Review Form 1.7

Journal Name:	**Asian Journal of Probability and Statistics**
Manuscript Number:	**Original Manuscript_AJPAS_117877**
Title of the Manuscript:	**SOME SECOND ORDER ROTATABLE DESIGNS CONSTRUCTED USING TRIGONOMETRIC FUNCTIONS**
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.journalajpas.com/index.php/AJPAS/editorial-policy)

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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		
1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)	Yes, the manuscript is important for the scientific community, particularly for researchers in the field of experimental design and statistical analysis. The development of new second-order rotatable designs using trigonometric transformations addresses a niche yet significant area of experimental methodology. These designs can be highly beneficial in optimizing response surfaces, which are widely used in various scientific and engineering disciplines for improving product yields and process efficiencies. By providing more efficient and theoretically sound designs, this research contributes to the advancement of experimental techniques and offers practical solutions for complex experimental setups.	
2. Is the title of the article suitable? (If not please suggest an alternative title)	Yes, the title of the article, "Some Second Order Rotatable Designs Constructed Using Trigonometric Functions," is suitable. It accurately reflects the content and focus of the manuscript. It clearly indicates that the study involves second-order rotatable designs and highlights the use of trigonometric functions in constructing these designs. This title will attract the appropriate audience interested in experimental design and statistical methods. However, it could be slightly more specific to enhance clarity, such as "Construction of Second Order Rotatable Designs Using Trigonometric Transformations."	
3. Is the abstract of the article comprehensive?	The abstract of the article is generally comprehensive, as it outlines the main objective, methodology, and significance of the study. It clearly states that the paper focuses on constructing new second-order rotatable designs using transformations of trigonometric functions and mentions the significance of these designs for spherical information contours and resource economy. However, there are areas where the abstract could be enhanced: 1. Specific Applications: Mentioning specific applications or fields where these designs could be particularly useful would help readers understand the practical relevance of the research. 2. Key Results: Including a brief mention of the key results or findings would provide a more complete overview of the study's contributions. 3. Implications: A short statement on the implications or potential impact of the research could highlight its importance to the scientific community more effectively.	
4. Are subsections and structure of the manuscript appropriate?	The structure and subsections of the manuscript appear to be appropriate for a research paper on constructing second-order rotatable designs. The manuscript follows a logical progression from introduction to methods, results, discussion, and conclusions.	
5. Do you think the manuscript is scientifically correct?	Based on the detailed examination of the provided sections and the mathematical rigor involved in the manuscript, the manuscript appears to be scientifically correct. In conclusion, the manuscript seems scientifically sound and correct, with a well-structured approach and detailed methodologies that support the construction of new second-order rotatable designs.	
6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.	The references in the manuscript are comprehensive and cover key foundational works in the field of experimental design and response surface methodology. They include seminal papers and books by influential authors such as Box, Hunter, Bose, and Draper, which are essential for understanding the context and development of rotatable designs. However, to ensure the references are both sufficient and recent, it's important to include more recent works that reflect the latest advancements and applications in the field.	
(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)		

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Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	The language and English quality of the article are generally suitable for scholarly communication, but there are areas where improvements can be made to enhance clarity, readability, and overall professionalism.	
Optional/General comments	Overall Assessment: • Strengths: ○ The study is methodologically sound with detailed mathematical formulations. ○ The introduction and methods sections are well-referenced and thorough. ○ The construction of new designs is clearly documented. • Areas for Improvement: ○ Expand the abstract to include potential practical applications. ○ Add visual aids to the results section for better illustration of design points. ○ Enhance the discussion section with a deeper interpretation of results and comparison to existing methods. ○ Include practical recommendations for extending the study to more factors. Recommendation: With some minor revisions to improve clarity and contextual depth, this manuscript has the potential to make a valuable contribution to the field of experimental design. I recommend accepting the paper with revisions focusing on the discussion and visual representation of results.	

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:

Name:	**Andrea Piroddi**
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