

## **CENTRALIZED INSTRUMENTATION FACILITY**

The Central Instrumentation Facility, has been established with sophisticated instruments in order to satisfy the research requirements and to have optimum use of instruments.

### **Vision**

To help students and research scholars to develop an analytical mind and good problem solving skills needed to solve the diversity of problems encountered in their career as a professional analyst

### **Mission**

To provide students with a broad based training in all major scientific disciplines for supporting their study in analytical science which is multi disciplinary in nature

### **Objectives**

To pursue a competitive research in order to discover and fulfill the global needs in Life Sciences.

To provide students with a solid knowledge base and skills in the variety of techniques used to solve a diversity of problems in analytical and testing science

To train the students in operating and maintaining with care and caution for increasing the long life of the instruments

### **MAJOR INSTRUMENTS**

HPLC, Gas Chromatography, BX-51 Microscope, Phase Contrast Microscope, Inverted Tissue Culture Microscope, Gel Documentation System, Thermal Cycler, Atomic Absorption Spectrophotometer, UV-Vis Spectrophotometer, Soxhlet Extraction Unit, Semi Auto Analyser, Bioreactor and Flame Photometer.

### INSTRUMENTS

S.NO	INSTRUMENT NAME	PURCHASE DATE	NUMBER	MAKE
1	Physical balance	31.05.1995	1	K-ROY
2	Digital pH meter	31.05.1995	1	EQUIPTRONIC
3	Tempo hot air oven	31.05.1995	1	TEMPO
4	Clinical centrifuge	31.05.1995	1	REMI
5	High speed centrifuge	31.05.1995	1	REMI
6	Heating mantle	31.05.1995	1	GUNA
7	Magnetic stirrer	31.05.1995	1	REMI
8	Compound Microscope	31.05.1995	2	ERMA
9	Research Microscope	31.05.1995	1	DOLLAR
10	Tempo Distilled water Plant	31.05.1995	1	TEMPO
11	Compound Microscope	31.05.1995	15	DOLLAR
12	Autoclave	15.07.1995	1	MATRI
13	Research Microscope	26.07.1995	4	DOLLAR
14	Laminar Flow Chamber	14.08.1995	1	MATRI
15	Incubator	18.08.1995	1	TEMPO
16	Vortex Mixer	16.10.1995	1	WESWOX
17	Student Microscope	-	8	LINKER
18	Mono Pan Balance	11.03.1996	1	-
19	Water bath with single hole	13.07.1996	2	-
20	Hot Plate	13.07.1996	1	SHITAL
21	Bright Field Microscope	13.07.1996	2	DOLLAR
22	Water bath six hole	15.07.1996	3	GUNA
23	Hot Air Oven-Alumina Chamber	13.07.1996	1	-
24	Tempo Incubator	13.07.1996	1	TEMPO
25	Triple Beam Balance	23.07.1996	3	DOLLAR

26	Spectronic-20 & Spectrophotometer	29.07.1996	1	MILTEN
27	Photoelectric colorimeter	29.07.1996	1	ERMA
28	Phase Contrast Microscope	13.08.1996	1	WESWOX
29	Allwin Refrigerator	28.08.1996	1	ALLWIN
30	Distillation Unit	19.01.1998	5	BOROSIL
31	UV-VIS Spectrophotometer	26.06.1998	1	SYSTRONIC
32	Hot Air oven	30.06.1998	1	KEMI
33	BOD Incubator with cooler	30.06.1998	1	KEMI
34	Laboratory Stirrer Model No. KLS.104 2B	20.07.1998	1	KEMI
35	Serological Water bath	03.03.1999	2	GUNA
36	Mini DNA Gel Set	14.06.1999	1	WESWOX
37	Immunoelectrophoresis apparatus	14.06.1999	1	-
38	Immunoelectrophoresis power supply	14.06.1999	1	IMMUNO
39	OHP slide projector	17.06.99	1	-
40	Gas Chromatography	26.12.1999	1	CHEMITO
41	Roy electronic top pan balance	1.09.2000	1	ROY
42	Vertical slab gel system electrophoresis	22.01.2003	1	-
43	Digital colony counter	22.01.2003	1	-
44	Deep Freezer 170 model	03.02.2003	1	REMI
45	UV transilluminator	30.12.2002	1	GENI
46	Hand Centrifuge	08.07.2003	2	-
47	Laminar Air flow chamber Lamp Vertical model	14.08.2004	1	-
48	Thin Layer Chromatography	14.08.2004	1	-
49	Membrane filter	14.08.2004	1	-
50	Colony Counter Digital	23.09.2004	1	-
51	Colorimetry Digital Filter	07.09.2004	1	-
52	Fluorescence Microscope	09.02.2005	1	-

53	Double Distillation Unit	06.08.2005	1	BOROSIL
54	Binocular Microscope	06.08.2005	1	ALMIDO
55	Microscope Olympus Trinocular Fluorescence Microscope	23.10.2006		OLYMPUS
56	Air Chamber system	03.01.2005		MADRAS
57	Chemical Balance	03.06.1995	10	KEROY
58	Electric Bunsen Burner	03.06.1995	1	-
59	Physical Balance	03.06.1995	1	KEROY
60	Photo electric Colorimeter	03.06.1995	4	CORONATION
61	Single Pan analytical Balance	03.06.1995	1	DHONA
62	PH Meter	03.06.1995	1	INDIAN
63	Heating Mantle with Regulator	03.06.1995	1	SAKTHI
64	Hot Air Oven	03.06.1995	1	-
65	Chromatography Cabinet	03.06.1995	1	-
66	Digital Flame Photometer	03.06.1995	1	CORONATION
67	Dessicator with Cover	03.06.1995	1	-
68	Electric Hot Plate With Regulator	03.06.1995	2	-
69	Laboratory Medical Microscope	15.07.1995	4	WESWOX
70	Chemical Balance	15.07.1995	1	KEROY
71	Electric Bunsen Burner	15.07.1995	1	REMI
72	Physical Balance	15.07.1995	1	REMI
73	Photo electric Colorimeter	15.07.1995	1	-
74	Single Distillation Unit	15.07.1995	1	-
75	Digital PH Meter	15.07.1995	1	-
76	Microkjedhal Digestion Unit	26.09.1995	3	-
77	UV Visible Digital Spectrophotometer	06.12.1995	1	-
78	TLC Kit	06.12.1995	1	-
79	Cooling Microfuge	19.07.1997	1	CSSCO
80	Head with Slideplate	19.07.1997	2	CSSCO

81	Nephelometer	05.08.1997	1	ERMA
82	UV –Transilluminator	19.09.1997	1	ERMA
83	Electronic Balance	30.06.1998	1	CSSCO
84	Digital PH Meter	03.07.1998	1	CSSCO
85	Digital Colorimeter	22.07.1998	1	-
86	Electronic top pan balance	22.07.1998	1	CSSCO
87	Triple Beam Balance	30.07.1998	1	SUPERFIT
88	Electrophoresis with Platinum Platform	11.09.1998	1	REMI
89	Deep Freezer	11.09.1998	1	REMI
90	Advanced Student Microscope	07.02.2000	1	SYSTRONICS
91	ECG Machine	16.02.2000	1	-
92	Tissue Homogenizer	01.09.2000	1	-
93	Laminar Air Flow Chamber	01.09.2000	2	-
94	Digital Photoelectric Colorimeter	01.09.2000	2	-
95	Centrifuge machine	30.09.2000	1	-
96	APS Two BED Demineraliser	01.10.2000	1	BESTO
97	Muffle Furnace	15.11.2000	1	-
98	Flame Photometer	22.03.2002	1	-
99	Cylindrical Water Bath	28.09.2002	2	-
100	Paper Electrophoresis	13.02.2003	1	-
101	Kitchen Balance	22.01.2003	1	-
102	Colorimeter	15.03.2004	2	DEEPPVISION
103	Autoanalyser	30.08.2004	1	REMI
104	Digital Colorimeter	12.02.2005	1	AQUOIN
105	Digital Colorimeter	23.02.2005	1	GUNA
106	Atomic Absorption Spectrophotometer	19.09.2006	1	ELICO
107	Laminar air flow chamber	26.10.2006	1	SCIENTEK
108	BOD Incubator	26.10.2006	1	-

109	Rotary shaker	11.10.2006	1	-
110	Hot air oven	26.10.2006	1	-
111	pH meter	11.10.2006	1	DIGISON
112	Flame Photometer	19.09.2006	1	ELICO
113	Spectrophotometer	20.11.2006	1	-
114	Fermentor	31.10.2006	1	-
115	Autoclave	26.10.2006	1	OSWORLD
116	Hot Plate with stirrer	11.10.2006	1	-
117	Colony counter	20.10.2006	1	-
118	Microscope	11.10.2006	1	-
119	Analytical Balance	11.10.2006	1	-
120	Electronic weighing balance	11.10.2006	1	-
121	Platform weighing balance	11.10.2006	1	-
122	Conductivity meter	11.10.2006	1	-
123	Deionizer Unit	02.12.2006	1	-
124	Automatic motorized sieve shaker	11.12.2006	1	NEOLAB/REVOTE K
125	Refrigerator with stabilizer	11.12.2006	1	-
126	Peristaltic pump	23.12.2006	1	ENERTEK
127	Stitching machine	23.12.2006	1	-
128	Autoclave	02.02.2006	1	PISCES
129	Electronic balance	21.10.2007	1	MADRAS SCIENTIFIC
130	Gene sequencer	02.02.2006	1	PISCES
131	Genei cooler	27.02.2006	4	GENEI
132	Gel drier	09.03.2006	1	GENEI
133	Gel documentation system	11.03.2006	1	PISCES
134	Hot air oven	02.02.2006	1	PISCES

135	Inverted tissue culture Microscope	24.03.2007	1	WESWOX
136	Ligation bath	09.03.2006	1	GENEI
137	Lux meter	14.03.2006	1	LABWARES
138	Laminar air flow chamber	09.02.2006	1	PISCES
139	Magnetic stirrer	02.02.2006	1	PISCES
140	Microcentrifuge	27.02.2006	4	GENEI
141	Mini immuno electrophoresis system	27.02.2006	6	GENEI
142	Micropipette	09.03.2006	6	GENEI
143	Mini sub system	27.02.2006	1	GENEI
144	Platform rocker	27.02.2006	2	GENEI
145	Vortex mixer	02.02.2006	1	PISCES
146	White light illuminator	02.02.2006	1	PISCES
147	Weswox microscope	31.5.1995	15	WESWOX
148	Compound Microscope	31.05.1995	2	ERMA
149	Research Microscope	31.05.1995	1	DOLLAR
150	Compound Microscope	31.05.1995	15	DOLLAR
151	Research Microscope	26.07.1995	4	DOLLAR
152	Student Microscope	-	8	LINKER
153	Bright Field Microscope	13.07.1996	2	DOLLAR
154	Microscope Olympus Trinocular Fluorescence Microscope-BX-51	23.10.2006		OLYMPUS
155	Medical Microscope	02.01.2003	1	-
156	Tissue Culture Microscope			OLYMPUS
157	Phase Contrast Microscope		1	WESWOX
158	Projection Microscope		1	RADIAL
159	Binocular Microscope		1	ALMICRO
160	Trinocular Research Microscope- CX-41	23.10.2006	1	OLYMPUS

161	Trinocular Research Microscope- CX-31	23.10.2006	1	OLYMPUS
162	Fluorescent Microscope with colour Video Monitor		1	-
163	Stereomicroscope	13.07.1996	1	-

### MAJOR INSTRUMENTS

	
<b>GAS CHROMATOGRAPHY</b>	<b>HPLC</b>
	
<b>AAS</b>	<b>UV-VIS SPECTROPHOTOMETER</b>
	
<b>Olympus Trinocular Fluorescence Microscope-BX-51</b>	<b>PCR</b>



## Agricultural Facilities for Lab to land Research





**SENGAMALA THAYAR EDUCATIONAL TRUST WOMEN'S COLLEGE**  
**PG AND RESEARCH DEPARTMENT OF MICROBIOLOGY**  
**CENTRALIZED INSTRUMENTATION FACILITY**  
**IN COLLABORATION WITH BIOMININ LABORATORIES, SUNDARAKKOTTAI**  
**TRAINING ON BIOINSTRUMENTATION**

**MAJOR INSTRUMENTS**

- ❖ **HPLC**
- ❖ **Gas Chromatography**
- ❖ **BX-51 Microscope**
- ❖ **Phase Contrast Microscope**
- ❖ **Inverted Tissue Culture Microscope**
- ❖ **Gel Documentation System**
- ❖ **Thermal Cycler**
- ❖ **Atomic Absorption Spectrophotometer**
- ❖ **UV-Vis Spectrophotometer**
- ❖ **Soxhlet Extraction Unit**
- ❖ **Semi Auto Analyser**
- ❖ **Bioreactor and Flame Photometer.**

<b>S.No</b>	<b>ACADEMIC YEAR</b>	<b>DATE</b>	<b>DEPARTMENT</b>	<b>No. OF BENEFICIARIES</b>
1.	2011-2012	06.08.2012	Microbiology	47 students
2.		14.08.2012	Biochemistry	31 students
3.		24.08.2012	Physics	26 students
4.		25.08.2012	Chemistry	17 Students

5.		28.08.2012	M.Phil Biochemistry and Microbiology	29 Research Scholars
6.	2012-2013	16.09.2013	Microbiology	34 students
7.		12.09.2013	Biochemistry	37 students
8.		21.09.2013	Physics	28 students
9.		06.09.2013	Chemistry	26 students
10.		25.09.2013	M.Phil Biochemistry and Microbiology	10 Research scholars
11.		2013-2014	12.02.2014	Microbiology
12.	13.02.2014		Biochemistry	37 Students
13.	16.08.2014		Physics	27 Students
14.	17.08.2014		Chemistry	21 students
15.	18.08.2014		M.Phil Biochemistry and Microbiology	15 Research scholars
16.			25.02.2015 26.02.2015	Student exchange Programme - A.V.C.College, Mayiladuthurai
17.	2014-2015	19.09.2015	Microbiology	34 students
18.		20.09.2015	Biochemistry	22 Students
19.		21.09.2015	Physics	33 students
20.		22.09.2015	Chemistry	27Students
21.		26.02.2015	M.Phil Biochemistry and Microbiology	6 students
22.		2015-2016	22.02.2016	Microbiology
23.	23.02.2016		Biochemistry	59 students
24.	25.02.2016		Physics	27 Students
25.	26.02.2016		Chemistry	21 students
26	26.02.2016		M.Phil Biochemistry and Microbiology	10 Research scholars
27.	2016-2017		28.12.2016	Physics, Chemistry, Biochemistry

		29.12.2016	and Microbiology	98 PG Final year students
28.		10.01.2018	Training on HPLC and GC-Chemistry, Biochemistry and Microbiology	133 PG students and Faculty Members
		11.01.2018		112 PG students and Faculty Members
29.		20.02.2018	Physics, Chemistry, Biochemistry and Microbiology	95 PG Final year students
		21.02.2018		
30.	2017-2018	29.05.2018 - 02.06.2018	Free summer training on Bioinstrumentation	44 students and Scholars from various colleges including, 1. Central University, Thiruvarur 2. A.V.V.M Sri Pushpam College, Poondi 3. Meenakshi Chandrasekaran Arts and Science College, Pattukottai 4. Idhaya College, Kumbakonam 5. M R Government Arts College, Mannargudi

Instruments in the Centralized Instrumentation Facility and Biominin Laboratories are used for training the students of certificate programmes, Bioinstrumentation and Microscopic Techniques conducted by the department

Training programme on Bioinstrumentation - 20.02.2018-21.02.2018



Free summer training programme on Bioinstrumentation - 29.05.2018-02.06.2018



Free summer training programme on Bioinstrumentation - 19.05.2019-24.05.2019



