

Review Form 3

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| Journal Name: | Asian Journal of Chemical Sciences |
| Manuscript Number: | Ms_AJOCS_124089 |
| Title of the Manuscript: | Synthesis and characterization of mononuclear complexes of metals transition of 1,3-bis-((5-methyl-1H-imidazol-4-yl) methyleneamino) propan-2-ol |
| Type of the Article | Research paper |

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. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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Important Policies Regarding Peer Review

Peer review Comments Approval Policy: <https://r1.reviewerhub.org/peer-review-comments-approval-policy/>

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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 synthesis of molecules with unique properties is essential for driving progress in fields such as drug development, materials science, and chemistry. By designing new molecules, scientists can investigate previously unknown chemical behaviors, which may result in breakthrough medications, eco-friendly materials, or more effective catalysts. These innovative molecules have the potential to tackle pressing challenges like drug resistance, environmental preservation, and energy efficiency, expanding the frontiers of current technologies and offering solutions to critical global problems. | |
| Is the title of the article suitable? (If not please suggest an alternative title) | I suggest the title like this: Synthesis and characterization of mononuclear transition metal complexes with 1,3-bis-((5-methyl-1H-imidazol-4-yl)methyleneamino)propan-2-ol ligand. | |
| 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 comprehensive nonetheless some suggest: I prefer the word mode to the word fashion in crystallography: sentence 1 and 3. I suggest delete the sentence its hydroxy group remaining free and non-deprotonated . It's clear if the ligand coordinate as neutral. Reshape the last sentence. | |
| Are subsections and structure of the manuscript appropriate? | Yes | |
| 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. | This manuscript appears to be scientifically robust and technically sound due to its clear methodology, well-defined experimental procedures, and thorough data analysis. The research is grounded in established scientific principles, with the synthesis and characterization of compounds following standard protocols. The data presented are consistent with expected chemical behavior, and appropriate techniques, such as spectroscopy or crystallography, have been employed for validation. Additionally, the manuscript offers a logical interpretation of the results, supported by relevant literature, making it a reliable contribution to the field. | |
| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. | Yes, some references are recent and other no, but it's ok Yes I suggest additional references in Introduction section, because it is short compared to the importance of the subject. | |

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| Minor REVISION comments | | |
| Is the language/English quality of the article suitable for scholarly communications? | Yes | |
| Optional/General comments | <p>I agreed to review this article within such a short timeframe because the work presented falls directly within my area of expertise. Some other points to accurate:</p> <ol style="list-style-type: none">1. In the abstract, the authors talk about the geometry of the copper cation because it is very important, but with that, we do not find any figure that illustrates the coordination sphere of this cation nor the octahedron.2. A figure of the octahedron formed by the copper cation must be added3. The Introduction section is short compared to the importance of the subject.4. Keywords: Crystal structure; manganese; cobalt; nickel; copper; zinc; square pyramidal. I don't see any importance, any attraction in these keywords, they need to be changed and the value of the paper put into these words.5. In part : X-ray structure determination of complex 4, there is one structure and not many structures, so correct the word structures by structure in all the section. | |

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) |
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| Are there ethical issues in this manuscript? | <i>(If yes, Kindly please write down the ethical issues here in details)</i> | |

Reviewer Details:

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| Name: | Ouahida Zeghouan |
| Department, University & Country | Algeria |