

Review Form 3

Journal Name:	International Research Journal of Pure and Applied Chemistry
Manuscript Number:	Ms_IRJPAC_128694
Title of the Manuscript:	Synthesis, Spectroscopic Studies and Crystal Structure of a New Co (III) Complex derived from 2-((2-hydroxyethylimino)methyl)phenol (H2L)
Type of the Article	Research 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. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: 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. A minimum of 3-4 sentences may be required for this part.	This manuscript contributes significantly to the scientific community by presenting the synthesis, characterization, and crystal structure analysis of a novel Co(III) complex derived from a Schiff base ligand. The detailed spectroscopic studies and crystallographic data not only enrich the understanding of cobalt coordination chemistry but also provide valuable insights into the structural and electronic properties of Schiff base metal complexes. These findings are particularly important given the diverse applications of such complexes in catalysis, material science, and bioinorganic chemistry. Moreover, the exploration of intermolecular hydrogen bonding in the crystal structure enhances knowledge regarding structural stabilization, which could be pivotal for future research in molecular engineering and materials design.	
Is the title of the article suitable? (If not please suggest an alternative title)	is clear and descriptive	
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.	It is enough	
Is the manuscript scientifically, correct? Please write here.	yes it is enough and correct	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references in the manuscript are mostly sufficient and include relevant studies to support the findings. They cover key areas such as Schiff base ligand synthesis, coordination chemistry, and structural characterization of cobalt complexes. However, there are areas where the references could be updated or expanded to reflect recent advancements: While some references are recent (2020-2021), a few date back more than a decade. Incorporating more recent studies, particularly those published after 2020, could provide a more updated context for the work. Suggested Additional References: 10.30492/ijcce.2023.2000120.5971 https://doi.org/10.18596/jotcsa.373904 https://doi.org/10.1002/jbt.22969 Incorporating these or similar references would make the bibliography more robust and provide a	

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	stronger foundation for the study's significance.	
Is the language/English quality of the article suitable for scholarly communications?	<p>The language and English quality of the article are generally suitable for scholarly communication, as it uses technical terms and academic structures appropriate for a scientific manuscript. However, there are areas where clarity, flow, and grammar could be improved to enhance readability and professionalism. Here are specific observations and suggestions:</p> <p>Some sentences are lengthy and could be split into shorter, more concise sentences. Example: "The complex signals observed in the range [6.87–7.44] ppm are assigned to the aromatic protons." could be revised for smoother flow.</p> <p>Avoid repeating details unnecessarily, such as crystallographic space group information, which appears in both the abstract and main text.</p> <p>Simplify overly complex sentences to make the content more accessible. Phrases like "pointed at" (e.g., "The band pointed at 1632 cm⁻¹") can be replaced with "observed at" for a more scholarly tone.</p> <p>Improve transitions between sections to maintain a cohesive narrative. Original: "The band pointed at 1632 cm⁻¹ is assigned to the C=N vibration of the imine group." Revised: "The band observed at 1632 cm⁻¹ corresponds to the C=N stretching vibration of the imine group."</p> <p>The language is adequate for publication but would benefit from careful editing to address minor grammatical issues, improve flow, and enhance clarity. This will ensure the manuscript meets the high standards expected in scholarly communication.</p>	
Optional/General comments	This manuscript provides a meaningful contribution to coordination chemistry and is suitable for publication after addressing minor revisions to enhance clarity, flow, and broader relevance.	

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>	

Reviewer Details:

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