

Report on the Workshop “Biochemistry based Experiments”

Date : 13.02.2021

Class : II B.Sc. Chemistry, III B.Sc. Chemistry, I B.Sc. Chemistry, I B.Sc. Zoology, II B.Sc. Physics and II B.Sc. Mathematics

No. of Beneficiaries : 90

Details of the Resource person: Dr. N. KannikaParameswari M.Sc., M.Phil., PhD
Professor
Department of BioChemistry,
Dr. NGP Arts and Science College
Coimbatore

Aim of the workshop

Our aim was to make students become familiar with some biological phenomena and are given the opportunity to acquire some simple skills.

We anticipated students to understand such things as planning and validating: experiments which can be more extensive and perhaps 'open-ended'

These ideas can be extended into the third year of their under graduate programme when students carry out a small research project.

Objectives of the workshop

1. To Illustrate Lectures

- Illustrate phenomena, equipment, by demonstration and personal handling
- Experience handling biological materials - Learn standard (or historical) techniques, verify principles
- Realise importance of biochemistry in medicine, industry, etc.

2. To inculcate Laboratory Skills

- to develop manipulative skills
- To learn how to use a particular apparatus
- To learn how to follow a protocol [controls, safety]
- To observe and record accurately
- To process data, (i.e) use statistical methods
- To present data, results, and conclusions

List of Experiments done during the workshop

- Separation of Serum from blood
- Estimation of alkaline phosphatase in serum
- Estimation of protein in serum by Lowry's method
- Determination of Blood group and Rh type in human
- Determination of the bleeding time of a subject
- Determination of the clotting time of a subject
- Estimation of Haemoglobin in blood
- Isolation, Estimation of chlorophyll and Separation by TLC