

Sri GVG Visalakshi College for Women (Autonomous), Udumalpet.

Affiliated to Bharathiar University

Accredited at A+ Grade by NAAC (Fourth Cycle)

An ISO 9001:2015 Certified Institution

Udumalpet, Tamilnadu.

DEPARTMENT OF PHYSICS

**Industrial visit to Alagappa University, Karaikudi organised under
DBT Star College Scheme**

2019-2020		
Date	Place of Visit	No. of Beneficiaries
04.09.2019	Department of Physics, Alagappa University, Karaikudi	52 B.Sc. Physics Students

Sri GVG Visalakshi College for Women (Autonomous), Udumalpet.

Affiliated to Bharathiar University
Accredited at A+ Grade by NAAC (Fourth Cycle)
An ISO 9001:2015 Certified Institution
Udumalpet, Tamilnadu.

DEPARTMENT OF PHYSICS
Minutes of the Industrial Visit

91

04.09.2019

Industrial Visit to Alagappa University

Alagappa University provided a golden opportunity to its students of B.Sc Physics to visit Laboratory of Physics & University Science Instrumentation centre (USIC) on 4th September 2019. The main objective of visit was to provide a scientific platform to exchange the information in higher studies. Dr. M. Sivakumar Assistant Professor of Physics, Alagappa University welcomed the faculties and students and facilitated the visit. Students were visited thin film lab, Solid State Ionics lab, Melt growth lab, Solution growth lab and USIC.

Research scholars from Alagappa University shared their knowledge with the students and explained about the various techniques and processes used in preparation of thin films, nanoparticles, polymer electrolyte film and various crystal growth techniques. Students were taken to specialized sections where these are performed and got a chance to understand the functioning of all the latest and updated instruments used to perform the analysis such as XRD, AFM, VSM, UV, PL, thickness measurement analyser, SEM & TEM techniques.

The students showed their interests and actively participated in the visit and it was an interactive forum for exchange of new knowledge and opportunities for stimulating young minds
No. of Beneficiaries : 52

B.A. /
Department Coordinator.

Sri GVG Visalakshi College for Women (Autonomous), Udumalpet.

**Affiliated to Bharathiar University
Accredited at A+ Grade by NAAC (Fourth Cycle)
An ISO 9001:2015 Certified Institution
Udumalpet, Tamilnadu.**

DEPARTMENT OF PHYSICS

IV REPORT

An IV was arranged by the Department of Physics to Alagappa University, Karaikkudi on 04 September 2019.

The main motto of this IV was to learn about the synthesis of nanoparticles in different ways and their characterisation techniques.

As we entered the Alagappa Campus, we were delightful to see such a large campus full of educational institutions. There were Engineering colleges, Polytechnic colleges, Arts and Science colleges, Kendriya Vidyalaya Karaikkudi and many.

We reached the Science block of the University around 10:00 am. We were welcomed and explained about the University and the Physics Department.

We could find many different labs for different types of nanoparticle synthesis. All the students were split into three batches and visited different laboratories.

Firstly we visited the characterisation lab where we studied about the working of a surface profilometer, UV visible, MicroAuto lab.

Then we went to Thin film coating lab and learnt about CVD instrument, different methods of thin film coating like electrode deposition, chemical bath spin coating, dip coating and spray coating. Other than Hot air oven, muffle furnace and microwave oven, we also learnt about Tubular furnace which is used to get desired compound by passing the required gas in it while the drying process goes on. In another thin film lab, we saw different oven, spin coaters and pH measuring instrument.

In the next lab we saw tubular furnace, box furnace for annealing purpose, ultrasonicator, water bath, centrifuges and oven. A fumehood was setup at that laboratory to suckout the gases emitted.

The next lab consisted Physical vapour deposition methods like electron beam evaporation and RF sputtering methods which takes a lot of time, about 5 hours, to get evacuated.

After this we had our lunch and at last we visited the characterisation lab-II where we learnt about the purpose and working of X-ray diffraction (XRD), Atomic force microscope (AFM), Vibrating Sample magnetometer (VSM).

TR. PADMASHRI
III - B.Sc., Physics.

Sri GVG Visalakshi College for Women (Autonomous), Udumalpet.

Affiliated to Bharathiar University

Accredited at A+ Grade by NAAC (Fourth Cycle)

An ISO 9001:2015 Certified Institution

Udumalpet, Tamilnadu.

DEPARTMENT OF PHYSICS

Industrial visit to Alagappa University, Karaikudi



Lab visit to Dept. of Physics, Alagappa University, Kaaraikudi on 04.09.2019

Sri GVG Visalakshi College for Women (Autonomous), Udumalpet.

Affiliated to Bharathiar University

Accredited at A+ Grade by NAAC (Fourth Cycle)

An ISO 9001:2015 Certified Institution

Udumalpet, Tamilnadu.

DEPARTMENT OF PHYSICS

**Lab visit to Dept. of Physics, Alagappa
University, Kaaraikudi on 04.09.2019**

