

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

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Potential competing interests: No potential competing interests to declare.

The paper entitled 'Synthesis of Nickel Nanoparticles using Ionic Liquid Based Extract from *Amaranthus Viridis* and Their Antibacterial Activity' has been reviewed carefully. The bioactive components of *Amaranthus viridis* are extracted in the present study using 1-ethyl-3-methyl imidazolium acetate [C3MIM] Ac and a microwave. The extract is further used for the synthesis of Ni NPs. The study is extended further for investigation of its antibacterial activity against *Aeromonas hydrophilia*, *Staphylococcus aureus*, and *Escherichia coli*. The following queries need to be clarified

1. Why is the ionic liquid being used in the title? I think it should not be there. The title should be modified, and similarly, it should be removed from the entire text.
2. Has any reproducibility study been done? If not, it should be done.
3. The abstract should be rewritten.

During revision, the following references should be considered and cited at appropriate places:

[Ultrasonic-assisted biosynthesis of ZnO nanoparticles using *Sonneratia alba* leaf extract and investigation of its photocatalytic and biological activities](#), Journal of Cluster Science, 1-17 (2022)

[Process optimization for the synthesis of silver \(AgNPs\), iron oxide \(\$\alpha\$ -Fe₂O₃NPs\), and core-shell \(Ag-Fe₂O₃CNPs\) nanoparticles using the aqueous extract of *Alstonia scholaris*: A ...](#)

The Open Materials Science Journal 12 (1) (2018)

[Synthesis of new \$\alpha\$ -aminophosphonates using nanoscale nickel-based metal–organic framework as a heterogeneous catalyst and their antibacterial activity](#) Applied Organometallic Chemistry 34 (2), e5317 (2020)

[Biogenesis synthesis and characterization of silver nanoparticles \(AgNPs\) using the aqueous extract of *Alstonia scholaris*: a greener approach](#) Micro and Nanosystems 7 (1), 49-54 (2015)

[Novel sonochemical green approach for synthesis of highly crystalline and thermally stable barium sulphate nanoparticles using *Azadirachta indica* leaf extract](#), Bulletin of Materials Science 42, 1-9 (2019)

[Green synthesis of silver nanoparticles using *Tabernaemontana divaricata* and in-vitro cytotoxicity investigation against](#)

human lung adenocarcinoma, INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES AND RESEARCH 8 (12), 5100-5110 (2017)