## **OUTREACH PROGRAMMES**

#### 1. REPORT

#### OUTREACH PROGRAM FOR HIGH SCHOOL TEACHERS

"Exploring science through Hands on Activities"

An outreach program was organised to High school teachers on 30<sup>th</sup> July, 2019 by Departments of Chemistry, Biochemistry and Microbiology funded by DBT-Star college scheme. The theme of this program was "Exploring science through hands on Activities". A total of 32 High School Teachers from various government and private schools took active participation in this outreach program.

The program started at 9.30 with a formal inauguration by Air.cmdre (Retd).J.L.N.Sastry, Vice Chairman, BVB Kendra, Prof.Y.Ashok, Principal,Bhavans Vivekananda Collge and Dr. K.Anuradha, Coordinator, DBT-Star college scheme. They briefed on importance of Hands on activities for science teachers. All the teachers were grouped in to three batches and assigned to three departments Chemistry, Biochemistry and Microbiology on rotational basis, where they were trained on different experiments proposed.

Department of Chemistry trained teachers on Green chemistry methods. The experiments included were Use of Curcumin instead of Nessler's reagent for testing the presence of ammonium ion; use of Thioacetamide in place of Hydrogen sulphide for testing Cations and Microwave synthesis of Benzoic acid from Benzamide.

Experiments included in Biochemistry are for alpha amylase (digestive enzyme) from saliva, Preparation of blood smear for differential count of leukocytes, Blood grouping and cardiac cycle was demonstrated to the teachers by a working model.

Hands on activities inDepartment of Microbiology emphasized on Staining of bacteria by simple staining, Lactophenol cotton blue staining of fungi, Observation of root nodules for bacteroid zones and Methylene Blue reduction test for testing the quality of Milk. Also the department took initiative in bringing awareness on Foldscope-a paper microscope that comes at an affordable and cheaper price to all the schools.

All the teachers got hands on training in the experiments. The participants gave a high appreciation for conducting the program through their feedback. The program ended with Valedictory program at 4.00pm by distribution of certificates to all the participants.













### 2. Brief report on Outreach Programme for Degree College Lecturers

# Hands on Training on Bioanalytical Techniques and Bioinformatics"

for undergraduate degree college lecturers **Under DBT Star College Scheme**22<sup>nd</sup> and 23<sup>rd</sup>, November, 2019

An outreach program, "Hands on Training on Bioanalytical Techniques and Bioinformatics" was organised for undergraduate degree college lecturers on 22<sup>nd</sup> and 23<sup>rd</sup> November, 2019 by Department of Biochemistry under DBT-Star college scheme. A total of 40 faculty members from private and government degree colleges have attended and benefitted from the programme.

The program started on 22<sup>nd</sup> at 9.30 am with a formal inauguration by Chief Guest, Air.cmdre (Retd).J.L.N.Sastry, Vice Chairman. BVB Kendra, Prof.Y.Ashok, Principal, Bhavan's Vivekananda College, Dr. K. Anuradha, Coordinator, DBT-Star college scheme and Dr.A. Sai Padma, Head, Department of Biochemistry. The dignitaries briefed on importance of practical knowledge for science teachers and to transmit the same skills to the undergraduate students for better understanding of subject. All the participants were grouped into batches and were trained on different experiments like separation of proteins by Gel-Filtration chromatography, separation of proteins by SDS-PAGE, Enzyme linked Immunosorbent Assay (ELISA), Restriction digestion and agarose gel electrophoresis and Bioinformatics. All these experiments are prescribed in the undergraduate syllabus of Osmania University and all the participating lecturers are provided hands on training in the above said experiments. The participants expressed a high appreciation for the program through their feedback. The program ended on 23<sup>rd</sup> November (Saturday) with a Valedictory program and certificates were given to all the participants.

