WATER AND WASTEWATER TESTING

Our state-of-the-art facility is dedicated to the meticulous analysis of water samples from a diverse range of sources, including households and industries. By leveraging advanced biotechnological techniques, we aim to provide comprehensive assessments of water quality, ensuring safety and sustainability for communities and ecosystems alike.

Our laboratory is equipped with cutting-edge technology and staffed by a team of interdisciplinary experts who specialize in identifying and quantifying contaminants, monitoring environmental changes, and developing innovative purification methods. We work closely with both residential and industrial sectors to address specific water quality concerns, offering tailored solutions that meet stringent health and environmental standards. Through our commitment to excellence in research, education, and community engagement, we strive to foster a deeper understanding of water quality issues and contribute to the development of policies that protect this crucial resource. Whether ensuring the safety of household drinking water or mitigating the environmental impact of industrial processes, our laboratory is at the forefront of efforts to maintain and improve water quality for a healthier and more sustainable future.

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.

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:

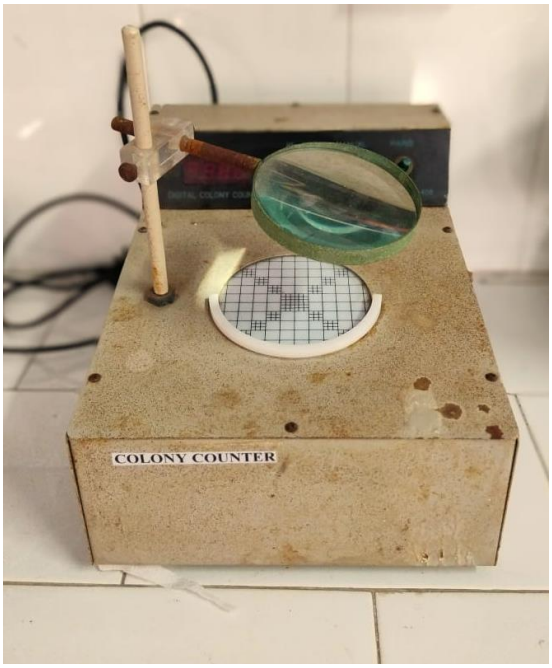
Bacteriological analysis: Presence of Coliform bacteria, Total Coliform count, Presence of Escherichia Coli, Presence of Faecal Coliforms (presumptive test)

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

RATE FOR WATER QUALITY ANALYSIS:

- ***CHEMICAL AND BACTERIOLOGICAL ANALYSIS: RS. 1850/-***
- ***BACTERIOLOGICAL ANALYSIS: RS. 1000/-***

EQUIPMENTS UTILIZED



COLONY COUNTER

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TRAINING OFFERED FOR STUDENTS IN RESPECTIVE LABORATORY AS PER REQUEST

The Department of Biotechnology & biochemical Engineering is proud to offer comprehensive training programs for students in our state-of-the-art laboratories, which specialize in various disciplines including general microbiology, biochemistry, molecular biology, and food analysis and processing. These training programs are designed to provide students with hands-on experience, advanced technical skills, and in-depth knowledge, preparing them for successful careers in biotechnology and related fields. BRSI has

PROGRAM HIGHLIGHTS:

- **General Microbiology**: Students will learn essential microbiological techniques, including microbial culture, isolation, identification, and the study of microbial physiology. Training includes the use of advanced microscopy, sterile technique, and microbial assay development.
- **Biochemistry**: Our biochemistry training covers fundamental and advanced biochemical methods such as enzyme kinetics, protein purification, electrophoresis, spectroscopy, and chromatographic techniques. Students will gain a thorough understanding of biochemical pathways and molecular interactions.
- **Molecular Biology**: This program focuses on the core techniques of molecular biology, including DNA/RNA extraction, polymerase chain reaction (PCR), gel electrophoresis, Photoluminescence Study, UV-Visible Spectrophotometer. Students will engage in hands-on projects to manipulate and analyse genetic material.

EXPERT MENTORSHIP:

Our experienced faculty and laboratory staff provide personalized mentorship, guiding students through each step of their training and helping them to develop critical thinking and problem-solving skills.

RESEARCH OPPORTUNITIES:

Students will have the chance to participate in cutting-edge research projects, contributing to advancements in biotechnology and gaining valuable experience in experimental design, data analysis, and scientific communication

PROGRAM FEATURES:

- **Hands-On Training**: External students will receive practical training on using laboratory equipment, ensuring they develop the necessary skills and confidence to conduct their research effectively.
- **Expert Guidance**: Our experienced faculty and lab staff will provide personalized support and mentorship, assisting students in the proper use of equipment and methodologies.
- **Research Collaboration**: Students can collaborate on ongoing research projects, gaining exposure to real-world applications and contributing to significant scientific advancements.
- **Flexible Access**: We offer flexible scheduling options to accommodate the diverse needs and commitments of external students.