

MAJOR EQUIPMENTS IN ENVIRONMENTAL ENGINEERING LABORATORY



AUTOCLAVE

An autoclave is a device used to sterilize equipment and supplies by subjecting them to high pressure saturated steam at 121°C or higher. It is commonly used in medical, laboratory, and industrial settings.

WATER QUALITY ANALYSER

A Water Quality Analyzer is a device used to measure various parameters in water, such as pH, temperature, turbidity, total dissolved solids, and chemical oxygen demand.





BOD INCUBATOR

A BOD incubator is a device used to accurately measure biochemical oxygen demand (BOD) levels in water samples. It is essential for tracking water pollution levels and providing reliable data for effective management of aquatic ecosystems.

NEPHELOMETER

A nephelometer is a device used to measure the amount of particulate matter suspended in a liquid or gas sample. It works by detecting light scattered from these particles and using the data to calculate their concentration.





SHAKING INCUBATOR

A Shaking Incubator is a laboratory apparatus used to grow and maintain biological cultures. It features adjustable speed, temperature, and platform inclination, and can be used to mix liquids or cultures. It is often used in industrial, research, and medical applications.

COLORIMETER

A colorimeter is a device used to measure color values and detect subtle differences in color. It is used in a variety of industries to accurately quantify the color of materials, products, and surfaces.





FOURIER TRANSFORM INFRARED SPECTROSCOPY

Fourier Transform Infrared Spectroscopy (FTIR) measures the absorption of infrared radiation by a sample to determine its chemical composition. It has many applications in various fields and uses an interferometer and computer for data analysis.

ULTRASONIC SONICATOR

An Ultrasonic Sonicator is a device that uses high-frequency sound waves to break up particles or disrupt cells in a liquid sample. It is used in various applications such as sample preparation, homogenization, emulsification, and cell lysis.



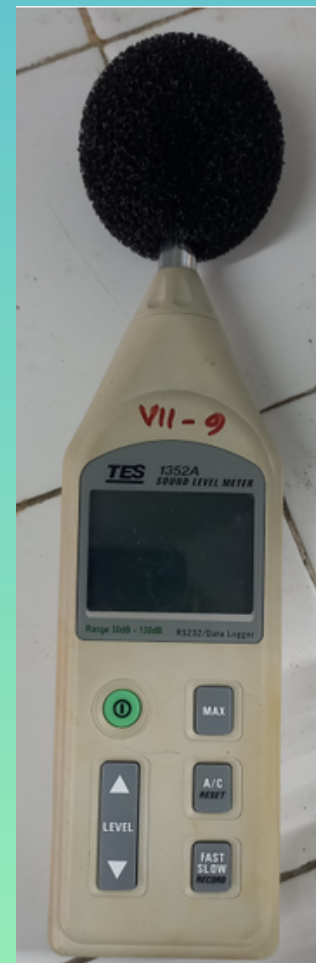


RESPIRABLE DUST SAMPLER

A respirable dust sampler is a device used to measure the concentration of respirable particulate matter in ambient air. It collects airborne particles from the air and allows for the analysis of particle size, composition, and quantity.

SOUND LEVEL METER

A sound level meter measures the intensity of sound in decibels using a microphone to capture the sound, and may have filters or data logging capabilities. It is used for environmental and occupational monitoring.



REMI LABORATORY CENTRIFUGE



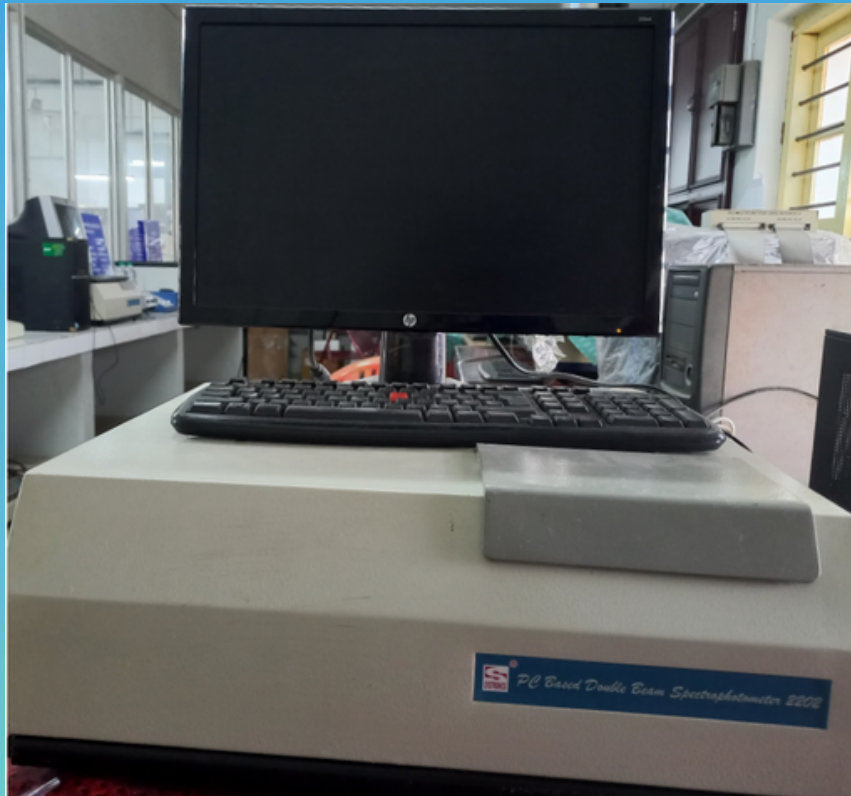
REMI laboratory centrifuge is a lab instrument that separates components based on their density by spinning samples at high speeds. It comes in various models and capacities.

GAS CHROMATOGRAPH

A gas chromatograph is a scientific instrument used to separate and analyze compounds that are present in a mixture. It works by passing the mixture through a column, where the components are separated based on their chemical characteristics and measured.



DOUBLE BEAM SPECTROPHOTOMETER



A double beam spectrophotometer is an instrument used to measure the absorption or reflection of light by a sample. It works by using two light sources, one reference beam and one test beam, and measuring their intensity before and after the sample, to calculate the amount of light absorbed by the sample.

ATOMIC ABSORPTION SPECTROMETER



An atomic absorption spectrometer is a device used to measure the concentration of an element in a sample. It works by passing a beam of light through the sample and analyzing the intensity of the transmitted light for the presence of certain elements.

FLAME PHOTOMETER



A flame photometer is an analytical instrument that measures the concentration of metal ions in a solution by emitting light of a specific wavelength. It is commonly used in clinical and environmental labs.