

INSTRUMENTATION SERVICES

The activities of the department can be categorised into 5 aspects:

I. Procurement and installation of new equipment.

II. Maintenance of existing equipment.

III. Training Programmes.

IV. Institution Building Activities.

V. Participation in research activities.

I. Procurement and installation of new equipment.

Procurement of equipment involves the following steps:

- a. Invite suggestions from scientists.
- b. Tabulation of the same and discuss at the Equipment Committee, with HOD, Institute and the Convener.
- c. Prepare document for placing at the SAC and defend.
- d. Prepare Tech, Specifications and get them approved by the Technical Committee.
- e. Stores to float tender in two bids form (Tech & Commercial).
- f. Scrutiny of Technical Bids and make recommendations and obtain approval of Technical Committee.
- g. Open Commercial Bids and make recommendations.
- h. The list is submitted to Council for funds.
- i. After the funds are released, LC will be opened. And order released.
- j. Once the order is placed, pre-requisites for installation of equipment are obtained.
- k. Note put up to Director, on arrival of equipment, mentioning the names of indenters with location for installation suggested.
- l. After the approval is obtained, action will be taken to install the equipment completing the formalities of consignment verification and reporting for short shipment, damage etc. if any.
- m. After the instruments are installed, tests will be performed to ensure that the specifications are matched and reports will be issued. Simultaneously, arrangements for training on operation and service are also carried out (Table 31).

Table 31. List of New Instruments Installed:

S. No	Name of the Equipment	Make	Model	Location
1	Digital Photocopier	Toshiba	E-studio 200	Room No.104 Field Unit.
2	Digital Photocopier	Toshiba	E-studio 200	Library
3	Digital Platform Balance	OSAW	600 Kg	Primate Facility
4	Digital Platform Balance	OSAW	300 Kg	NCLAS
5	Binocular Microscope	Nikon	E-200	R.No.38 Bio.chem.
6	Trinocular System Microscope	Olympus	BX51	Room No. 32 Clinical Immu.
7.	Fluorimeter with PC and Printer (hp 3535)	Jasco	P.C.6500	Endocrinology Division
8.	C.D. Polarimeter with PC & Printer (hp3745)	J 810 (150-l)	Jasco	Endocrinology Division
9.	Micro plate Reader spectrophotometer	RPR WI HT WAVE	Biotek	Endocrinology division
10.	Hp Desk Jet Printer	HP	3845	Attached to Varian GC 3800
11.	Hp Desk Jet Printer	HP	3650	Attached to Spectramax Plate Reader cum Spectrophotometer
12.	Table Top Ref. Centrifuge	HERAEUS	Multifuge 3S-R	Clinical R.No11
13.	Whole Blood Aggregometer	Chronolog	500VA	R.No215
14.	Electrophoresis	Bio-Rad	Power Pack	R.No 55
15.	Microwave Oven-2nos.	LG	30LT	1) Bio-Chem.
16.	Digital Multimeters	Yokogawa	73401	Instrumentation
17.	Digital pH Meters- 8nos.	Thermo Orion	420A+	Biophysics – 2Nos. Molecular Biology–1No. Bio-chemistry – 2Nos. Clinical Division – 1 No. Endocrinology – 1 No. Food Toxicology – 1 No.
18.	RO System	Labconco	90750-02	Endocrinology
19.	RO System	Labconco	90750-02	Food Toxicology
20.	Millipore Water Purification System	Milli-Q	ELIX – 10	Biophysics
21.	Gel Dryer	Hydro Tech	583	Molecular Biology
22.	0.5KVA UPS –3nos.	Wipro	Wipra e-merge.	1&2-Libr. 3-Personnel div
23.	Off-line UPS 0.5 KVA		BE 5005	C-Bills Section
24.	1 KVA UPS	VIVCON		Clinical Division
25.	1 KVA UPS	VIVCON		Drug Toxicology
26.	1 KVA UPS	VIVCON		Library
27.	Off-line UPS 0.5 KVA–2 No	APC	ES500	Library
28.	Window Air Conditioner	Voltas	2000DV Vectra S.No.RAC-502500007	Room No.307
29.	Deep Freezer(Vertical D.D)	Bluestar	BFS –345 S.No. 20041306578	Room No.68
30	Deep Freezer		HF500 S.No.31031001795	Room No.68

S. No	Name of the Equipment	Make	Model	Location
31.	Water Cooler- 40 Lit	Sriram	S.No. SRA 200BF8/2020K3034 7. Compressor No.CCK21883	
32.	High Pressure Water Jet.	OAH	TW13/170. 3804672	
33.	Air Cooler.	Kenstar	DXPO 118H	Stores Dept.
34.	Refrigerators(D/D, Frost Free) 260Lit	Godrej	GF28	FDTRC R.No.310
35.	Refrigerator(D.D	LG	GLT322GP. S.No.J.B CG40811 L0066491N	R.No.51 Analytical Corridor
36.	Refrigerator D.D	LG	S.No: J44G3091 L004577N	Dr.Vijayalaxmi Biochemistry
37.	Refrigerator D.D	LG	S.No.: 50045961 N0045931	Dr.Veena Shatrugna's Lab
38.	Refrigerator	LG	S.No.: 50045961 N0045931	Dr.Vajreswari's Lab- Biochemistry
39.	Refrigerator (Dr/D) 310Lit	LG	S.No.J43G3091 L004281N	Dr.Singotam's Lab
40.	Refrigerator170lit.	Godrej	Champion	Crutch
41.	Refrigerator	Kelvinator	Electrolux S.No.: 40401188	R.No.40
42.	Refrigerator D.D, F.F -310 Lit	LG	322GD S.No.: 40401188	Dr.Vajreswari Dr.Madhavan Nair Mr.T.Longvah
43.	Warranty Replacement of Compressors (Sealed)		2000Q. S.No.: 20MJ1739	Molecular Biology Lab
44.	D.F Condensing Unit	Kirloskar Copeland	KCH-410	R.No.214
45.	Cold Room Condensing Unit			Gopalan Block II Floor
46.	Glass Distilled Water Set	Shanti Scientific		Ocular Biochemistry
47.	Bacteriological Incubator	Osworld	JRI'C-9	Molecular Biology
48.	Floor Scrubbing Machine	Unitec	43-CT	Primate Facility
49.	Vacuum Cleaner	Eureka Forbes	Euroclean	Primate Facility
50.	Vortex Mixers-20nos.	Scientific Industries	G360E	Biophysics
51.	Seed Germinator	Remi	SG 65	NCLAS
52.	Water Bath	Cintex	CIC12	Food Chemistry
53.	Colour Television	Thomson	21 F TSV	NCLAS
54.	Wet Grinder	Maharaja	--	Biophysics
55.	Multimedia Projector-3nos.	Epson	EMP 74 EMP 75 EMP 735	Director's Office Assembly Hall Conference Hall

II Maintenance of Existing Equipment

Table 32. Total no. of complaints registered

Name of the Divisions	Complaints Received	Completed	Pending
Electronics	210	198	12
Electromechanical & Winding	160	154	6
Refrigeration & Air-Conditioning	50	48	2
Electrical	241	240	1
Electrical	723	714	9
Total	1384	1354	30

III Training Programmes and other activities

Participation of staff in Training Programmes:

In plant Training in Biomedical Engineering was imparted to six candidates from the Advanced Training Institute for Electronics and Process Instrumentation, Ramanthapur; under the aegis of Ministry of Labour, Government of India, for a period of six weeks from 12-07-2004 to 20-8-2004. Mr.R.Chaugule, Mr.AKV.Rajamouli, Mr.V.Satish Babu, Mr.Prasanna Kumar, Mr.K.Srinivasa Rao and Mrs Durga explained the theoretical and practical aspects of various scientific and test equipments used in the Biomedical research. The staff of the Division demonstrated Isotope Counters to the participants of the Thirty Second Annual Training Course on Endocrinological Techniques and their Applications on August 20th 2004 (Mr.R.Chaugule & Mr.A.K.V.Rajamouli).

Training

Attended Training on HVAC Systems organized by GMP Compliance India at Hyderabad, (Mr.B.Ramulu).

Refrigeration Staff attended Inplant Training by BPL Engineer on Refrigerators at the Institute.

Seminar attended:

"Innovation in Chromatograph" conducted by Ms Perkin Elmer India on 29-09-2004 (Mr.V.Satish Babu and Mr.K.Sreenivasa Rao).

IV. Audio-Visual Arrangements were made for various scientific and cultural functions.

Institution Building Activities:

1. Equipment Committee (Technical and Purchase).
2. ICMR and DGHS Technical Committee- Capacity Building Project.

V. Research Activities: The following papers have been published

1. A study of the structural characterization and cyclohexanol dehydrogenation activity of Cu/-Al₂O₃ Catalysts.
Anita Rachel a, V.Durga Kumari*a, R.Subramanianb, K.V.R.Charya & P.Kanta Raa
Indian Journal of Chemistry vol.43A, June 2004,pP.1172-1180
2. A Protective role for Zinc on intestinal peroxidative damage during oral iron reletion.
B.Sreedhara, R.Subramanian b and K. Madhavan Nair a
Biochemical and Biophysical Research Communications 318 (2004) 992-997.
3. Helped the scientists in the simulation of ESR specific using appropriate software and interpretation of data.

LIBRARY AND DOCUMENTATION SERVICES

Library continued to cater to the documentation and information needs of the Institute and other research organizations, home science and medical colleges. The Library has played a key role in reference activities by offering information services like MEDLINE Searches. ProQuest Searches and other on-line retrieval activities using the LAN network. Library continued to participate in exchange of data and information using the URL < <http://Groups.yahoo.com/Group/ICMRLibrarians>>.

Automation activity (Cataloguing) using the ISIS and LIBRIS softwares has been continued during the year.

The Library has continued to provide an excellent Photostat support to the scientists, technical as well as to the administrative staff. Resource Sharing and User-Education Programmes etc are continuously being undertaken by the Library. Institute's scientific papers going in for publication in Journals etc., are being routed through the Library and a data-base of the published papers is also made accessible through on-line services.(www.ninindia.org).

During the period a Total of 2861 ProQuest ML Full Text database Searches Jan-Dec'04 were made and there is overall 491% (Jan-Dec'04) increase in its usage.

British library Institutional membership is renewed for 2004 and Corporate Membership for "Universities Federation for Animal Welfare" UK for the year 2004, has also been taken out during the year under report.

The following journals have been added to the existing subscriptions list of 2004

1. Perspectives in Education

The following Library services were expanded as detailed below

1. New Additions

Books	.....	207
Reports	.....	501
Thesis / Dissertations	.....	17
Microforms	.....	27
CDROMS -MEDLINE	32	} 137
ProQuest ML CD's	53	
Misc. CD's	52	

2. Other activities

Journals Bound	.....	221
Visitors using the Library	.....	8,378
Circulation of Books/Journals etc.	.....	1,928
MEDLINE Abstracts provided	.....	2,945
No. of E-mails sent outside	.....	199
No. of E-mails received	.....	759