Review of: "Synthesis of Nickel Nanoparticles Using Ionic Liquid-Based Extract from Amaranthus viridis and Their Antibacterial Activity"

Ramesh Sabu Gani[1]

1 Department of Industrial Chemistry, Mangalore University, India

Potential competing interests: No potential competing interests to declare.

REVIEWER RESPONSE LETTER

Manuscript Number:

Full Title: Synthesis of Nickel Nanoparticles Using Ionic Liquid-Based Extract from Amaranthus viridis and Their Antibacterial Activity

Reviewed Date: 12-10-2024

Comments to the Author:

This article attempted to develop synthesis of Nickel Nanoparticles using liquid-based extract from Amaranthus viridis, and further evaluated for their antibacterial activity.

This work can publish with the fallowing minor revisions

1. In the Introduction section, the author can provide further current references pertaining to importance of Amaranthus viridis and research gap, also why you have chosen this plant and how this plant extract is better than other plant extract with respect to antibacterial activity. In the Introduction section, rationality must be emphasized.

2. In the material section, which standard drug have you used to compare with your results

In addition to that table was missing; you can provide all anti bacterial data in the table along with standard drug, comparative results and discussion need to be done.

Amaranthus viridis source you mentioned as Pakistan Local Market, if possible can write source of location exactly where this plant is available.

3. While discussing about results and discussion author need to compare with other reference, supporting evidence is required

4. You have written Figure 4, and Fig. 5(B), Figure 5 (A) which format is correct, let can refer journal guidelines accordingly you can write Figure and its number

5. Nickel nitrate is the inorganic compound can write as a Ni $(NO_3)_2$ not as a Ni (NO3)2

6. While discussing about alkyl C-H stretching vibrations, you can write two values symmetric stretching and asymmetric stretching for example aliphatic C-H stretching vibration exhibited two peaks at 2967cm^{-1} and 2890cm^{-1}

2. If possible In the results and discussion section author can write mechanism of action of Nickel nano particles with respect to Staphylococcus aurous and Escherichia coli, ref are available you can add reference also about importance of nickel nanoparticles to determine anti-bacterial activity

.

4. Anti-bacterial activity relationship study should be included in the result and discussion section to further investigate this relationship.