



ST. JOHN'S
UNIVERSITY

Industrial Pharmacy Innovation Laboratory

St. John's University, Queens NY

Facilities



Laboratory G9 (St.
Albert's Hall), 650 sq. ft.

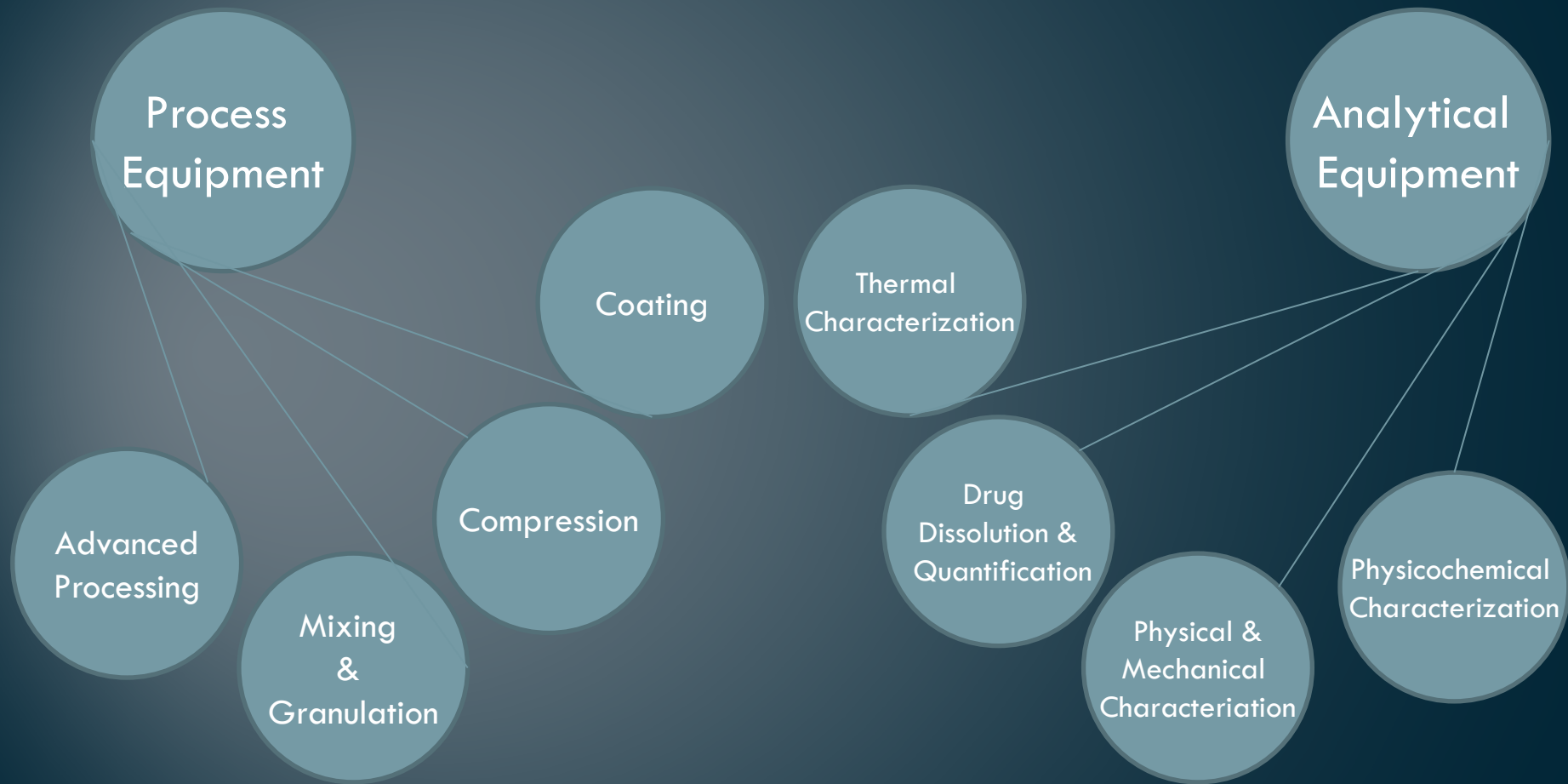


Laboratory B2 (St.
Albert's Hall), 1100 sq. ft.

Research Focus

- **Poorly Soluble Drugs**
 - Lipid Based Drug Delivery Systems
 - Melt Extrusion
 - Solid Dispersions
 - Nanoparticulate Systems
 - Pharmaceutical Salts, Microenvironmental pH Modulation
 - Spray Drying
- **Pharmaceutical Processing**
 - Melt Granulation
 - Continuous Processing
 - Compaction Physics
 - Coating

Process & Analytical Equipment



Processing Equipment

Hot Melt Extrusion

Advanced
Processing

Process
Equipment

Mixing &
Granulation

Compression

Coating

Thermo Scientific, Process 11, Hot Melt Extruder



Spray Drying

Advanced
Processing

Process
Equipment

Mixing &
Granulation

Compression

Coating

Buchi, B-90 Nano Spray Dryer





Turbula Mixer,
Planetary Mixer
and V Blender



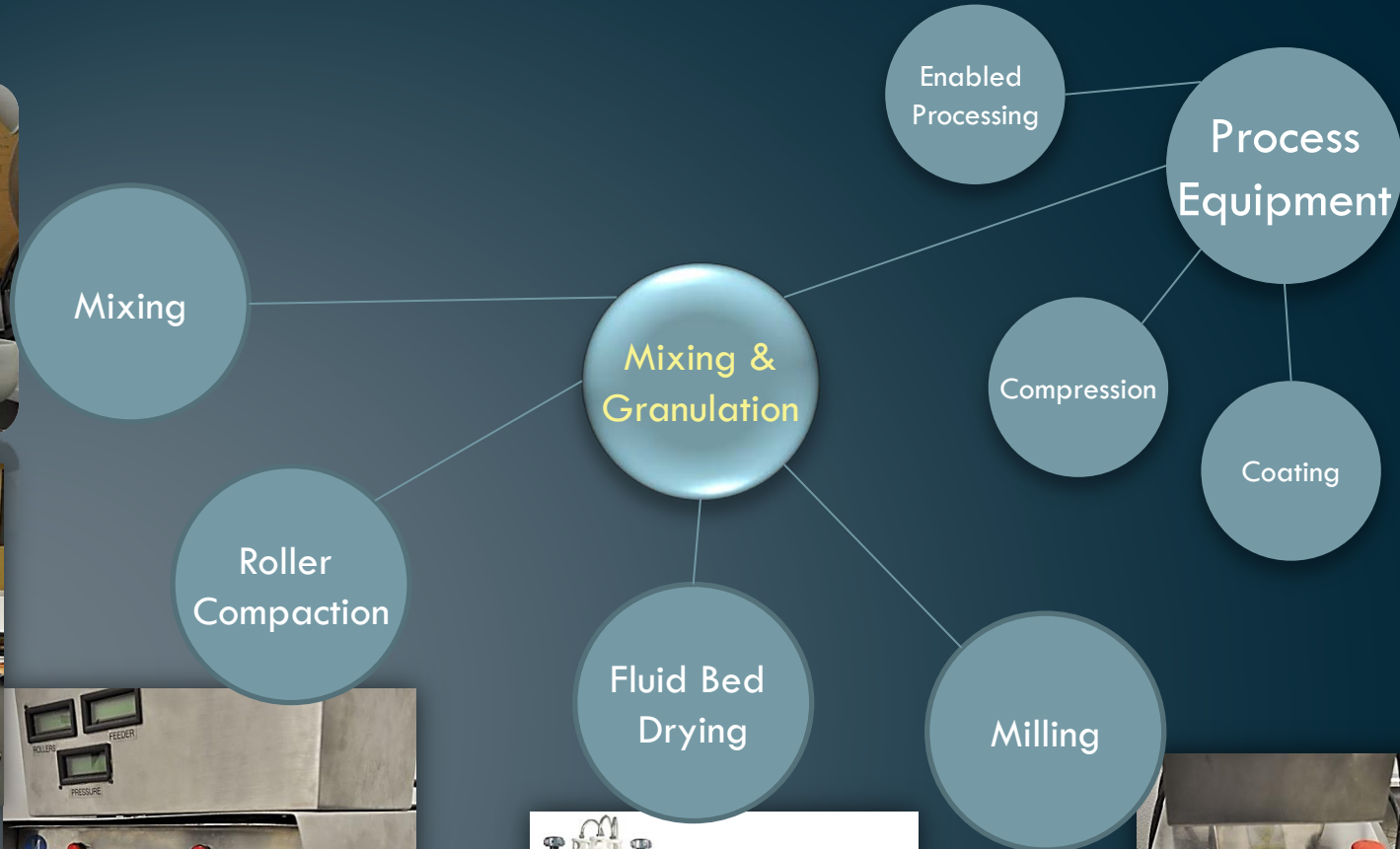
MRC, Roller Compactor



Freund Vector
VFC Lab Micro-Flo Coater



MRC, MOM5
Oscillating Milling





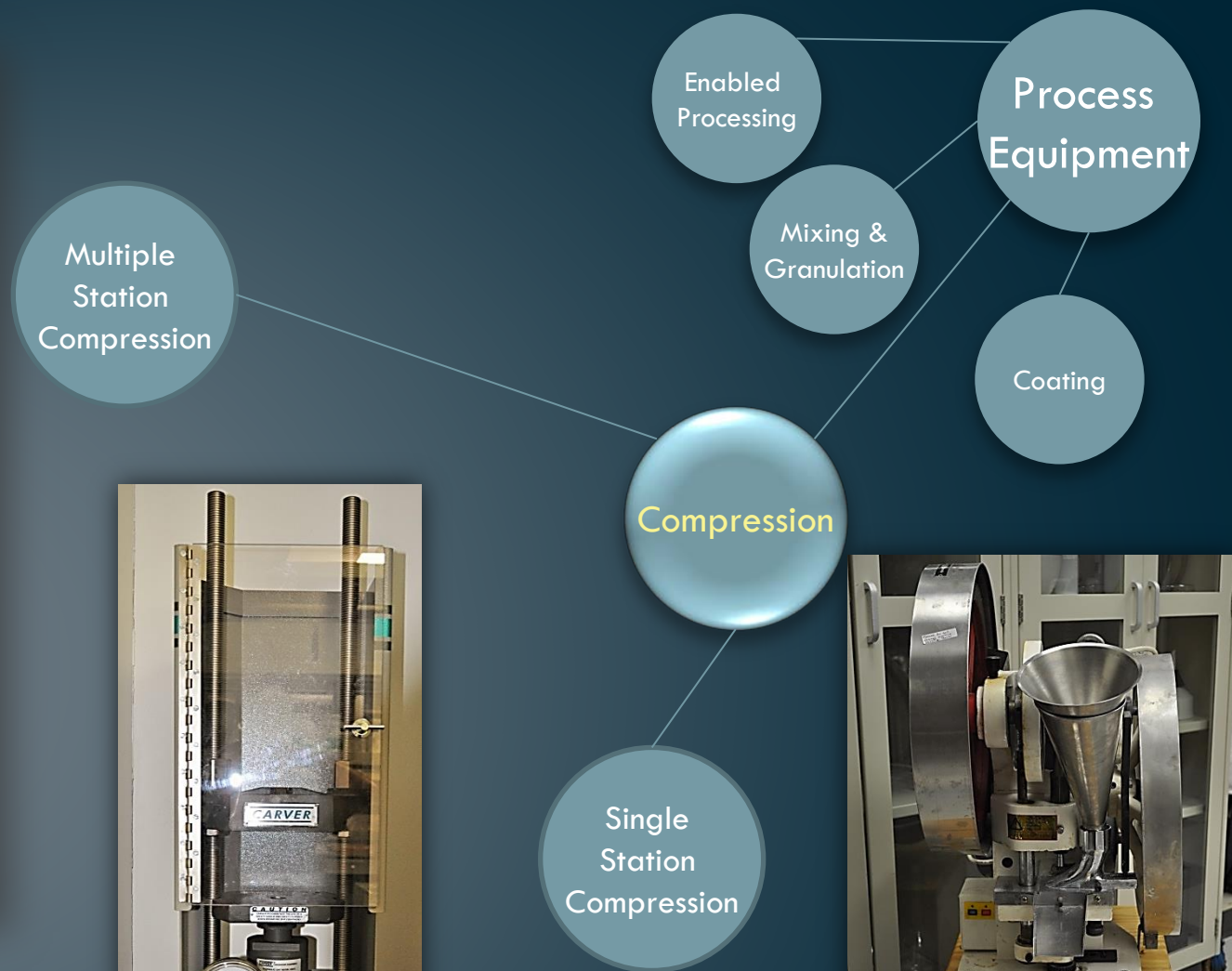
Cadmach Machinery,
Benchtop Rotary Tablet Press
8 Station



Carver Tablet Press,
Single station Model C



Shanghai Tiangfeng,
TDP Series, Automatic
Single Punch Tablet
Press



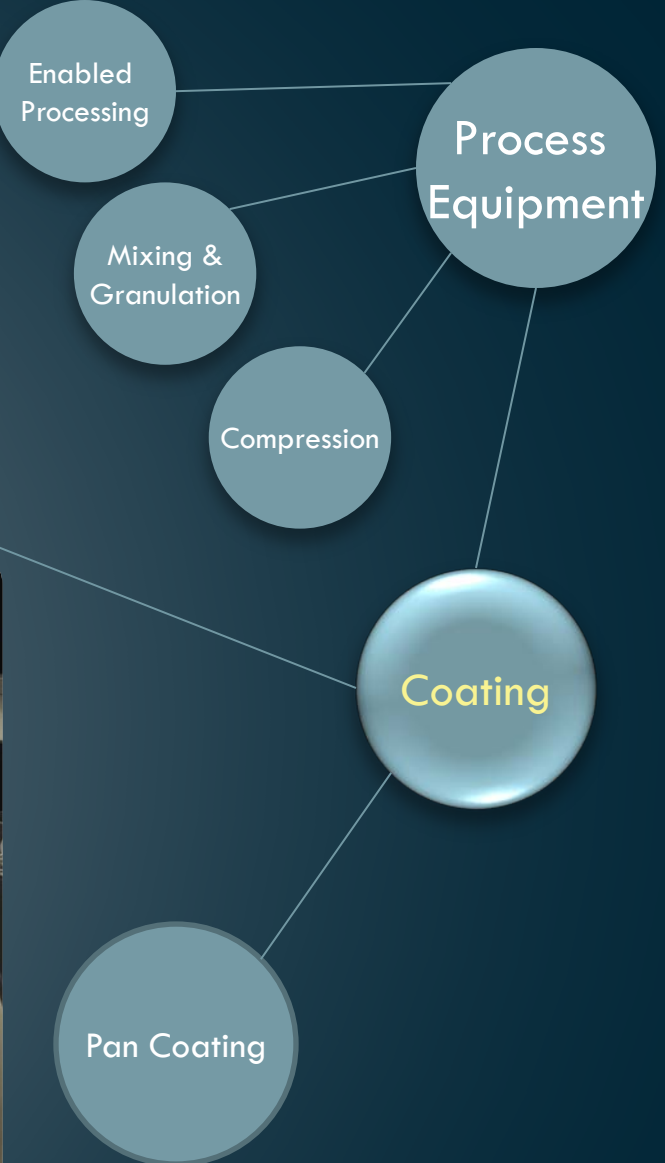


Freund Vector VFC Lab
Micro-Flo Coater

Wurster
Coating



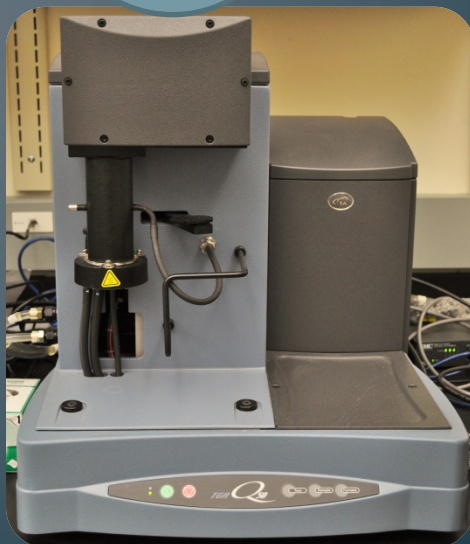
Shanghai Tiangfeng , Waternut
Type Tablet Film Coating machine



Analytical Equipment



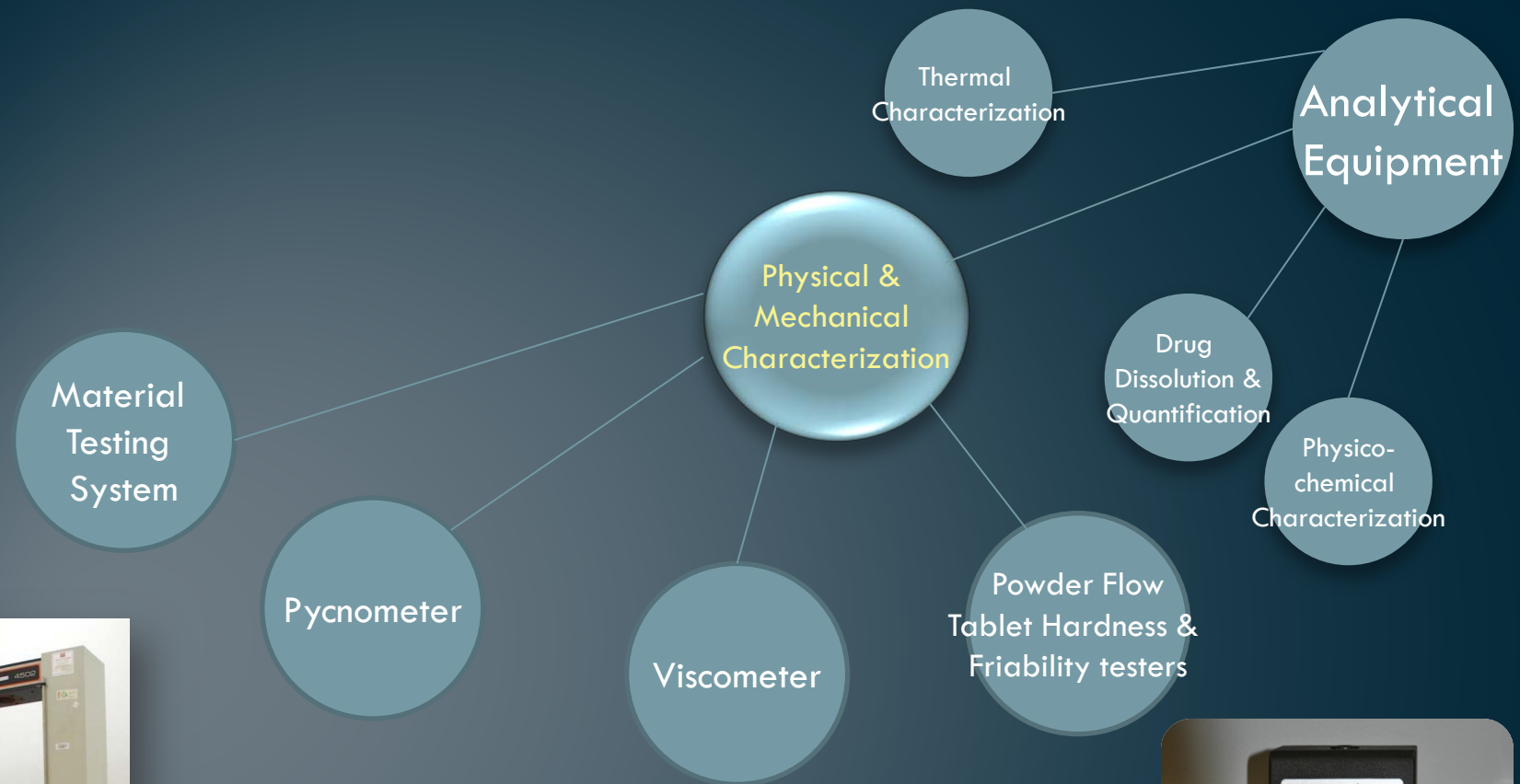
TA Instruments, Discovery HR-2
Hybrid Rheometer



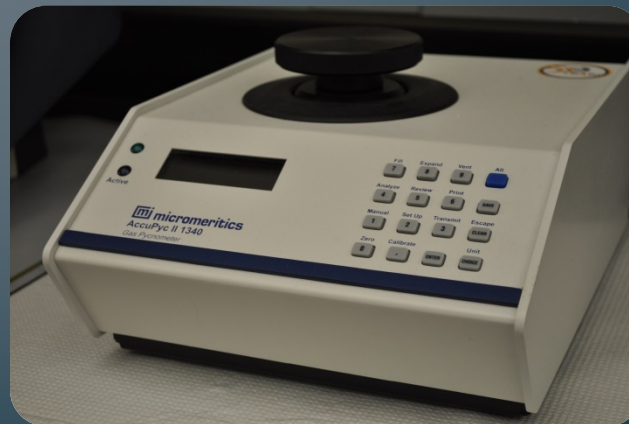
TA Instruments, TGA Q 50



TA Instruments, DSC Q 200



Instron 4502
Material Testing System



Micromeritics Inc., Accupyc II
1340 Gas Pycnometer



Brookfield, DVR-2 Viscometer

Thermal
Characterization

Physical &
Mechanical
Characterization

Analytical
Equipment

Physico-
chemical
Characterization

Drug
Dissolution &
Quantification

Dissolution
Apparatus
(4)

HPLC (7)



SR8 Plus Dissolution Station,
Distek Dissolution Apparatus



Agilent 1100 series HPLC (2), Waters Corporation HPLC (5)





Beckman Coulter, Delsa Nano,
Dynamic light scattering
particle size analyzer



Shimadzu,
X Ray Diffraction
XRD 6000



Mettler Toledo FP82 Hot
Stage Microscope



Nikon Eclipse 50i
Polarized Light Microscope

Particle size &
zeta potential
analyzer

Powder X-ray
diffractometer

Hot-stage
microscope

Polarizing
microscope

Physicochemical
Characterization

Analytical
Equipment

Thermal
Characterization

Physical &
Mechanical
Characterization

Drug
Dissolution &
Quantification

Advanced Analytical Equipment

Available In The Department

- *Scanning Electron Microscope*
- *Transmission Electron Microscope*
- *Confocal Imaging Microscope*
- *Nuclear Magnetic Resonance*
- *FTIR Spectrometer*

