

## CUCIF Sophisticated Instrumentation – I

CUCIF provides basic facility and support to entire university for the development of research. It is allocated on Babbage block 2<sup>nd</sup> floor. This basic instrumentation facility houses more than 50 equipment's. CUCIF categories this facility into open area and 4 cabins.



### Open Area Facility of Sophisticated Instrumentation – 1

The open area facilities don't have sitting space. The equipment in the open area is used by researchers while standing. The facilities in the open area of Sophisticated Instrumentation facility – I are listed in table 1.



**Table 1: List of equipment in open area of Sophisticated Instrumentation – I**

S.NO	Equipment's
1.	BOD incubator
2.	Autoclave
3.	Water bath
4.	Muffle furnace
5.	Hot air oven
6.	Microwave oven
7.	Calorimeter
8.	Microscope with Micro-Camera
9.	Space jet 3D printer
10.	Weight scale
11.	pH meter
12.	Viscometer
13.	Heating mantle
14.	Magnetic Stirrer
15.	Digital melting point apparatus
16.	Centrifuge
17.	Conductive meter
18.	Washing consumables
19.	Refrigerator
20.	First aid
21.	Fire extinguisher

### Facility Details

The facilities mentioned in table-1 are picturized in this section



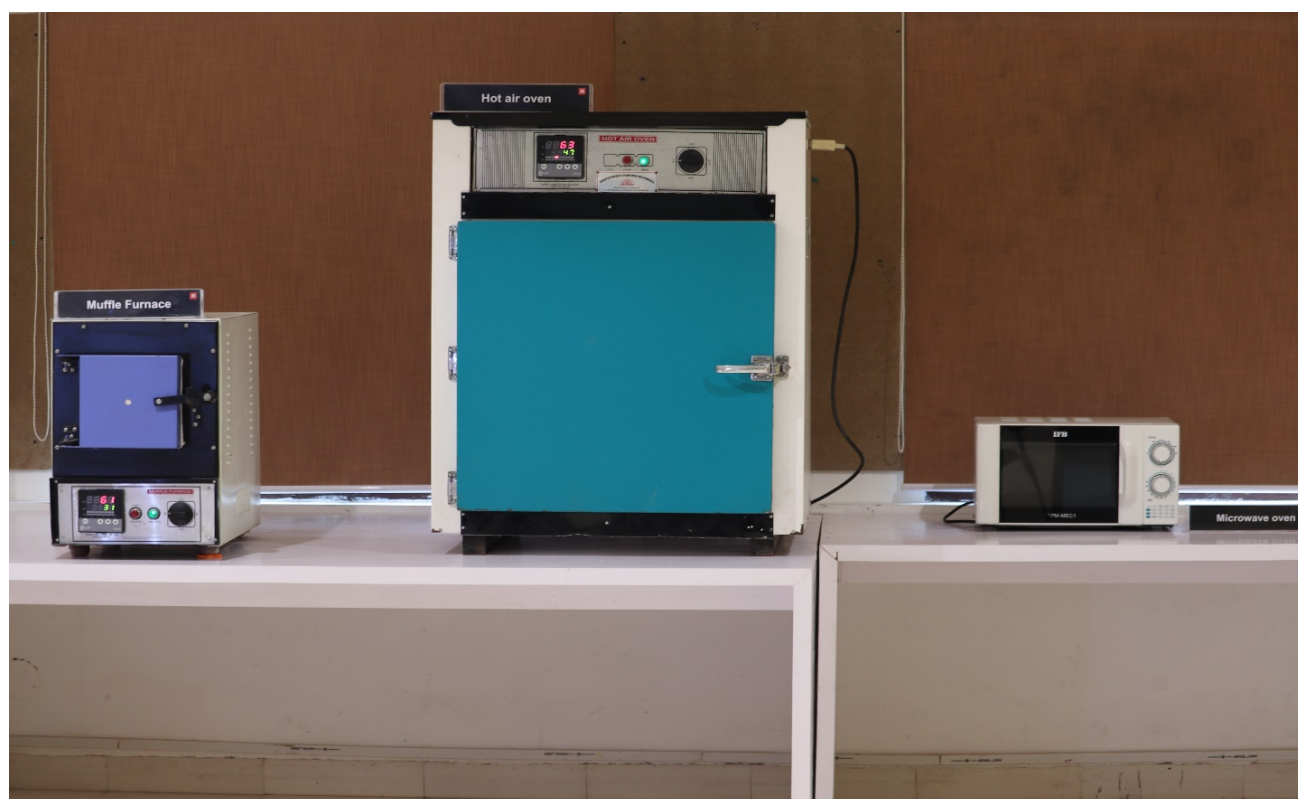
BOD incubator



Autoclave



Water bath setup



Muffle furnace, Hot air oven and Microwave oven setup

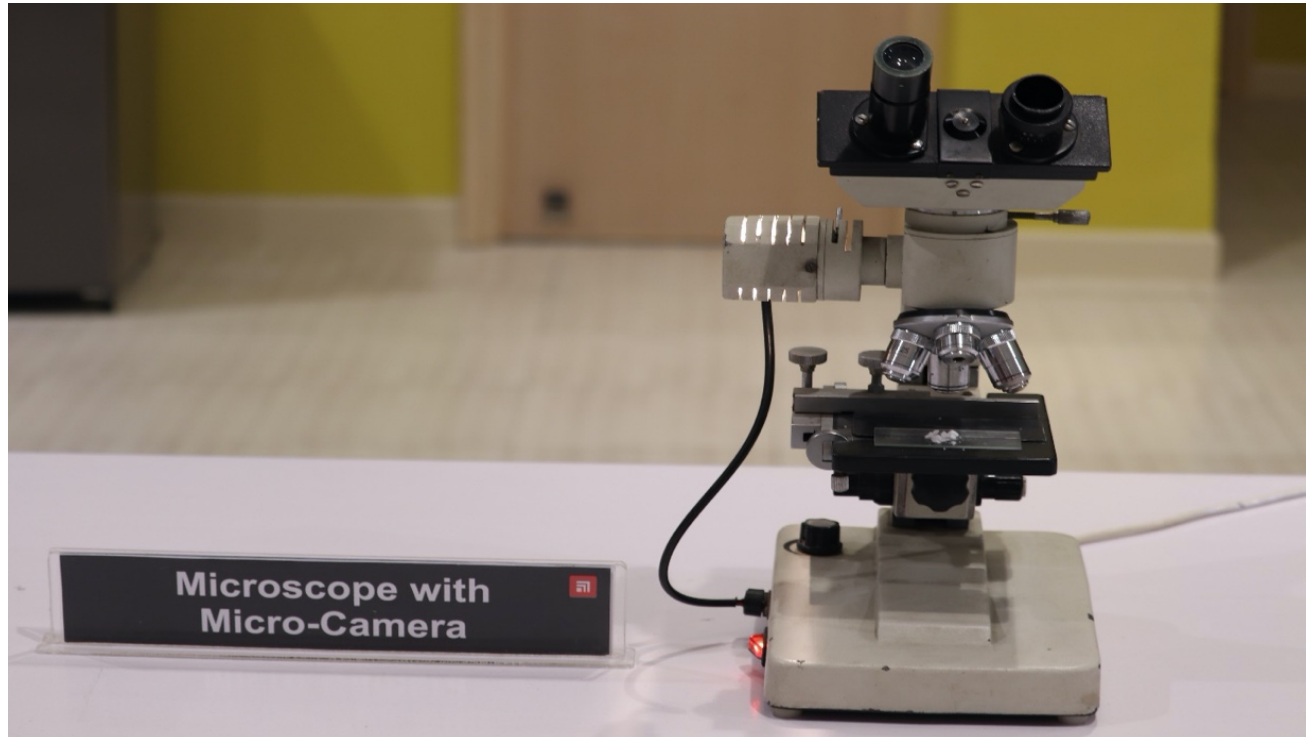




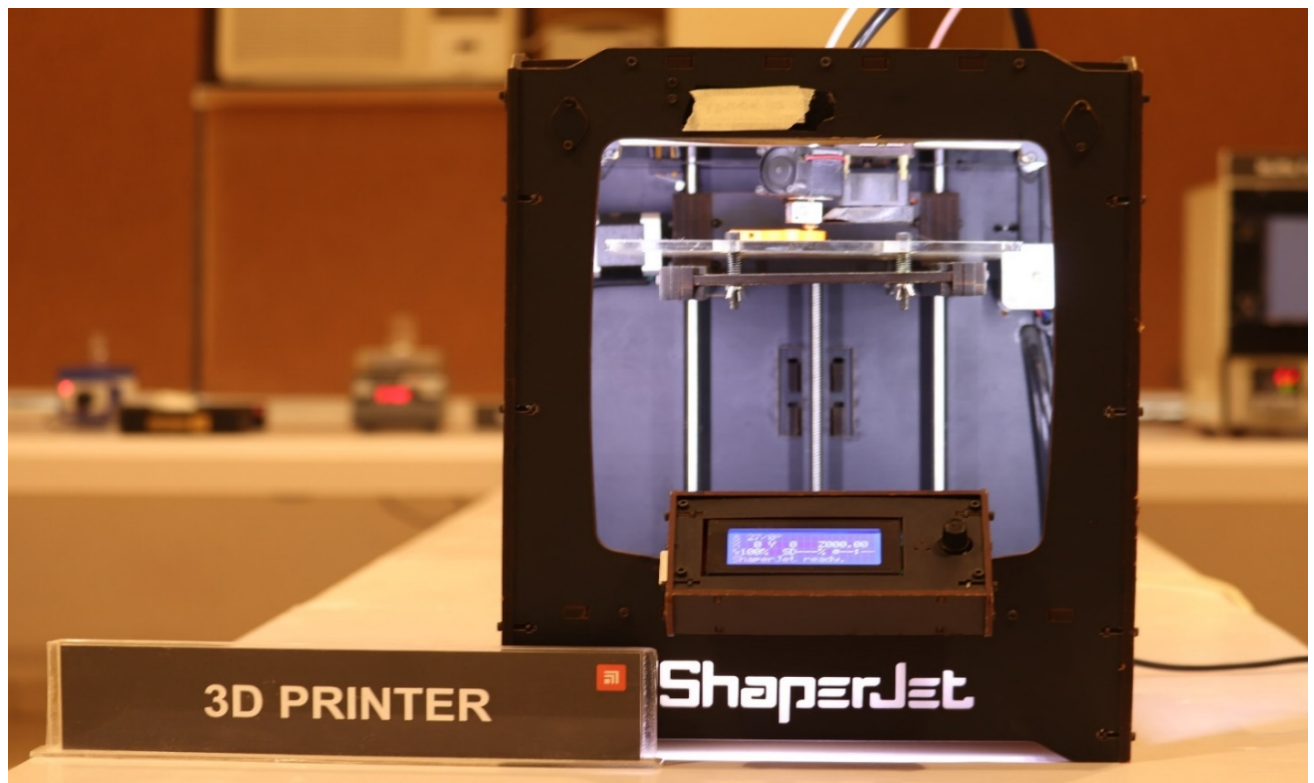
Sterilizing the chemical solution



Calorimeter

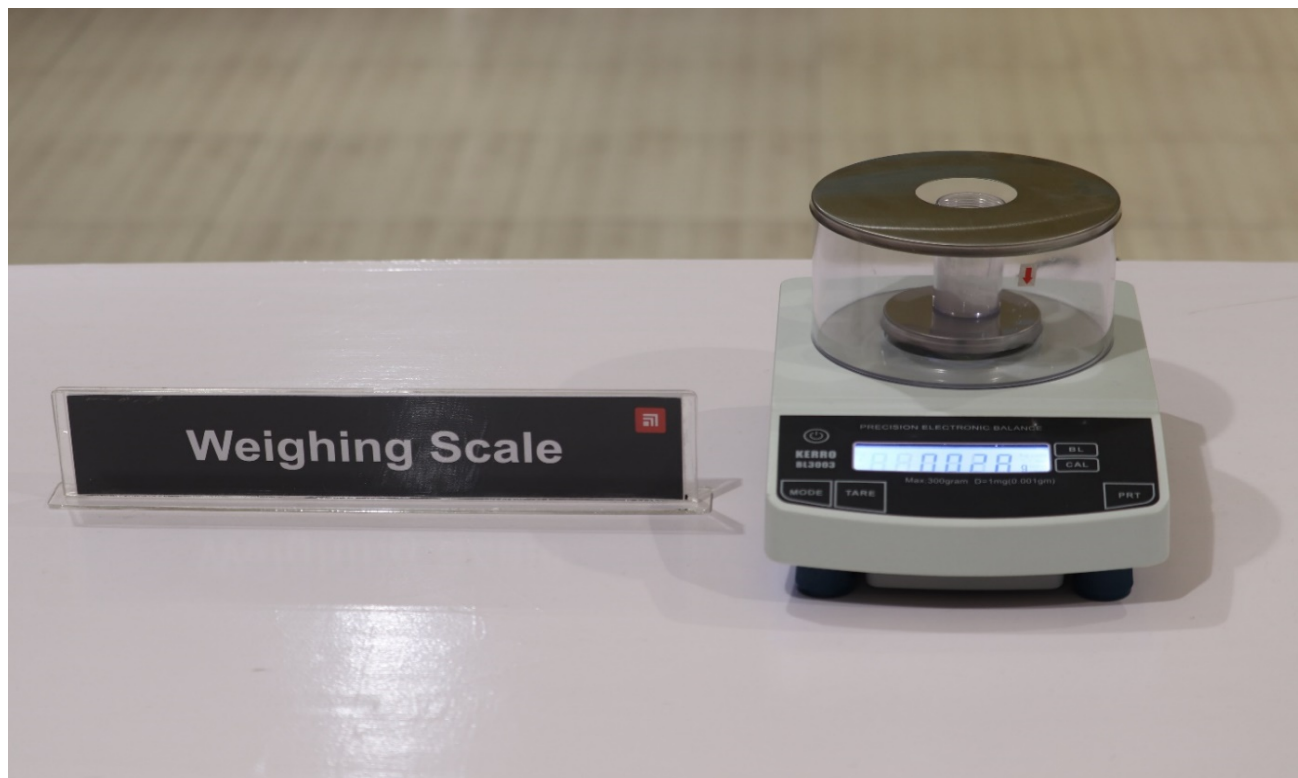


Microscope with Micro-Camera



3D Printer



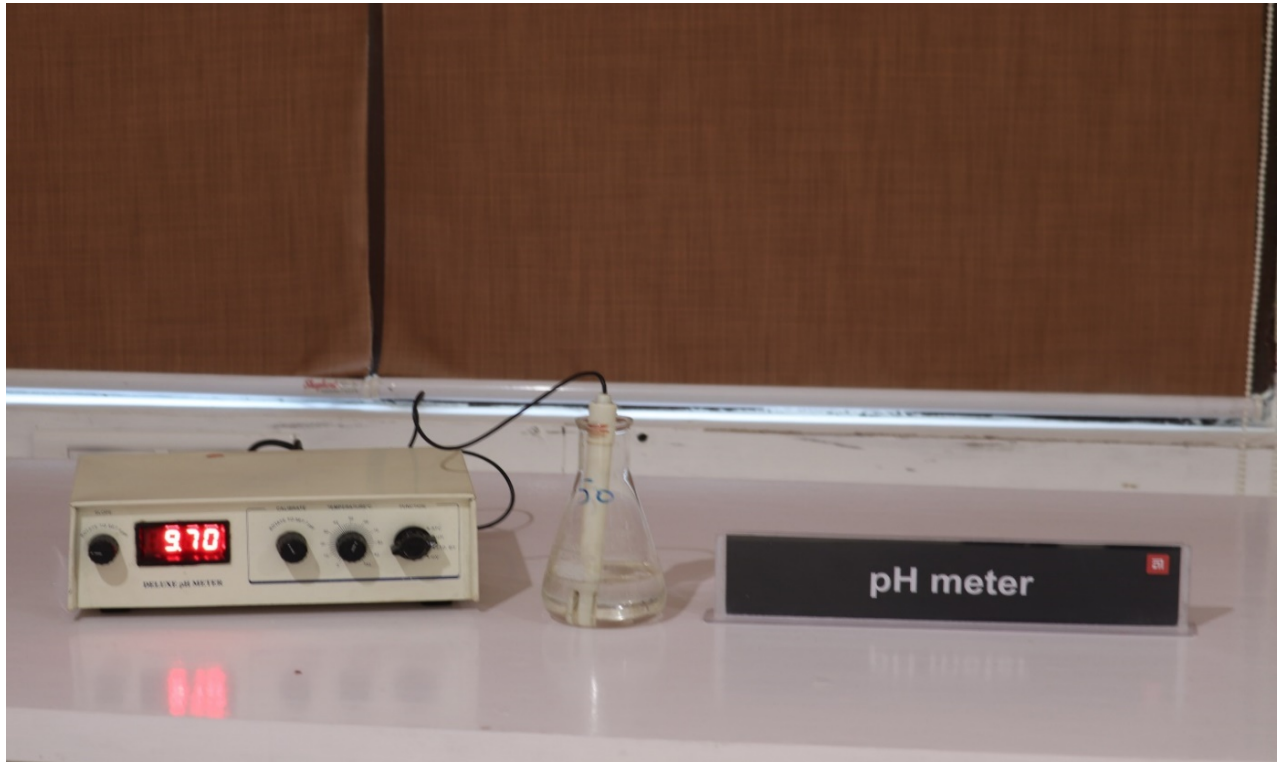


Weighing Scale



Precise weighing scale with resolution of 0.0001 gram





pH meter



conductivity meter

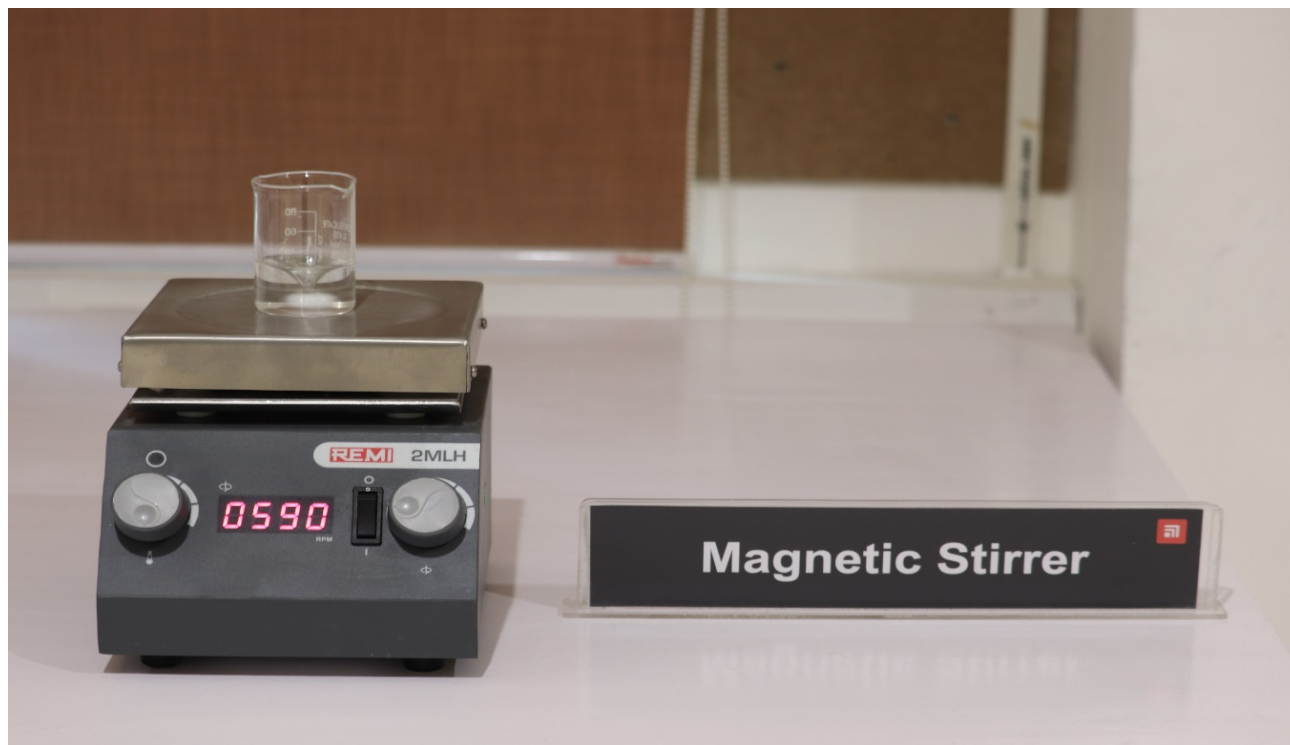


Viscometer



Heating mantle





Magnetic Stirrer



Digital melting point apparatus





Centrifuge



Conductivity meter



Washed Consumables and Vessels

### **Cabins area of Sophisticated Instrumentation Facility – I**

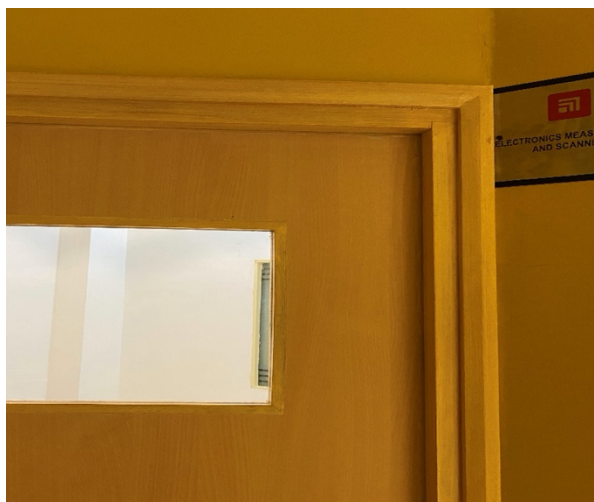
The cabin area of sophisticated instrumentation – 1 house essential measuring instruments and equipment which require sitting of the researchers. The cabins are isolated and air-conditioned with proper ventilation. Each cabin is provided with fire extinguisher and first-aid box. There are four cabin areas and the details of each cabin areas are given in table 2.



**FTIR**



**HPLC**



**Electronics workbench and 3-D scanning**



**Laminar Flow**

Table 2: List of equipment in cabin areas of Sophisticate Instrumentation Facility – I

S.NO.	Equipment's	Cabin Name
1.	FTIR	FTIR
2.	Hydraulic press	FTIR
3.	Computation system for FTIR	FTIR
3.	High Performance Liquid Chromatography (HPLC)	HPLC
4.	Vector Network Analyzer (VNA)	Electronic workbench and 3D scanning
5.	Digital Scope Oscilloscope (DSO)	Electronic workbench and 3D scanning
6.	Geomagic 3D scanner	Electronic workbench and 3D scanning
7.	Laminar flow	Laminar flow

## Facility Details





FTIR setup



Hydraulic press and computation of FTIR



High performance liquid chromatography (HPLC)

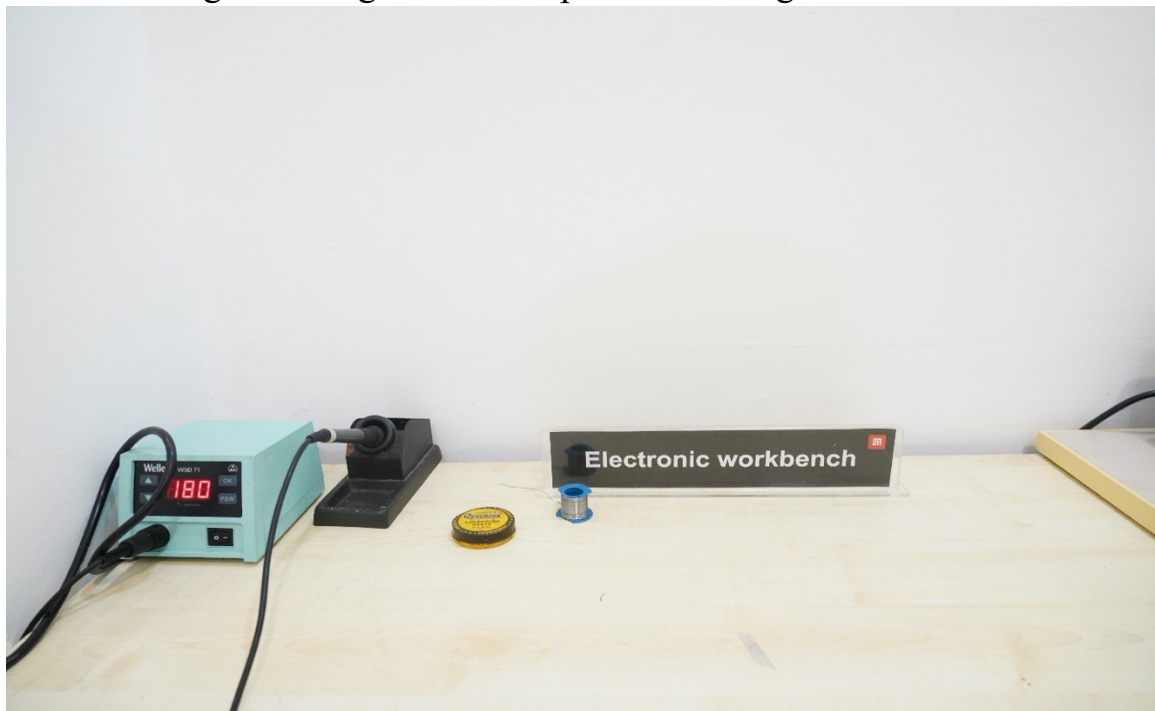


Keysight Vector Network Analyzer





Digital Storage Oscilloscope and Geomagic 3D scanner



Electronic workbench





Laminar flow setup