

4.0. Study Design

The present studies have been elaborated the characterization of CCPS and ECNPs. It has been conducted on female Wistar rats *in-vitro* and *in-vivo* assay systems. In this thesis, *in-vitro* experiment has been performed to establish the direct effects of curcumin, and CCPS on arsenic induced hepato-toxicity. The main aims of these works are the protective and curative action of curcumin, pectic polysaccharide (CCPS) from *Momordica charantia*, and curcumin encapsulated chitosan nanoparticles (ECNPs) on sodium arsenite mediated female reproductive disorders *in-vivo* condition by co-administration and post-treatment mode. The present research design and group distribution will be discussed in the following.

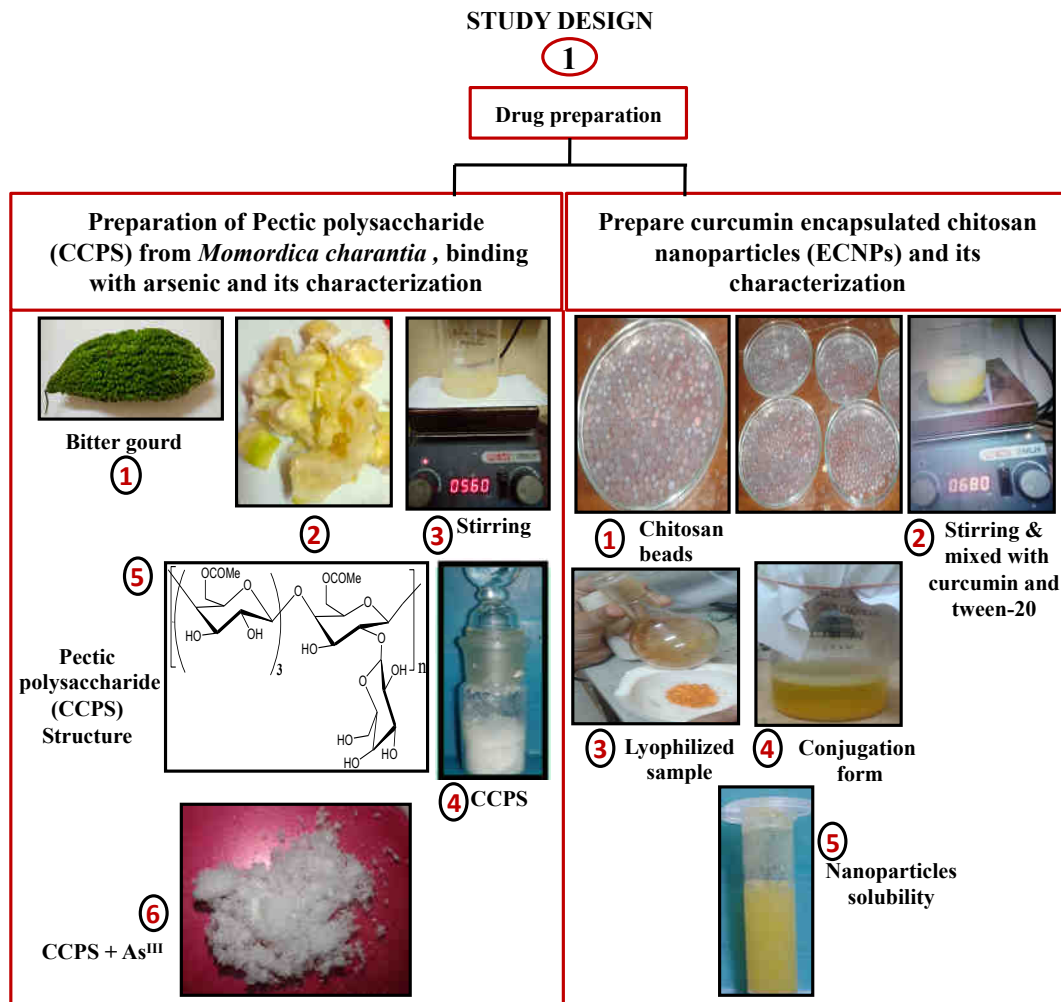


Fig 4.1. Schematic diagram of study design of present research work.

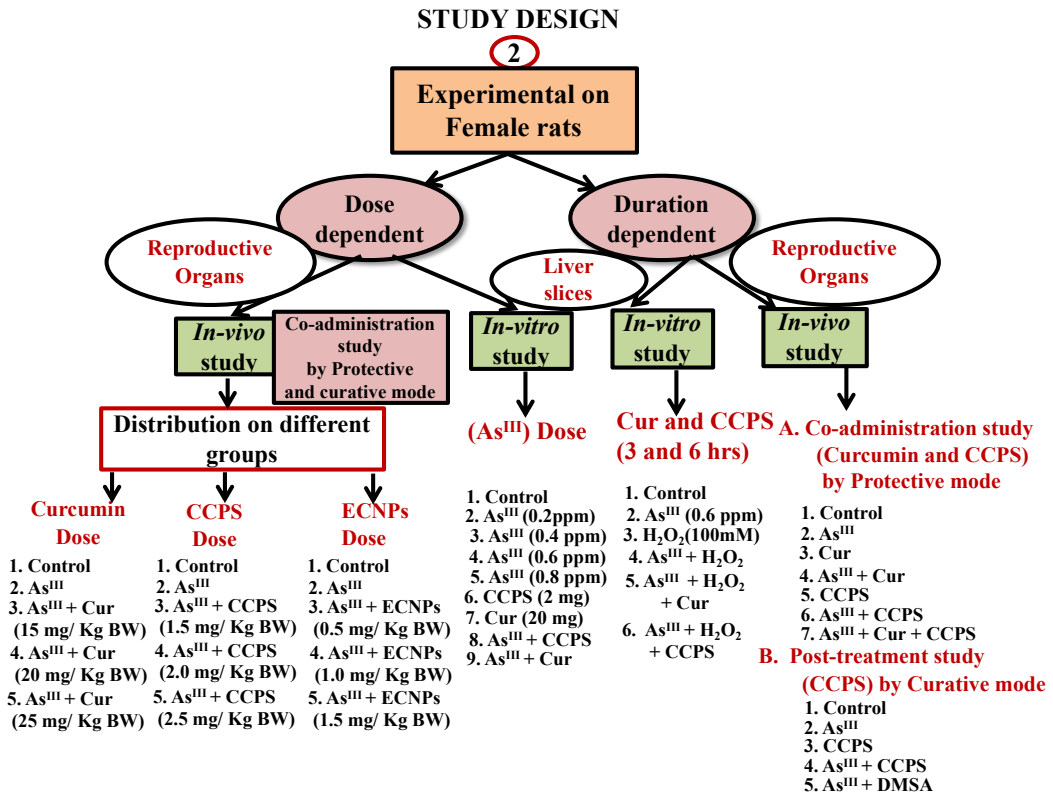


Fig 4.2. Schematic graphic of study design of present research work.