

Agriculture structure and environment control (AS&EC) laboratory

The main endeavor of AS&EC lab is 'improvement in agriculture structure' and 'environment control for higher productivity in plants as well as in animals'. In accordance with this the research area of AS&EC lab is 'development of low cost cooling and environment control technologies for cold chain'.

AS & EC LAB EQUIPMENT



WATER ACTIVITY METER

Used for determination of water activity. Effective in moisture content estimation of flour and dried food products.



ULTRA FILTRITION UNIT

Ultra filtration system used for purification and fractionation of biomolecules by means of membrane filtration.



ORBITAL SHAKER

Used for giving incubation along with shaking, in a controlled environment having significant importance in fermentation.



HOT AIR OVEN

Drying of varied type of food product could be achieved within wide range of temperature.



AUTO TITRATOR

Used for estimation of moisture content in liquid food products, which could not be possible by the general method.



BOD INCUBATOR

Incubation could be given for the growth of specific microbes with specific heat and relative humidity.



ENVIRONMENTAL CONTROL CHAMBER

Controlled heat treatment could be given up to 60°C for effective drying of food product.



GAS CHROMATOGRAPHY ASSEMBLY

Separation of components and pigments could be achieved for a given sample with different components.



HPLC ASSEMBLY

Separation of components and pigments could be achieved for a given sample with different components.



LAMINAR FLOW

Used for pouring and dilution series preparation in a sterilized environment.



MICROENCAPSULATOR

Effective in encapsulation of food ingredients, plant extracts, enzymes and probiotic micro-organisms to provide a protective coating.