**BIOTECHNOLOGY RESEARCH LABORATORY**

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| **S.No** | **Name of Equipment** | **Make &Model** | **Application** |
| 1 | ***High Performance Liquid Chromatography*** | *SHIMADZU &*  *LC2010CHT* | Quantitative and qualitative analysis of liquid samples |
| 2 | ***Biodiesel Rancimat*** | *METROHM &*  *893PROFESSIONAL BR* | Determination of the oxidative stability of biodiesel |
| 3 | ***Rotary Vacuum Evaporator*** | *EQUITRON &*  *ROUND BATH RUTEUA* | Purification of sample after solvent extraction |
| 4 | ***Accelerated Solvent Extractor*** | *THERMO SCIENTIFIC & DIONEX ASE 150* | Rapid extraction of desired product by use of organic solvent. |
| 5 | ***Laminar Airflow Chamber*** | *GENUINE* | Microbial transfer under sterilized condition |
| 6 | ***Autoclavable Fermentor*** | *BIOSPIN – OSA*  *&BIO-AGE EQUIPMENT SERVICE* | Culturing and harvesting of microbes using fermentation |
| 7 | ***Large Volume Centrifuge*** | *SCIENCE WORLD(SIGMA) &2-16KL* | Separation of substances based on relative density in liquid suspension |
| 8 | ***Thermomixer*** | *EFFENDORF& THERMOMIXER-C220-240V* | Vortexing samples under controlled temperature |
| 9 | ***Ultra Sonicator*** | *CHEM LABS BANGALORE* | Dispersion of liquid using ultrasonic wave bath. |
| 10 | ***Incubator Shaker*** | *THERMO SCIENTIFIC &SHKE6000-8CE* | Maintenance of suspended condition for microbial growth |
| 11 | ***Fully Automatic Autoclave*** | *EQUITRON* | Sterilization of microbial medium |
| 12 | ***Moisture Analyser*** | *WENSAR & WENSER HMB100* | Determine the amount of moisture content present in any solid or semi solid sample |
| 13 | ***Tissue Tearor*** | *UNIDRIVE X 1000*  *& CAT* | Disruption of microbial cell wall |
| 14 | ***Cold Storage Chamber*** | *F-MAXX & SZ-7524-P* | It is maintained under 50c, so as to pressure any kind of samples from biological degradation or microbial activity |
| 15 | ***Fourier Transform***  ***Infrared Spectrophotometer*** | *PERKIN ELMER &*  *L160000E* | Qualitative assessment of functional groups |
| 16 | ***TOC analyser*** | *SHIMADZU &TOC-LCPH* | Assessment of total carbon and total nitrogen present in liquid sample |
| 17 | ***COD Digester*** | *MERCK & TR-420* | Simultaneous digestion of 24 samples for COD analysis. |
| 18 | ***Automatic Organic Waste Convertor Machine (25 KG)*** | *NETAL(India) Ltd & BIOMALI 25S* | Produce waste into organic compost or manure. |
| 19 | ***Elisa Reader*** | *TRIVITRON HEALTH CARE & LDXR1* | Measure antibody test, HIV Detection and Quantification of Nucleic acid. |