

## **Abstract**

The unique chemical and physical properties of nanoparticles, like their Nano size and high surface-to-volume ratios, will enable their employment in a variety of future applications. This article will discuss the production of silver nanoparticles from ginger (*Zingiber Officinale* Roscoe), which has several medical uses. Silver nanoparticles generated from ginger are then detected by infrared and confirmed by the spectroscopic UV-Vis method. Ag-NPs are analyzed qualitatively using a UV-Vis spectrophotometer. The absorption peak in UV visible spectroscopy is almost apparent between 290 and 430 nm. Specificity, linearity, accuracy and precision are the parameters used to validate Ag-NPs. Ag-NPs' antibacterial action is their primary biological significance. Using silver nanoparticle stain in bacterial culture verifies the antimicrobial activity of the particles, and the action of the nanoparticles prevents 80% of the total deadly content from surviving. Because silver nanoparticles can cause apoptosis, they also work as an anticancer medication and are a viable option for treating infectious diseases.