Hands on Training on Culture of Bacteria

The Department of Zoology arranged for a hands-on training section under DBT STAR College scheme on 19.07.2019. Dr. P.K. Ramasamy, Assistant Professor, Department of Zoology, explained the various requirements like chemicals and glassware needed for bacterial culture. He also explained the precautious measures to be followed in a laboratory to carry out the microbiological techniques. He explained the types of nutrient broth (liquid and agar media) and the agar plate method using nutrient agar that allows the growth of bacteria. Two sterilization processes namely autoclave and ethanol sterilization were first explained and demonstrated. Then packing of glassware was explained and they were kept inside the autoclave for sterilization. Meanwhile, samples were collected (soil from our campus) and serial dilution of samples was demonstrated to the students. Then agar was added to the nutrient broth for the preparation of agar plate culture. Many other types of culture like slant culture, stab culture, roll tube and tube media culture were also demonstrated. Glassware was taken out of the autoclave after sterilization process. The cleaning of the Laminar Airflow Hood and its working mechanism was explained. It was followed by inoculating microbes in the agar plates. Then it was kept in an incubator for 24 hours at 370 C for the growth of bacteria. After 24 hours of incubation, the culture plates were observed and the data of the growth of bacteria was recorded.