

The Workshop started with chanting Sai Gayatri Mantra by the students and the staff. **Dr. Urmil Tuteja**, Scientist G, DRDO, Gwalior, gave an introductory lecture for the practical planned, where she explained all the techniques and clarified all the queries from the students and the staff.

Experiment 1: Multiple PCR

In this experiment she has demonstrated how to identify the pathogen of typhoid, whether *Salmonella typhi* or *Salmonella paratyphi* using Polymerase chain Reaction (PCR).

Experiment 2: ELISA

This experiment showed how to differentiate closely related species by using antibodies. It is much faster than PCR method, if species specific antibodies are available.

Experiment 3: Dot Blot

This experiment is useful to determine whether a particular protein is present or absent by using specific antibodies.

Experiment 4: LAMP

This is a technique can be used by the bed side in any hospital to detect the presence of any pathogen if we have the required specific primers. This is cost effective, faster and sophisticated equipments are not needed compare to PCR.

The session concluded with vote of thanks given by **Dr. (Mrs.) Pallavi C**, Asst. Professor, Dept. of Biosciences, SSSIHL, followed by photo session.

Note: The workshop was attended by III B.Sc., I M.Sc. and II M.Sc. Biosciences students. All the students are given opportunity to have hands on experience with a few techniques. II B.Sc. students were able to join in the afternoon session and performed the dot blot themselves.

