

**Directorate of Research**  
**Major Central Research Facilities being Created**  
**At Guru Nanak Dev University, Amritsar**  
**Under Assistance from UGC, DST and the University Funds**  
**(UPE, CPEPA, PURSE)**

Equipment	Approx. Cost (Rs. in lacs)
NMR Spectrometer (500 MHz)	300
High resolution transmission electron microscope (HRTEM)	250
Motion Analysis equipment	250
LCMS	150
FESEM	150
ESCA/AES	150
Module for Microarray System	150
Next Generation Sequencer	150
Microarray system	150
Vibrating sample magnetometer	130
Confocal Microscope	130
Pulse laser deposition system	100
Nanoimprint lithography along with ion etching system	100
Vector Network Analyzer (10 MHz – 43.5 GHz) with software	100
BSL-3 (P3) facility	80
Automatic DNA Sequencer	80
Spectroscopic Ellipsiometry	70
Scanning Electron Microscope for biological applications	80
SAXS and temperature stage	60
Inductively Coupled Plasma Mass Spectroscopy (ICP-MS)	60
Cytogenetic Workstation and accessories for Comet Assay	55
Minor equipments and accessories	50
Accessories for SEM (detectors such as STEM, EDS etc. )	50
Computers and Networking	50
Liquid Nitrogen Plant	50
Isothermal Titration Calorimeter (ITC)	43
Magnetron Sputtering system	40
Time-resolved fluorescence spectrophotometer	40
Atomic Absorption Spectrophotometer	40
Amino acid analyser	40
Ultra Performance Liquid Chromatography (UPLC)	40
Dynamic Light Scattering Measurement	35
Accelerometers (5)	35
Antioxidant analyser	35
Upgradation of Bruker Single Source crystal diffractometer to double source	35
Brunauer-Emmett-Teller (BET) surface area analyzer	30
Semiconductor IV-CV characterization	30

Software	30
Hybrid isoelectric focusing system	30
Microwave synthesizer (2)	30
Five Part Hematology cell counter	30
CHNOS analyzer	30
Preparative / Semi –prep. HPLC	30
Standard radon equipment	30
Ultracentrifuge	30
Fully automated Chemiluminescence analyser with accessories	27
Flow Cytometer	27
HPLC and accessories	25
Fully automated random access clinical chemistry analyzer	25
Hybrid isoelectric focusing system	25
Spectroradiometer	25
Doppler Electrocardiograph with treadmill and accessories	25
AutoKjeldahl System	25
Automated serum screening system	25
Dual Energy X-Ray Absorptiometry (DEXA)	22
Lab. Clinical Analyser	21
PVD system (multi target) with electron beam gun	20
Flash chromatograph	20
Ion chromatograph	20
Microfiltration	20
Freeze Drier	20
Mobile Environmental analysis lab	20
Biosafety cabinet level-3	20
Atomic Absorption Spectrophotometer	20
Real Time PCR	20
2D workstation	20
UV-Vis-NIR Spectrophotometer	17
Software for Remote sensing, Statistical, Mathematical, Environmental and other applications	15
Language lab. (30 Units)	15
Folklore material	15
Language lab. (30 Units)	15
Folklore material	15
FTIR	15
UV-Vis-NIR 190-2500nm	15
Remote sensing workstation and GIS software	12
Work station with software for drug designing	10
Fluorescent microscope (photographic, computer, recorder	10
Cryotome	10
Language teaching software	10
Recording Studio	10
Vernacular/Translation	10

Production of recordings/	10
Language teaching software	10
Recording Studio	10
Vernacular/Translation	10
Production of recordings/	10
Density and Sound Velocity Analyzer	10
Rutherford Back Scattering	10
Compton Scattering Expt.	10
CAD System	10