

CONSULTANCY DETAILS

1)WATER AND WASTEWATER TESTING

Department of biotechnology and biochemical Engineering provides comprehensive testing services to evaluate the quality of water for its different end-uses, to assess its pollution, potability and other regulatory requirements.

Laboratories of Department of biotechnology and biochemical Engineering, SBCE is approved by Kerala State Pollution Control Board (KSPCB) as 'C' grade laboratory (Approval Number: **PCB/LAB/C50/2022**).

The Laboratory is equipped with facilities for testing Physical, Chemical and Biological parameters of Drinking water, Processing water, Waste Water Etc.

Consultancy activities of water quality analysis is performing in collaboration with the Health Centers Nooranad and Palamel. Also, samples from the public are tested based on their requirement

The tests are conducted as per Bureau of Indian Standards (**BIS**) and the Standards of American Public Health Association (**APHA**)

Parameters tested:

Bacteriological analysis: Presence of Coliform bacteria, Total Coliform count, Presence of Escherichia Coli, Presence of Faecal Coliforms

Chemical parameters analysis: Colour & Appearance, Odour, Taste, COD, BOD, DO, Turbidity, pH, Electrical conductivity, Chlorides, Hardness -TotalTotal solids

2)TRAINING OFFERED FOR STUDENTS IN RESPECTIVE LABORATORY AS PER REQUEST

3)PHOTOLUMINESCENCE STUDY

Model:F-2700 Hitachi

Range:200nm-800nm

Analysis:Studies on material imperfections and impurities are studied.

4)UV-VISIBLE SPECTROPHOTOMETER

Model:Systronics 117

Range: 200nm-800nm

Analysis:Absorbance and transmittance spectral analysis of liquid samples and dispersions. Concentration estimation of organics, inorganics and heavy metal ions in water. Bandgap evaluation of dispersible nanomaterials.

CONSULTANCY AMOUNT DETAILS

Slno:	Description on source of sample	Work done	Amount
1	Water Quality Testing	Bacteriological & chemical analysis	40,000/
3	Student Training	Training offered in respective laboratory	5000/
4	Sample Testing	Photo luminescence study using Spectrophotometer	300/
5	Sample Testing - SreeBuddha College Of Engineering (Civil Engineering students)	Study using Spectrophotometer	300/