



Infrastructure and Learning Resources

Criterion 4

Criterion 4.1

Physical Facilities



SREE SANKARA COLLEGE
SANKAR NAGAR, MATTOOR
KALADY P.O, ERNAKULAM – 683 574
(Affiliated to MG University)

SREE SANKARA COLLEGE, KALADY

LIST OF RESEARCH EQUIPMENTS

2022-23

I. Post Graduate and Research Department of Microbiology

Supported by Department Of Science and Technology, FIST Scheme FIST/487/2015-16 and SARD Scheme 10/SARD/2013/KCSTE of Kerala State Council for Science, Technology and Environment, Kerala.

Sl. No.	Name of the Instrument	Company Name
1.	Gel Documentation system	Gel Doc EZ system BioRad
2.	Lyophilizer	LABCONCO- 7740060, 7522800
3.	-80° C Freezer	Eppendorf New Brunswick U410 230v 50 Hz
4.	CO ₂ Incubator	Symbiogen Biotechnologies Necternova EP 165 A
5.	Bio Safety Cabinet (Class 100) (2Nos)	LABLINE –B S C 4
6.	Laminar Hood, Vertical (2), horizontal (1)	LABLINE
7.	PCR Machine-normal and gradient	Applied Biosystems ABI 2720 BIORAD Thermal CyclerT-100
8.	Research Microscope/ Fluorescent Microscope	OLYMPUS Trinocular Microscope Model CX21i, LED fluorescence, Magnus UHCCD-USB2 Mega Pixel camera
9.	Inverted Microscope	EVOS XL Core Imaging system – THERMO FISCHER SCIENTIFIC Invitrogen Bioservices

10.	UV-Vis spectrophotometer	ELICO
11.	High Speed Refrigerated Centrifuge bench top	Eppendorf 5804R, FA-45-30-11 rotor, F-34-6-38 rotor with 15ml and 50ml adaptors
12.	Hybridisation incubators	LAB PLUS HI-1
13.	UV transilluminator	Bangalore genei
14.	Weighing balance	INFRA – IN 200
15.	pH meter	ELICO – L1 120/L1 610
16.	Refrigerators	Videocone, Samsung, L.G
17.	-20 °C Freeze	ELANPRO EFS 340
18.	Serological Water bath	ROTEK - RSN 04
19.	Incubators/ BOD Incubators	Kemi, LABPLUS, BOD INCUBATOR ROTTEK (RCI-3A)
20.	Autoclaves	LABPLUS –LAC -2 ROTEK
21.	Magnetic stirrer	REMI 2ML, 5 ML
22.	Vortex mixer	REMI - CM 101
23.	Colony counter	Himedia
24.	Hot air Oven	Kemi, LABPLUS, ROTTEK
25.	Micropipettes	Thermoscientific – F2 variable volume Tarsons, Finnpipette, Borosil
26.	Water Purification System	Milli-Q-DQ3 Tap to Pure and Ultra Pure Water Purification system
27.	Microscopes	OLYMPUS Monocular and Fluorescent, MOTIC- Stereo microscope,
28.	Electrophoresis Apparatus- Horizontal, Vertical	BioRad Electrophoresis System and High Current Power Supply-
29.	SDS PAGE Apparatus	1658003, 1704469, 1645050

30.	Western blotting apparatus	BioRad Electrophoresis System and High Current Power Supply- 1658003, 1704469, 1645050
31.	Semi-dry transfer apparatus	Hoefer-TE70XP Semi Dry Transfer Unit with built in power pack
32.	Ice flaking machine	Labline- LIM 30
33.	Flame photometer	Roy instruments digital flame photometer (ri 512)
34.	Orbital Shaking incubator	Remi
35.	Qubit nanofluorometer	Invitrogen
36.	Weighing Balance (4 digit)	Sartorius

II. Post-Graduate Department of Physics is supported by DST-FIST, DAE-BRNS and UGC

No.	Name, funding and year of purchase	Specifications
1	RF Magnetron Sputtering Unit-HHV Bangalore-DAE-BRNS funded-2012	300W, 13.56 MHz, with substrate heating facility
2	UV-Visible Spectrophotometer- Agilent (Cary 60)-funded by DST-FIST, 2015	Thin films and liquid samples, 190-1100 nm scan
3	Keithley -System Source meter – DST-FIST, 2015	26 B series
4	Thin film Thickness measuring Unit – DST-FIST, Holmarc Opto-mechatronics, Kochi, 2017	Interference method
5	Muffle Furnace-DAE-BRNS, 2012	1200oC

6	4-Probe apparatus – UGC Minor, 2013	Research level
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III. Research Department of Chemistry is supported by DST-FIST, KSCSTE and UGC

Item	Model and Make	Fund
Compression moulding machine and Ball Mill for Latex Mixing	Mini Metal Industries, Kottayam, Kerala	DST-FIST
Electrical Conductivity Meter (Interactive Digital Source Meter)	Make : Keithley	DST-FIST
&	RV 8 V Rotary Evaporator Unit,	DST-FIST
Data Processing Units	Make: IKA	DST-FIST
Rotary Evaporator	Oil Free Vacuum Pressure Pump	DST-FIST
Electric Oven	Double Stage, Make: Riviera	DST-FIST
Fume Exhaust Hood	Hi-heat furnaces & refractories	DST-FIST
Analytical Balance	Make: Rotek	DST-FIST
Disperser/Homogeniser	Model: XB220A, Make: Precisa, Switzerland	KSCSTE
Serological Water Bath	T 18 ULTRA-TURRAX With Package, Make: IKA, Germany	UGC
FT-IR Spectrometer using ATR		UGC

Magnetic Stirrer with hot plate 1Ltr	PerkinElmer Spectrum Two in the range of 4000 – 450 cm ⁻¹	UGC
Electronic Balance (0.1mg.)		KSCSTE Minor project
Photoelectric colorimeter		DST-FIST
Incubator		DST-FIST



Dr. Preethi Nair, Principal – in - Charge