

Review Form 1.7

Journal Name:	Journal of Pharmaceutical Research International
Manuscript Number:	Ms_JPRI_118473
Title of the Manuscript:	Green Synthesis of Xanthenes: Utilizing Sulfonated Fructose as an Efficient and Eco-Friendly Catalyst
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:

(<https://www.journaljpri.com/index.php/JPRI/editorial-policy>)

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PART 1: Review Comments

Title	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>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community?</p> <p>2. Is the title of the article suitable?</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes, the subsections and structure of the manuscript are appropriate but could benefit from additional subsections in the Introduction and Results and Discussion for better clarity and readability.</p> <p>Yes</p> <p>Yes</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>The English language quality is generally good but requires minor revisions for grammar, clarity, and conciseness.</p>	

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<p>Optional/General comments</p>	<p>Comments:</p> <ul style="list-style-type: none">• The title is concise and appropriately reflects the content of the manuscript. It emphasizes the green synthesis approach and the use of sulfonated fructose as a catalyst. <p>Abstract</p> <p>Comments:</p> <ul style="list-style-type: none">• The abstract effectively summarizes the key points of the manuscript.• However, it lacks specific numerical data (e.g., yields, reaction times) which could strengthen the abstract's impact. <p>Suggestions:</p> <ul style="list-style-type: none">• Include specific results, such as yield percentages and reaction times, to provide a clearer summary of the study's outcomes. <p>Introduction</p> <p>Comments:</p> <ul style="list-style-type: none">• The introduction provides a comprehensive background on xanthenes, their importance, and current synthesis challenges.• It could be more concise, particularly in the historical context section. <p>Suggestions:</p> <ul style="list-style-type: none">• Condense the historical background and focus more on the significance of the current study and the specific advantages of using sulfonated fructose. <p>Experimental Section</p> <p>Comments:</p> <ul style="list-style-type: none">• The experimental section is detailed, with clear descriptions of the materials, methods, and conditions used.• The preparation method for sulfonated fructose is well-described but could benefit from including a reaction scheme for visual aid. <p>Suggestions:</p> <ul style="list-style-type: none">• Add reaction schemes or flow diagrams to illustrate the synthesis process of sulfonated fructose and the target xanthenes.• Ensure all steps are described with precise quantities and conditions to allow reproducibility. <p>Results and Discussion</p> <p>Comments:</p> <ul style="list-style-type: none">• The results section is detailed and presents the data in a structured manner.• The discussion is thorough but could benefit from deeper comparative analysis with existing methods. <p>Suggestions:</p>	
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	<ul style="list-style-type: none">• Include more comparative data with previously reported methods to highlight the advantages of the new catalyst.• Discuss any observed limitations or potential challenges in the synthesis process. <p>Tables and Figures</p> <p>Comments:</p> <ul style="list-style-type: none">• Tables and figures are appropriately used to present data.• Some figures lack detailed captions, and tables could be more reader-friendly. <p>Suggestions:</p> <ul style="list-style-type: none">• Ensure all figures have comprehensive captions explaining the contents clearly.• Format tables to enhance readability, possibly by adding borders and shading to distinguish rows and columns. <p>Conclusion</p> <p>Comments:</p> <ul style="list-style-type: none">• The conclusion effectively summarizes the main findings and implications of the study. <p>Suggestions:</p> <ul style="list-style-type: none">• Mention specific future directions or potential applications of the research to provide a forward-looking perspective. <p>References</p> <p>Comments:</p> <ul style="list-style-type: none">• References are comprehensive and relevant but need to be checked for formatting consistency. <p>Suggestions:</p> <ul style="list-style-type: none">• Ensure all references are formatted according to the journal's guidelines.• Verify that all in-text citations are correctly matched with the reference list. <p>Specific Proofreading Comments</p> <ul style="list-style-type: none">• Abstract<ul style="list-style-type: none">• Replace "higher catalytic activity" with "higher catalytic efficiency."• Correct punctuation and grammatical errors, e.g., "including antibacterial antiviral and anti-inflammatory effects" should be "including antibacterial, antiviral, and anti-inflammatory effects."• Introduction<ul style="list-style-type: none">• Clarify the sentence: "Xanthenes are indispensable in organic synthesis and are also valued for their spectral properties as dyes in laser industries and fluorescent materials for detecting biological molecules."• Correct any typographical errors, e.g., "In this method, dibenzoxanthenes were prepared..." (consider rephrasing for clarity).• Experimental Section	
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	<ul style="list-style-type: none">• Ensure consistent use of units and symbols, e.g., "1 gr of sugar" should be "1 g of sugar."• Add missing details such as reaction temperatures and times where applicable.• Results and Discussion• Verify and correct the enhancement factor value if necessary.• Clarify any ambiguous statements, e.g., "The progress and completion time of the reaction were monitored using thin-layer chromatography (TLC)."• General• Conduct a thorough grammar and spell-check throughout the manuscript.• Ensure all chemical names and terms are used consistently and correctly. <p>Overall Recommendation</p> <p>With minor revisions for clarity, conciseness, and formatting, this manuscript presents significant findings that merit publication. The innovative use of sulfonated fructose as a green catalyst is a valuable contribution to the field of sustainable chemistry. Addressing the outlined comments will enhance the manuscript's readability and impact.</p>	
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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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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