

Journal Name:	Journal of Applied Chemical Science International
Manuscript Number:	Ms_JACSI_12308
Title of the Manuscript:	Formulation and Thermal Analysis of Waste-Derived PET-Rice husk composite: A sustainable Material Solution
Type of the Article	

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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 <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>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.</p>	<p>1. Your research work is good, you are done surface morphology like SEM, But you need to do additional surface morphology like TEM, EDAS, FTIR and XRD. You will do charecterization study with some modelling.</p> <p>2. You have to mention need for study and objective of study of your research work.</p> <p>3. Please focus on your graph , use error bar graph in your work.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>"Development and Thermal Characterization of Eco-friendly PET-Rice Husk Composites: A Sustainable Approach"</p>	
<p>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.</p>	<p>1. Please do some additional parameter of surface morphology and include your abstract and modify your result value.</p> <p>2. Brief summary of the objectives, methods, results, and conclusions.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Please focus on Materials and Methods for subsctions like</p> <p>Materials</p> <ul style="list-style-type: none"> • Description of PET waste and rice husk sources. • Information on any additives or compatibilizers used. <p>Composite Preparation</p> <ul style="list-style-type: none"> • Detailed procedure for preparing the PET-rice husk composites. • Mixing ratios and processing conditions. 	

	<p>Sample Fabrication</p> <ul style="list-style-type: none"> • Techniques used for molding and shaping the composite sample <p>Characterization Techniques</p> <ul style="list-style-type: none"> • Thermal Analysis <ul style="list-style-type: none"> ○ Differential Scanning Calorimetry (DSC) methods. ○ Thermogravimetric Analysis (TGA) methods. ○ Dynamic Mechanical Analysis (DMA) methods. • Mechanical Properties Testing <ul style="list-style-type: none"> ○ Tensile, flexural, and impact testing procedures. • Morphological Analysis <ul style="list-style-type: none"> ○ Scanning Electron Microscopy (SEM) methods 	
<p>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.</p>	<ol style="list-style-type: none"> 1. The comprehensive examination of both thermal and mechanical properties, alongside morphological analysis using Scanning Electron Microscopy (SEM), provides a holistic understanding of the material's behavior and performance. 2. The manuscript's detailed methodology and rigorous analysis demonstrate a high level of scientific rigor and technical proficiency, making a valuable contribution to sustainable materials research. 3. This manuscript is scientifically robust and technically sound because it thoroughly addresses the formulation and thermal analysis of waste-derived PET-rice husk composites through a systematic approach. 	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>⋮</p>	<p>Recency: The majority of the references should be recent (within the last 5-10 years) to reflect current advancements in the field.</p> <p>Relevance: Ensure that all references are directly related to the study's focus on PET-rice husk composites and sustainable material solutions.</p> <p>Diversity: Include a mix of foundational studies, recent advancements, and comprehensive reviews to provide a well-rounded background and context for your research.</p>	

<p><u>Minor REVISION</u> comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<ol style="list-style-type: none"> 1. Some sentences in the methods section are overly complex and could be simplified for better readability. 2. There are occasional grammatical errors, such as inconsistent use of tenses and misplaced commas. 3. A few technical terms are used without prior explanation, which might be confusing for readers not specialized in the field. 	
<p><u>Optional/General</u> comments</p>	<p>The manuscript presents a well-structured and comprehensive study on the formulation and thermal analysis of waste-derived PET-rice husk composites. The topic is highly relevant in the context of sustainable materials development and waste management. You please focus on additional study and do some modeling for your research work.</p>	

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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