

## **RESEARCH FACILITIES AND EQUIPMENTS AVAILABLE IN THE DEPARTMENT OF BIOCHEMISTRY**

The Department of Biochemistry has grown over the last twenty five years in various aspects. Besides the human resource generation, the department today can boast of the very latest advanced research equipments in the field. Through its facilities and equipments diverse research activities are ongoing in the Department keeping abreast with the international pace. The Department has over the years acquired and maintained a variety of instruments required for students' research work. Today the Department provides the following functional facilities such as

1. Animal cell culture room
2. Microbial culture room
3. Cold room
4. Reprography facility
5. Department library
6. PCR
7. Photography
8. Micro photography
9. Radioactive handling room
10. Radioactivity disposal facility
11. Glass House

These facilities and equipments have been acquired using grants made available to the Department by UGC and under assistance provided by DST-FIST and UGC-SAP. Many of the instruments are also acquired by the faculty members individually using grants available from the various national and international projects. The equipments in the Departments are kept in the Central Instrumentation rooms for easy access and maintenance. They are maintained by members of the Departmental supporting staff under supervision of an elected faculty member. According to the needs and speciality, many instruments are also placed in different laboratories depending upon the need of the particular research unit but are open for use by research scholars of the department and sometime other department after obtaining the permission.

Last but not the least, we have online internet and telephone connection to all the rooms in the Department. A large number of Journals are also available online to everyone in the Department under the INFO-NET scheme of UGC. Many more journals are scheduled to be available over the internet in near future. Overall, we have come a long way in 25 years and from now on the progress of the department will be even faster as most necessary facilities are already available in the Department.

### **INSTRUMENTATION ROOM (I)**

1. Spectro Fluorometer
2. Multiscan
3. Freeze Dryer
4. Stopflow Spectrophotometer
5. High speed refrigerated Centrifuges
6. Ultracentrifuges
7. Phase contrast microscope
8. electronic digital balances (Sartorius and Metler)
9. Mass spectrometer cum Nitrogen Analyser System
10. ELISA reader

## **INSTRUMENTATION ROOM (II)**

1. Ultra Freeze (HETO -80)
2. Quick Freezer (REMI -30)
3. UV Spectrophotometer (DU, 64)
4. Laser Writer
5. Phast System (PHARMACIA)
6. Liquid Chromatograph
7. Liquid Scintillation Counter
8. High Voltage Electrophoresis
9. Freeze Dryer(Heto Lyolab)
10. Ultra Centrifuge (Hitach))
11. Evaporating Unit (RECTI THERM)
12. Chromatopac
13. Fridge
14. Stabiliser

### **Microbiology (Prof. A.N. Rai, Dr. A.K. Singh, Dr. M.B. Syiem)**

1. Beckman DU-530
2. Sonics Vibra Cell
3. Genei Electrophoretic Unit
4. Cyber Scan 510<sup>PH</sup>
5. Remi Cyclomixer
6. Remi Magnetic Stirrer 2 ml
7. BOD Incubator NSW India
8. Chemito GC-8610
9. Beckman LS-1801
10. NSW India Water bath Shaker
11. Remi Laboratory Centrifuge R4C
12. NSW India Oven Universal
13. Remi Laboratory Centrifuge

### **Genetics & Immunology (Prof. R.N. Sharan, Dr. L.Kma, Dr. A. Alam)**

1. Mini-Protein II  
Electrophoresis Cell (BIORAD)
2. Mini Trans-Blot  
Electrophoretic Transfer Cell (BIORAD)
3. Bio-Dot SF  
Microfiltration Apparatus (BIORAD)
4. M..pid  
(Horizontal Gel Electrophoresis Apparatus)
5. Gel Electrophoresis Apparatus  
GNA-100 (PHARMACIA)

6. UV-Lamp (Hand held) HERAEUS
7. UV Light-meter  
(290nm-390nm UVA.UVB) LUTRON
8. Kodak DC-120 Zoom Digital Camera & Kodak Digital Science Electrophoresis Documentation and Analysis System-120
9. Mini-Transilluminator BIORAD
10. PH Meter-Cyberscan 510
  
11. Aspirator Rotary Vacuum Evaporator :
  - (a) EYELA - A -35
  - (b) Type N-1
  
12. Centrifuge :
  - (a) Remi C24
  - (b) Spin win Model MC-01
  
13. Electrophoretic Unit :
  - (a) Bio-Rad Model Mini-Protean II Cell
  - (b) GENEI UV Transperent Submarine Electrophoresis
  
14. Spectrophotometer : Hitachi Model U-2001 UV/Vis
  
15. Chromatographic Unit : Bio-Rad Biologic LP, Pharmacia
  
16. Carbondioxide Incubator

### **Medical Biochemistry (Prof. R. Sharma & Dr. D. Syiem)**

1. Hitachi U-2000 Spectrophotometer
2. Heto Ultrafreeze
3. Beckman CoulterTM  
Allegra 64R Centrifuge
4. Hitachi,Refrigated Centrifuge
5. Incubator
6. Oven Universal
7. Fridge-2
8. HPLC Millinium 32- Water Pvt ltd.
9. Varian Spectrophotmeter
10. Homogenizers
11. Columns for chromatography with automated fraction collector.



**Centrifuge Sigma 3k30**



**HP Laser Jet 1320<sub>n</sub>**



**Liquid Scintillation Counter Wallac 1409**



**Lyophilizer Heto Lyolab 3000**



**Microscope SH-50**



**Millipore**



**N-15 Analyser**



**Ultra Freeze Heto -80°C**



**Stopped Flow Spectrophotometer RA-401**



**Lyophilizer Secrofoild**



**Olympus phase contrast microscope**