



# GREEN SYNTHESIS OF SILVER NANOPARTICLES FROM HYGROPHILA AURICULATA AND ENHANCING THEIR ANTICANCER ACTIVITY THROUGH BIODEGRADABLE CARRIERS

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## FINDINGS OF THE PROPOSED RESEARCH

Classification	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Asterids
Order:	Lamiales
Family:	Acanthaceae
Genus:	<i>Hygrophila</i>
Species:	<i>auriculata</i>

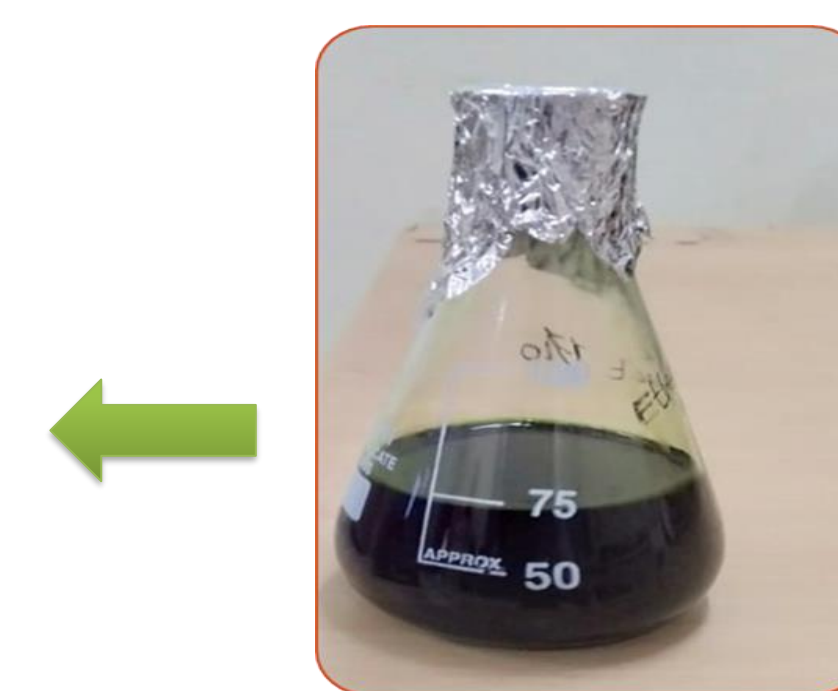


*Hygrophila auriculata*



### QUALITATIVE ANALYSIS

S.No.	Qualitative analysis	Ethanollic leaf	Ethanollic stem	Methanollic leaf	Methanollic stem
1	Carbohydrates test	+	+	+	+
2	Tannins test	-	-	-	-
3	Saponins test	-	-	-	-
4	Flavonoids test	+	+	+	+
5	Alkaloid test	-	-	-	-
6	Quinones test	-	-	-	-
7	Cardiac glycosides test	+	+	-	-
8	Phenols test	+	-	+	-
9	Coumarins test	-	+	+	+
10	Phlobatannins test	-	-	-	-
11	Antraquinones test	-	-	-	-
12	Glycosides	-	-	-	-
13	Terpenoids	+	+	+	+
14	Steroids and Phytosteroids	+	-	-	-

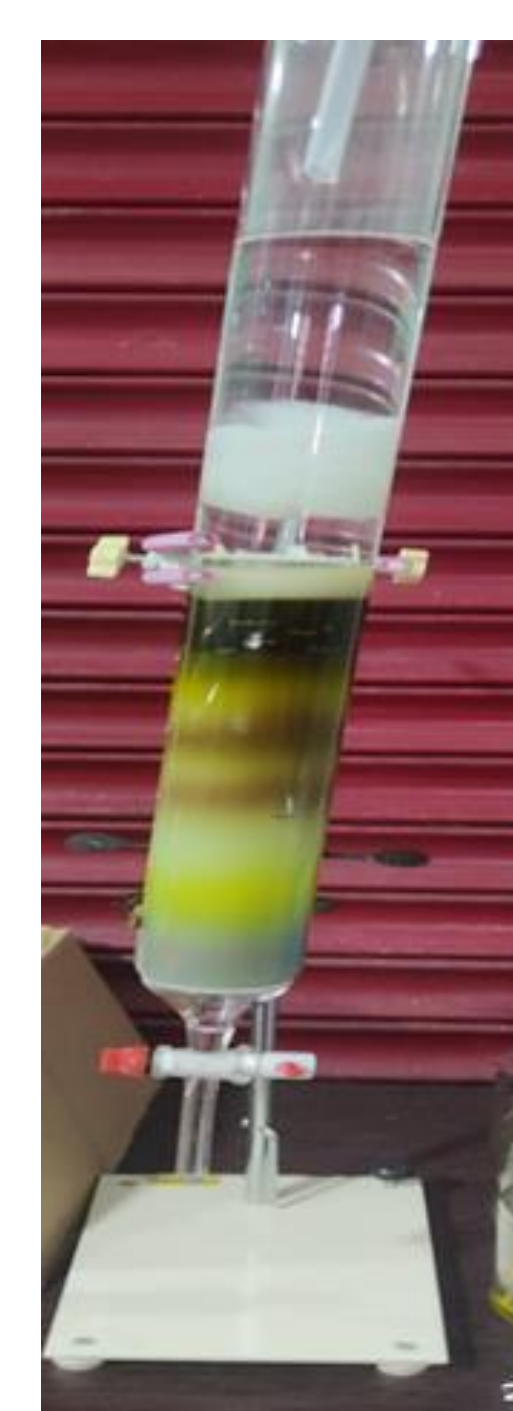


**ROTARY VACUUM  
EVAPORATION**

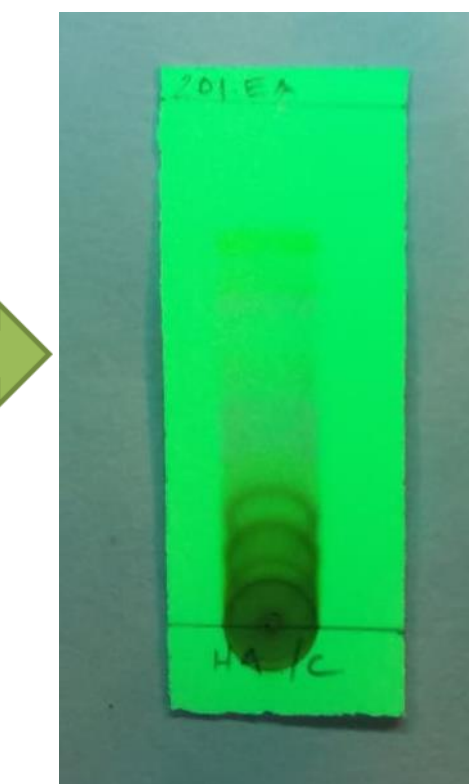
**SOXHLET  
EXTRACTION**

### QUANTITATIVE ANALYSIS

Extracts	Quercetin equivalence for plant extracts (in µg/mg)	Gallic acid equivalence for Plant extracts (in µg/mg)
Ethanollic leaf	11.98	8.06
Methanollic leaf	7.23	3.12
Ethanollic Stem	8.58	4.94
Methanollic Stem	11.85	6.29



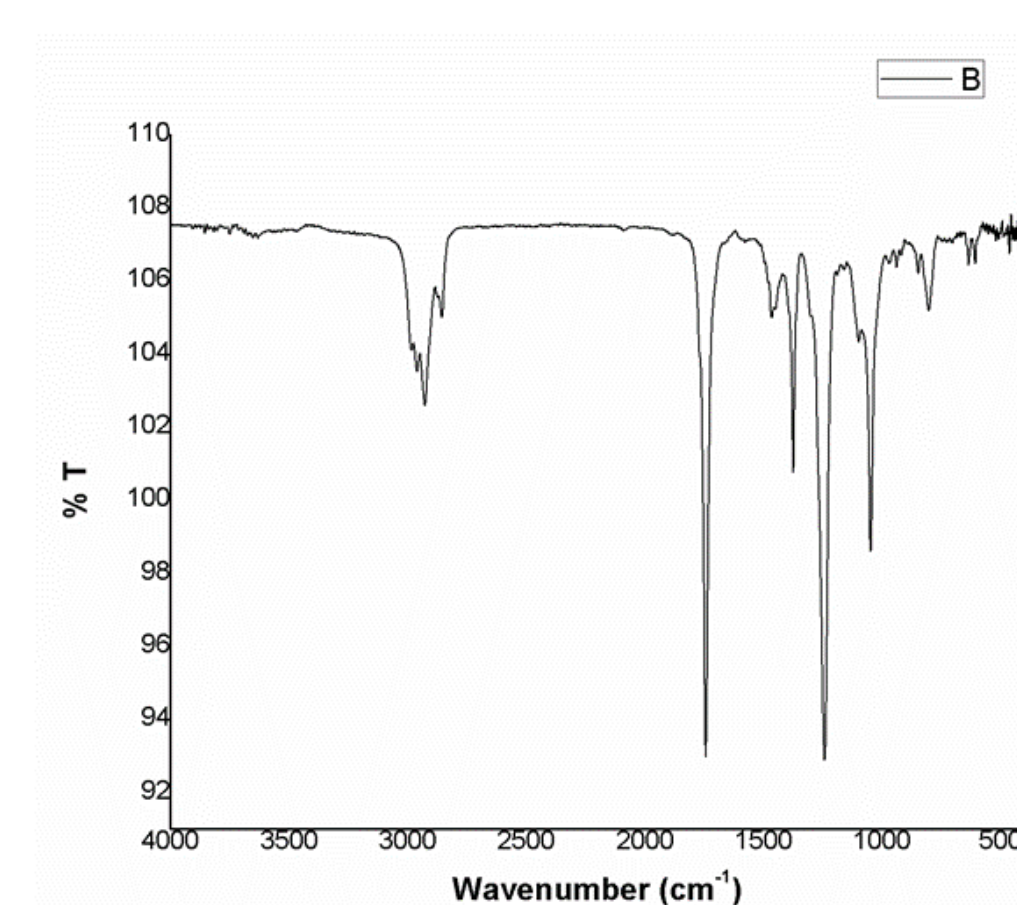
**COLUMN CHROMATOGRAPHY**



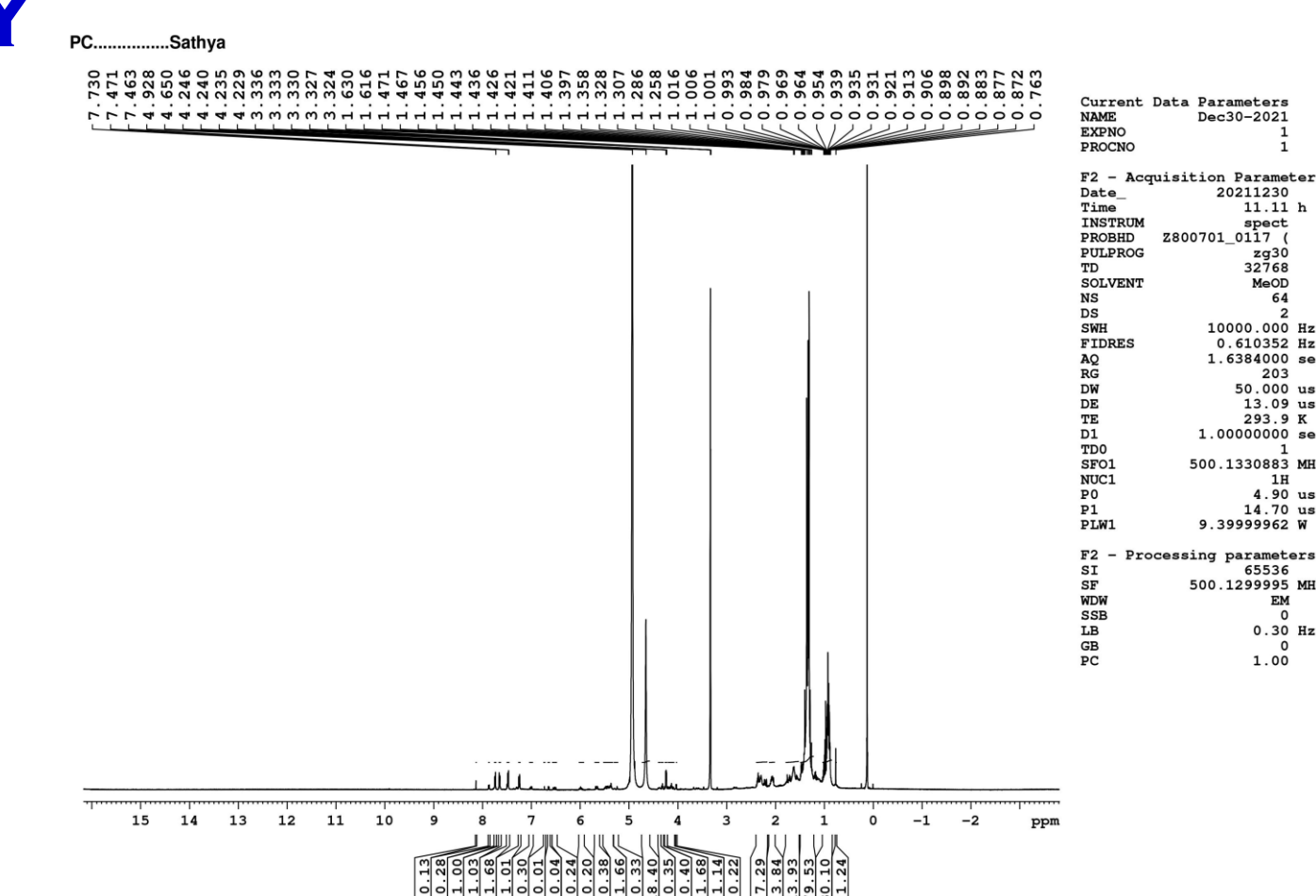
**TLC**



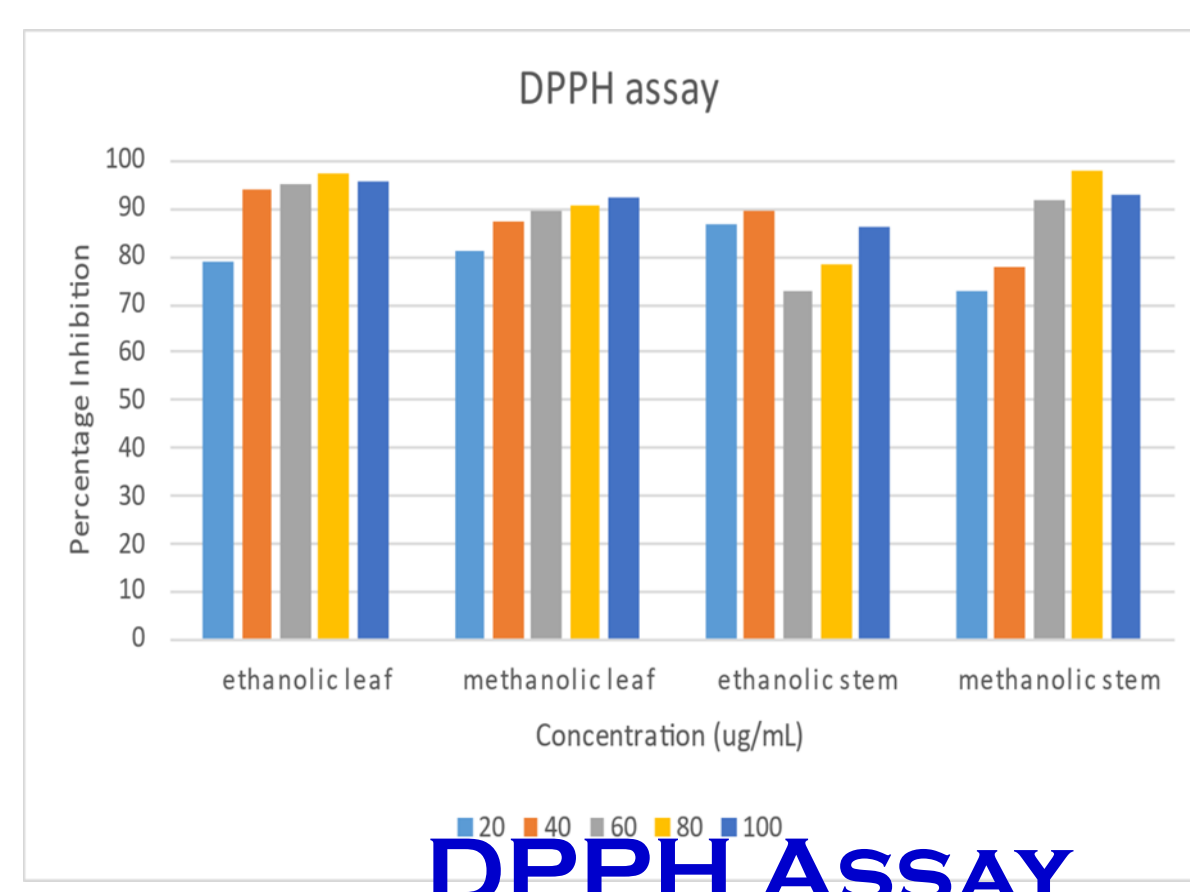
**HPTLC**



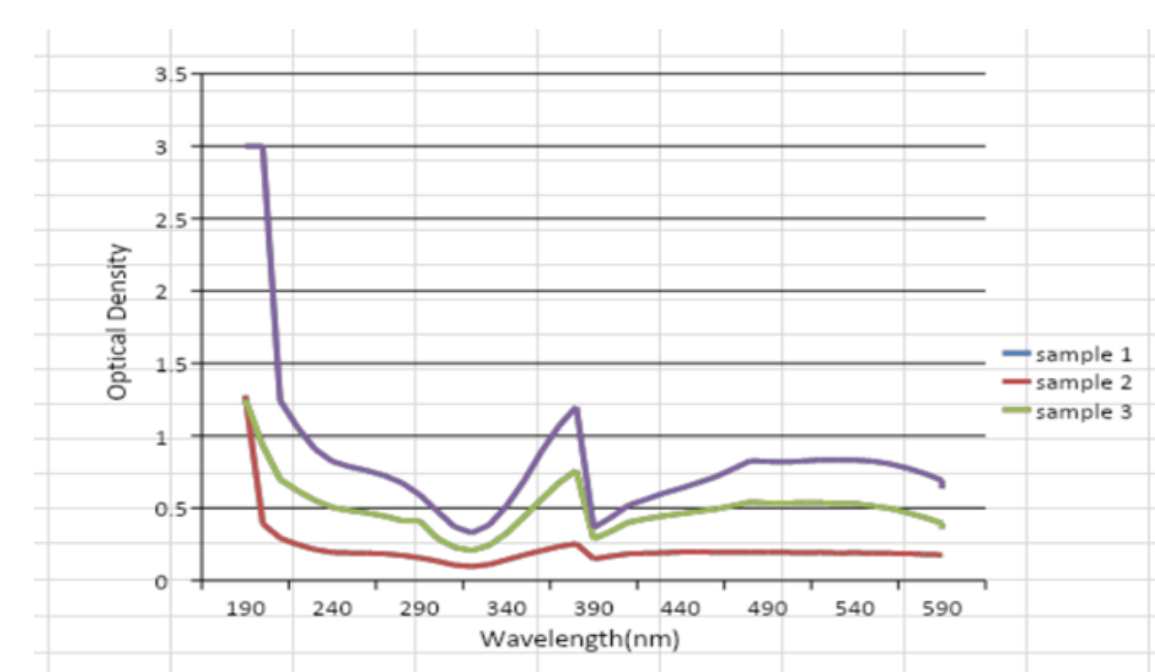
**FTIR ANALYSIS**



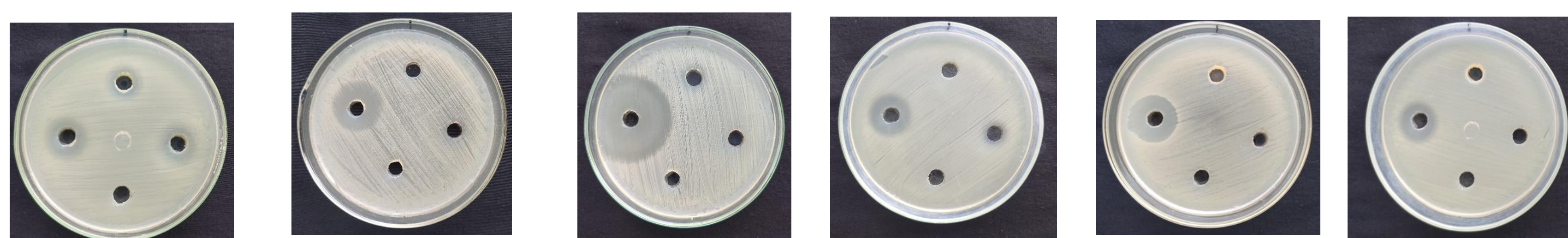
**NMR ANALYSIS**



**DPPH ASSAY**



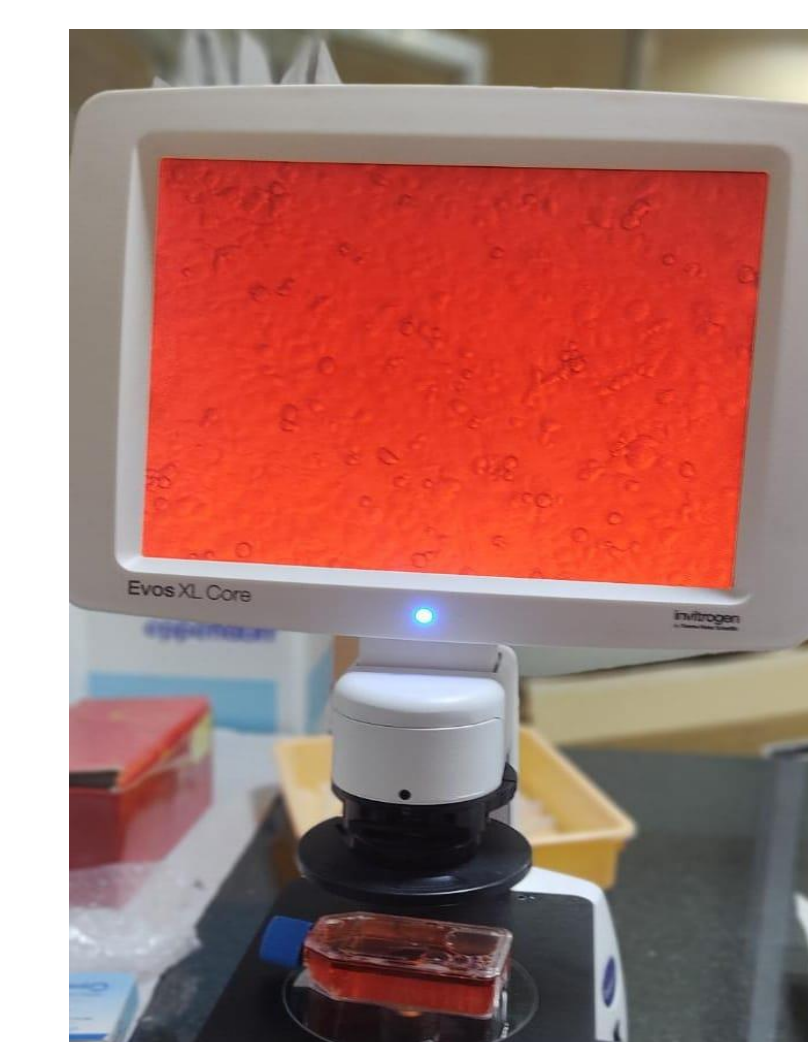
**UV SPECTRUM OF  
SILVER NANOPARTICLES**



**ANTI MICROBIAL ACTIVITY OF THE CRUDE EXTRACTS  
BY AGAR DIFFUSION ASSAY**



**PC3**



**DU145**

**PROSTATE CANCER CELL LINES**