

Instrument Facilities Available at DSIR-IITGN-CRTDH

| Sr. No. | Instruments | Brand / Model | Function |
|---------|---|--|---|
| 1 | ICP-MS System | PerkinElmer NexION 2000, Avio200, USA | Detection of trace metals and isotope analysis |
| 2 | Fluorescence Spectrophotometer | Jasco FP-8300, Japan | Optical properties |
| 3 | UV-Vis spectrophotometer | Analytik Jena Specord 210 plus, Germany | Optical properties |
| 4 | TOC analyzer | Analytik Jena Multi N/C 21005 BU, Germany | Total organic carbon analyzer |
| 5 | Multimode Plate reader | BioTek Cytation 5, USA | Microbial/cell line studies |
| 6 | HPTLC | CAMAG | Qualitative and Quantitative analysis of Dyes and other compounds |
| 7 | GC | CIC Baroda, Dhurvua | Detection of Gases |
| 8 | BOD Analyzer | VELP Scientifica BOD system 6, Italy | Biological Oxygen demand analyzer |
| 9 | Spray dryer | Techno Search Pvt. Ltd. SPD-P-111, Maharastra | Particle drying |
| 10 | Refrigerator | Samsung RT39M5538S8/TL | For cool samples and Chemicals for preservation |
| 11 | Water Distillation Unit | KM scientific instruments 4L/hr., Ahmedabad | For samples preparation |
| 12 | Vaccum Pump | TECHNICS TID-75-S , Mumbai | For filtration of treated effluent |
| 13 | Hot air Oven | Patel Scientific Instruments 24"x24"x24" , Ahmedabad | Drying the materials/glasswares |
| 14 | Microwave Oven | Samsung MW73AD-BXTL | synthesis purpose |
| 15 | Weighing Balance | Shimadzu ATX224, Japan | Measure the amount of chemicals |
| 15 | D C Power Supply | Aplab L3205, Mumbai | For Electrocoagulation process |
| 16 | Micropipette (100µl,1000µl,5ml) | Gilson Pipetteman, US | Measure the accurate volume of liquid |
| 17 | Multi Place magnetic Stirrer | Neuation I stir HP 5M, Gandhinagar | Magnetic bar immersed in a liquid to Spin (5 samples on a same plate) |
| 18 | pH meter | Eutech ECPHTUTOR-D, Singapore | Measure the hydrogen ion activity (acidity or alkanity) in solution |
| 19 | TDS Meter | Milwaukee Mi306, USA | Concentration of total dissolved solid particles |
| 20 | Ultra Sonicator | Aczet CUB-5, Mumbai | For dispersion of particles |
| | Vortex | Dlab MX-S, China | To mix small vials liquid |
| 21 | Orbital Shaker | Dlab SK-O330-Pro, China | To mix substance in a tube by shaking them |
| 22 | For batch to continuous process overhead stirrer used | Remi RQ-121/D, Mumbai | Use for large volume and viscous fluid for mixing properly |
| 23 | Magnetic Stirrer | Remi 5 MLH plus, Mumbai | Magnetic bar immersed in a liquid to Spin |
| 24 | Jacketed Reactor | Bioneds | To cool the Reactor |