ABSTRACT

A relatively new engineering discipline called green chemistry aims to address sustainability at the molecular level. Utilizing *Leea asiatica* and the co-precipitation method, zinc and manganese acetate in hydrate form are used as precursors to create Zn and Mn oxide NPs. First, leaf extract from the Leea asiatica plant was used to produce Zn and Mn oxides. Leaf extract is a reducing agent. Through the use of FTIR, UV-VIS spectroscopy, and PL, the generated NPs were identified. then use the OD technique to assess its antibacterial effectiveness. In the final stages of synthesis, chitosan and synthesized NPs doped with doxorubicin were used as stabilizing agents, and then the potential against cancer cells was examined to determine how effective doxorubicin was for treating cancer.