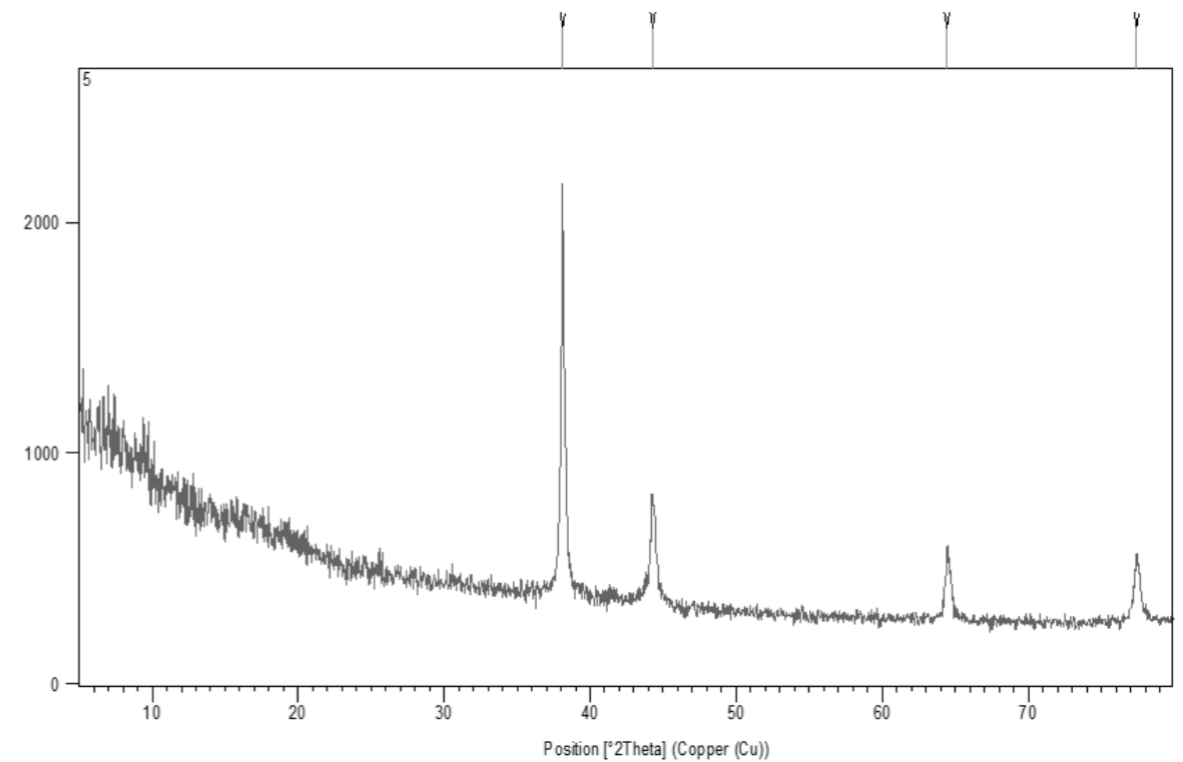


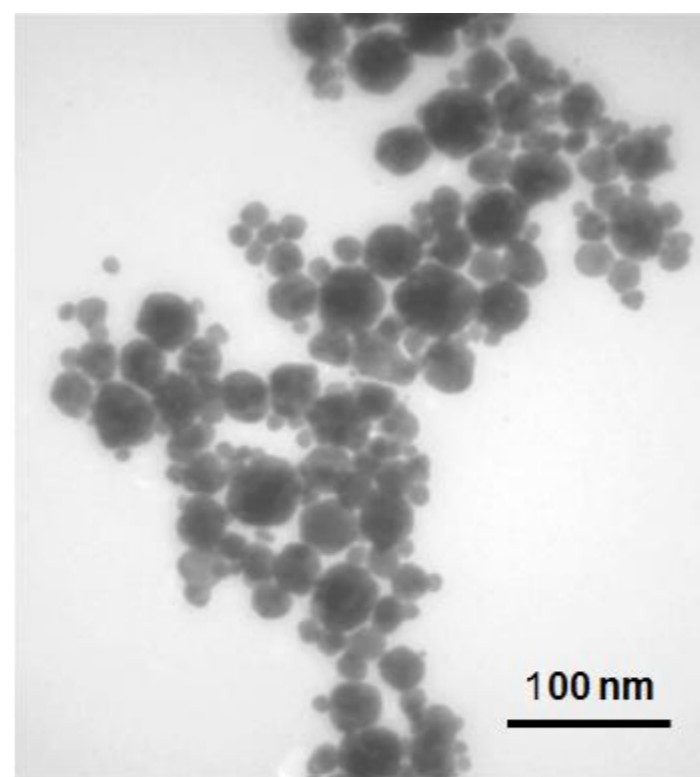
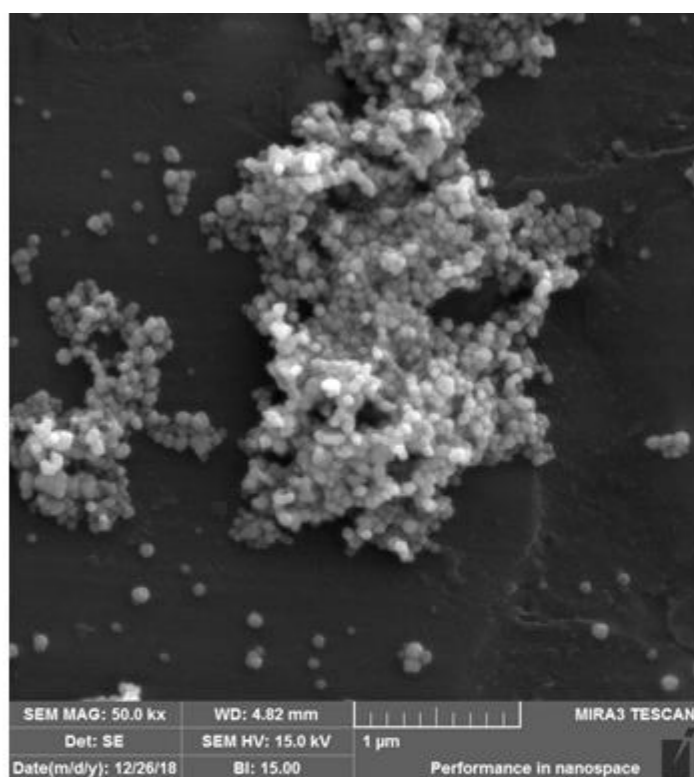
## Silver nanoparticles SNP5

The area of nanoparticles research has witnessed tremendous growth specially nanoparticles of noble metals which are a great interest today.

**Silver nanoparticles**, generally smaller than 100 nm and contain 15–20,000 silver atoms, have distinct physical, chemical and biological properties compared to the bulk material. The optical, thermal, and catalytic properties of silver nanoparticles are strongly influenced by their size and shape. This nanoparticles have grate application in microelectronics and also, become the most widely used sterilizing nanomaterials in consuming and medical products due to its antimicrobial ability.



The X-ray diffraction analysis which indicates the FCC structure of SNP5.



The SEM image of colloidal SNP51 and TEM image of powder SNP5 which indicate its spherical shape.



Colloidal



Powder

### Properties of SNP5:

Form	Color	Particle shape	Particle size (nm)	Concentration
Water base Colloid	olivaceous	spherical	20-30	2000 ppm
powder	gray	spherical	10-50	>99%

### Consideration:

Colloidal SNP51 stabilized with PVP should be kept in cool and dry place and avoid direct light. To disperse SNP5 powder use ultra-sonication.

