

Laboratory Name: Centre for Antenna and Electronic Materials **Venue:** 29006 (Research Park)
Laboratory In-Charge: Dr. R.Prasanna **Qualification:** M.E., Ph.D.

Research Faculty in Lab

Faculty: Dr.Subhankar Chakraborty
Qualification: M. Tech., Ph.D.

DESCRIPTION ABOUT THE LABORATORY

The Centre for Antenna and Electronic Materials is a Research lab with 50 published and 14 granted patents. We are working in state of the art cutting edge and current scenario technologies such as Nano and Quantum material based printed electronics. Self-powered systems, EMI/ EMC coatings, thin film and flexible patch antennas, sensors, thermal applications, RF and WPT mechanisms.

OBJECTIVES

- To provide state of the art facility for flexible material based thin film prototyping approaches.
- To develop sustainable technologies for the future antenna, sensor and printed electronic industry.
- To develop cutting edge Quantum and Nano material solutions for the nation.

LABORATORY SPACE AND STUDENT ALLOCATION

Area of the Laboratory : 60 sq.m
No. of students per session : 30
Batch Size : Single
Weekly Utilization Status : Open Access for Research & Development Activities

COST OF THE LABORATORY

Total cost of equipment/software : Rs. 34,90,676/-
Total cost of consumables : Rs. 10,00,000/-
Overall cost of the Laboratory : Rs. 44,90,676/-

Budget

Name of the facility	Features	Invoice Number	Total in Rupees
Dielectric Constant Meter	Solid and liquid dielectric meter	VTU/AT73/RP-DRDO/ DIE ELEGONS KIT SOLID/LIQUID/GF/29006/02	30,319/-
Sheet Resistance Meter	Variable temperature Four probe method	VTU/ AT73/ RP-DRDO/ SEMI FOUR PROBE METHOD/ GF/ 29006/ 01	27,011/-
Keithley Digital Multimeter	6.5 Digit	VTU/ AT73/ 10-2021/ MM/ 29006/ 065	1,05,462/-
Screen Printing Machine	60x60 flat printing machine	VTU/AT73/12-2021/ SCRE PRIN MACH/ 29006/06	1,59,600/-
Online UPS	3KVA backup supply	VTU/ AT73/ ONLI UPS/ 29006/ 04	47,985/-
6.5 Digit Multimeter	34461A Keisight 6.5 Digit	VTU/ AT24/ 29006/ 1	73,136/-
RF Power Meter	V3500A 10MHz to 6GHz	VTU/ AT-24-29006/ 2	2,15,538/-
RF Sensor	U2042 XA 10MHz to 6GHz	VTU/ AT24/ 29006/3	3,82,345/-
PCB Milling machine	4 axis 60x60 flat surface	VTU/ AT55/ TBI/ RP/ 29303/1 PO NO: 57, DT: 06.03.2019	1,49,860/-
LPKF PCB milling machine	30cm x30cm flat surface	VTU/ AT53/ TBI/ RP/ 29303/ 1 PO NO: 26, DT: 26.03.2019	7,43,650/-
PCB Milling Machine	One axis CNC milling small	VTU/ AT54/ TBI/ RP/ 29030/1	36,757/-
Hydrogen Electrolyser	300Watts, PEM and AEM electrolyser	VTU/ 2024/1664	10,67,900/-
Antenna Training System	915MHz antenna trainer	VT/ECE/AATD-001 DT: 02.10.04, INV NO FE/ 04-05/186	2,32,391/-
RF Signal Source	915MHz signal source	VT/ ECE/ RFS/ 02 DT: 24.08.04 INV NO: FE/ 04-05/092	2,18,722/-
Total			34,90,676/-

