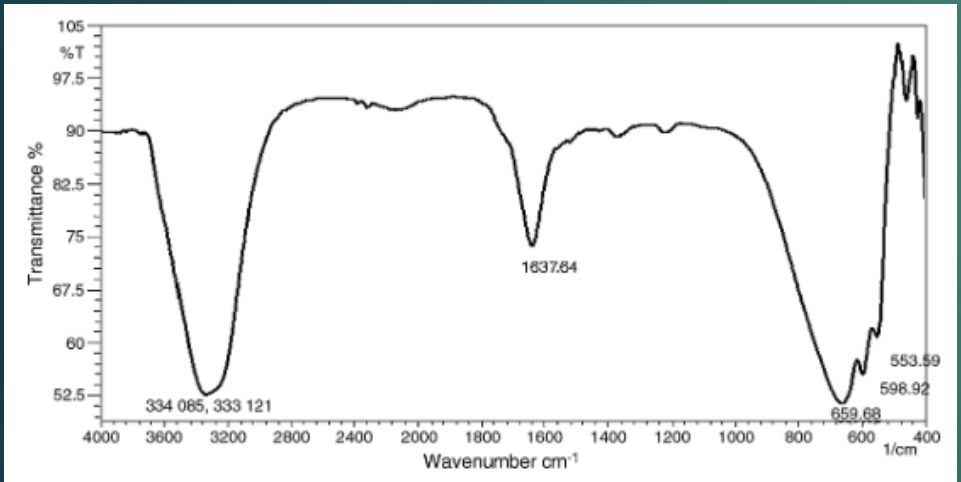
Biosynthesis of PVA encapsulated silver nanoparticles

*In this work they use silver nanoparticles synthesized with Ocimum sanctum leaf extract at room temperature.

*These particles were encapsuled with polyvinyl alcohol (PVA) polymer matrix.

*They use FTIR to identify the functional groups present in the colloidal form of the PVA embedded silver nanoparticles.

RESULTS



*The FTIR method is important to determine the Internal structure and the intra-molecular interaction between PVA and filler.

*The peaks were observed at 3340 cm^{-1}, 1637 cm^{-1} , $659cm^{-1}$ to 553 cm^{-1}. They indicates that the peak at 3340 cm^{-1} shows the prescence of hydrogen bond between the PVA polymer and leaf causing hydroxylamine (OH/NH_2)

"Chandran, S., Ravichandran, V., Chandran, S., Chemmanda, J., & Chandarshekar, B. (2016). Biosynthesis of PVA encapsulated silver nanoparticles. Journal of applied research and technology, 14(5), 319-324."