

MAJOR RESEARCH AREAS

Department of Pharmaceutics

- Solubility enhancement techniques (Spray drying, Hot melt extrusion, Lyophilization).
- Spray coating technology (R&D coater)
- Particle size reduction (Probe sonicator, High speed homogenizer).
- Targeted drug delivery systems.
- Nanotechnology based drug delivery systems.
- Carbon nanotubes carrier based drug delivery systems.
- Niosomes, Liposomes and Ethosomes based drug delivery systems.
- Nanocomposite based drug delivery systems.
- Silicon Nanoparticles based drug delivery systems.
- Osmotic controlled drug delivery systems.
- Compression coating based pulse-tile drug delivery systems.
- Ophthalmic drug delivery systems.
- Transdermal drug delivery systems.
- Herbal based drug delivery systems.

MAJOR RESEARCH AREAS

Department of Quality Assurance Techniques:

- Development and evaluation of novel drug delivery system like ethosomes, niosomes and nanoparticles.
- Nasal drug delivery systems
- Colon drug delivery systems
- Phytopharmaceuticals
- Drug delivery via fast dissolving films
- Self emulsifying drug delivery systems
- Development and validation of stability indicating analytical methods on bulk drug and marketed formulation.
- Nanocomposites

MAJOR RESEARCH AREAS

Department of Pharm. Chemistry

Synthetic Chemistry

Synthesis of -

- Triazoles
- Diazoles
- Indazoles
- Aryloxypropanolamines
- Thiophenes

Analytical Chemistry

- Development and validation of UV-Visible spectrophotometric methods for estimation of various drugs in bulk and dosage forms.
- Development and validation of RP-HPLC methods for estimation of various drugs in bulk and dosage forms.
- Development and validation of bioanalytical methods for estimation of various drugs in bulk and dosage forms.

MAJOR RESEARCH AREAS

Department of Pharmacology

- Antisnake venom activity
- Antiarthritic activity of Scorpion and Bee venom.
- Nootropic activity
- Chronic fatigue syndrome
- Wound healing activity
- Hypertension
- Atherosclerotic
- Diabetes and its complications
- Antiinflammatory and Analgesic activity
- Antidiarrhoeal activity
- Hypertension
- Pharmacological evaluation of bioactive compounds.
- Hyperlipidemia

MAJOR RESEARCH AREAS

Department of Pharmacognosy

- Herbal Drug Standardization
- Histological Analysis of Crude Drugs
- Extraction of Fixed & Volatile oils
- Isolation & Characterization of Phytoconstituents
- Chromatographic Identification of Phytoconstituents
- Formulation & Evaluation of Herbal Cosmetics
- Evaluation of Marketed Herbal & Ayurvedic Formulations