CHAPTER 3 AIM AND OBJECTIVES

The primary aim of the present research work is to explore new alternatives for the treatment of conditions like gout which is commonly associated with many other diseased conditions like rheumatoid arthritis, pain and inflammation associated with cancer. The conventional treatment for these conditions includes use of oral medication which allows the use of tablets of NSAIDs. However there are many side effects associated with these conventional NSAIDs. Since many years Ayurveda has been practiced in India and many medicinal plants are used in the form of their powders, extracts to treat many diseases. Besides this it claimed to have lesser side effects than the Allopathic medication available in the market to treat the same conditions. The aim of this work is to establish a relation between the penetration activities shown by certain medicinal plants used many phytoconstituents show a synergistic effect when used in the form of whole extract. The study also aims at making these valuable and useful constituents in a dosage form that will increase patient convenience and be stable and effective at the same time. Though it has been observed that oral route is most convenient and compliant with the patients, has main disadvantages of drug metabolism and low bioavailability. Therefore the current work aims at topical delivery of drug, the site of action being the inflammation at a particular site on the skin or some layers beneath the skin.

The aim of the study is to make transdermal formulations of a few anti-inflammatory agents like extracts of seeds of *B.lanzan* family Anacardiaceae and extracts of seeds of *Simmondisia chinesis* family Simmondsiaceae.

Objective of the Study:

The broad objective of the present work is to develop a formulation made from extracts of medicinally Important plants which have already been reported and widely used in Ayurveda are one of the rich source of fatty acids as it is well known from the literature survey that in order to exist penetration enhancer activity it must have higher percentage fatty acids which may be responsible for drug molecules to enter into the systemic circulation through stratum corneum. So the present study was taken to isolate the mucilage and oil from seed and evaluate it as penetration enhancer.

Objectives of work:

A vast summary of literature survey gives some views, which hypothesized as follows,

- To Collect and identify, authenticate of plants materials and seeds.

- To study Morphology and microscopy of plant material.
- To study Isolation methodology
- To perform Qualitative analysis for isolated oil
- To study Toxicity of isolated penetration enhancers.
- To perform preformulation study of isolated components (oil)
- To prepare formulation using isolated oil.
- To evaluate formulated product (Medicated gel)
- To perform comparative drug release studies *(in vivo and ex vivo)*
- To establish of Pharmacokinetics in rat
- To establish of release kinetics.
- Accelerated stability studies