

Review of: "Synthesis and Antibacterial Screening of Cefradine Schiff Bases and Their Metal Salts"

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Potential competing interests: No potential competing interests to declare.

I have reviewed the manuscript entitled "Synthesis and Antibacterial Screening of Cefradine Schiff Bases and Their Metal Salts."

The authors have synthesized new metal complexes of Schiff bases and characterized them by IR and NMR spectroscopic methods. Furthermore, the bactericidal effects of Schiff bases and their metal(II) complexes have been tested. The data support the preparation of the compounds, although the lack of X-ray analysis is a negative point. Overall, the manuscript looks good, but a significant amount of improvement is needed before further consideration. So, I am recommending a major revision. The comments are:

1. The main objectives and their novelty should be summarized. Should add more results in the introduction part related to the significance of Schiff bases. Some recent work should be cited in this work.

DOI: [10.2174/2210299X01666230721153433](https://doi.org/10.2174/2210299X01666230721153433); DOI: [10.1016/j.jics.2023.100945](https://doi.org/10.1016/j.jics.2023.100945); DOI: [10.14233/ajchem.2022.23634](https://doi.org/10.14233/ajchem.2022.23634) ; DOI: [10.14233/ajchem.2021.23050](https://doi.org/10.14233/ajchem.2021.23050)

2. Redraw Scheme 1: Show the coordination site.

3. In the discussion part, ¹³C NMR data should be included and explained in detail.

4. Include the IR, ¹H, and ¹³C NMR spectra of representative compounds in the revised manuscript.

5. Compare the antibacterial activities of these compounds with other compounds, citing the following references. DOI: [10.1016/j.molstruc.2023.135670](https://doi.org/10.1016/j.molstruc.2023.135670); DOI: [10.1016/j.jaubas.2016.05.003](https://doi.org/10.1016/j.jaubas.2016.05.003) etc.

7. Most of the references that the author referred to are old, and many of them must be replaced and updated with the above references.

8. The English language of the manuscript should be carefully checked, and some typos should be corrected.