5. PLAN OF WORK

- Literature Review
- Selection of drug candidates (Herbal & Synthetic)
- Identification of animals for experimental procedures
- Development of protocol
- Approval of Animal Ethics committee for experimental work
- Procurement of chemicals and reagents
- Procurement of animals for experimental procedures
- Stabilization of animals as per requirement of the study
- Preparation of dosing solution as per protocol
- Analytical Methods
  - Development and optimization of analytical method to determine drug from plasma
  - Optimization of extraction procedure of drug from plasma
  - Validation of analytical method as per USFDA guidelines
  - Dosing of experimental animals as per schedule
  - Collection of blood samples after specific time intervals as mentioned in protocol
  - Separation and storage of plasma samples
Plan of work

- Pharmacokinetic Study
  - Determination of pharmacokinetic parameters from analytical data
  - Interpretation and statistical analysis of pharmacokinetic data
  - Evaluation of the herb-drug interaction through the pharmacokinetic study.

  ➢ Pharmacodynamic Study
    - Comparative anti arthritic activity using FCA induced arthritic model in rats.
  
    - Dosing of experimental animals as per schedule
    - Evaluation of different parameters like change in paw volume, mechanical nociceptive threshold, mechanical hyperalgesia, histopathology and hematological parameters.
    - Interpretation and statistical analysis of pharmacodynamic data
    - To evaluate the herb-drug interaction through the pharmacodynamic study.

  ➢ Correlation of the pharmacokinetic and pharmacodynamic study results for the establishment of herb-drug interaction.

  ➢ Zeroing of data, documentation and publication.