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**A STUDY OF PROPERTIES, APPLICATION OF SILVER NANOPARTICLES
TOWARDS GREEN SYNTHESIS METHOD**

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ABSTRACT

Synthesis may be done biologically, mechanically, and chemically. Biological synthesis is most successful and convenient since it is cost-efficient and eco-friendly; it also produces nanoparticles of a consistent size. Even though several studies have been done in this field, relatively little study has been done on the green production of silver nanoparticles from Cinnamon zeylanicum. Using a green method, this study investigates experimentally the production of silver nanoparticles (AgNPs) from Cinnamomum zeylanicum plant extract, which is then characterized using a UV-Spectrophotometer, XRD, FTIR, AFM, and a SEM microscope. Double beam UV spectrophotometer scanning range 200–800 nm was used to monitor the production of silver nanoparticles and the maximum absorption at 460 nm showed the existence of AgNPs.