provide a more detailed insight.</p> <p>Insights and Implications: The abstract could briefly touch upon the broader implications of the research and its potential impact on addressing energy and sustainability challenges.</p> <p>Keywords: While keywords are listed at the end, it might be helpful to incorporate them within the abstract itself to improve searchability.</p> <p>These suggestions aim to enhance the abstract's clarity, structure, and informativeness, making it more comprehensive for readers.</p> <p>4. I've carefully reviewed the provided content, and it appears that the manuscript does not include explicit subsections or a structured format. The information is presented in a continuous flow without clear section headings or subheadings. The absence of these elements might make it challenging for readers to quickly navigate and locate specific information within the manuscript.</p> <p>For improved clarity and organization, I would recommend the inclusion of distinct subsections that correspond to the different aspects of the study, such as "Introduction," "Material and Methods," "Results," "Discussion," and "Conclusion." This structured approach can enhance the manuscript's readability and assist readers in following the logical flow of the research. Each subsection can then be further divided into smaller parts as needed.</p> <p>The jump from numeral 1 "Introduction" to numeral 3 "Material and Methods" without an intervening numeral 2 may be an oversight or a formatting error in the manuscript structure. Including an intermediate numeral (such as "2. Literature Review" or "2. Background") would provide a more standard and complete structure, allowing for a more logical and understandable transition between the introduction and the materials and methods section.</p> <p>It is advisable to review the manuscript's structure to ensure that all elements are in place and follow a coherent sequence. The typical structure of an academic manuscript includes sections like Introduction, Literature Review, Methodology, Results, Discussion, and Conclusions. Ensuring that the structure is consistent and complete will enhance the overall presentation of the work.</p> <p>Additionally, the Introduction in the manuscript provides a general overview of the importance of solar cooking and hybrid technologies but could benefit from some adjustments to make it more comprehensive and effective:</p> <p><b>Broader Context:</b> Including a broader context to situate the significance of solar cooking and</p>	
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**Review Form 1.7**

	<p>hybrid technologies within the overall landscape of energy sustainability and the needs of resource-limited communities could enhance understanding. This can help readers better grasp the relevance of the study.</p> <p><b>Problem Statement or Gap:</b> It might be useful to incorporate a problem statement or a gap in knowledge that the study aims to address. This would highlight the research's necessity and motivate readers to continue reading.</p> <p><b>Research Objective:</b> Although it is mentioned that the study focuses on the design, development, and evaluation of a hybrid system, explicitly presenting the research objective or objectives could provide a clearer guide.</p> <p><b>Manuscript Structure:</b> Including a brief description of the manuscript's structure at the end of the introduction could give readers an overview of what to expect in the subsequent sections.</p> <p>Overall, the introduction could benefit from further expansion to establish a broader context, emphasize relevance, and guide readers toward the purpose and structure of the study.</p> <p>5. It can be observed and inferred that the citation style the author has chosen for the preparation of their manuscript is that of the Pan American Association of Psychology – APA; however, when making citations throughout the text, some errors are noticeable, and it is evident that this has been done manually rather than utilizing the full potential of the word processor, which is customary for this type of scientific or academic work. This detail is crucial because it is not just about including references to fill the list but declaring and citing them, even specifying the section consulted; that is, indicating the pages, among other details.</p> <p>6. The references provided cover relevant topics related to solar cookers, but there is room for improvement in terms of recency. While the references span from the 1980s to 2010, adding more recent sources could enhance the manuscript's currency and demonstrate awareness of recent advancements in the field. Consider incorporating references from the past decade (2010 onwards) to ensure a comprehensive and up-to-date representation of the current state of research in solar cooker technology.</p> <p>If the author has access to more recent literature or specific areas they would like to reinforce, incorporating recent publications is recommended and could further enrich the manuscript.</p>	
<p><b>Minor REVISION</b> comments</p> <p><b>1. Is language/English quality of the article suitable for scholarly communications?</b></p>	<p>Based on the provided excerpts and your previous feedback, the language and English quality of the article seem to be generally suitable for scholarly communication. However, it's important to ensure consistency in language usage and formatting throughout the entire manuscript. If there are specific sections or sentences where language improvements are needed, addressing them will contribute to the overall clarity and professionalism of the article. Additionally, running the full manuscript through a thorough proofreading process can help catch any remaining linguistic issues.</p>	
<p><b>Optional/General</b> comments</p>	<p>In the case of a research paper intended for publication in a scientific journal, local currency can be used in economic and financial studies as long as it is accompanied by its equivalent in EUR or USD.</p>	

[Review Form 1.7](#)

**PART 2:**

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

**Reviewer Details:**

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