Plan of work and Methodology

1. Extensive Literature Survey
   Various National, International Journals, books, articles, pharmacopoeias, internet sites will be reviewed for the present work.

2. Identification of diseases of oral cavity: At least one of the various identified periodontal diseases mentioned in literature will be selected and targeted for the work.\textsuperscript{51} The treatment of plaque will lead to treatment of oral malador also.\textsuperscript{26}

3. Design of delivery system based on techniques available: The techniques reported will be utilized to finalize a method for preparation of the formulation\textsuperscript{4}. The delivery system designed will either be a buccal film, buccal tablet, patch or cone. These can be utilized for mucoadhesion to the various regions of the oral cavity for local effect.

4. Formulation: Development of the formulation with reference to the available techniques and their feasibility.\textsuperscript{4}

5. Optimization: The most suitable and promising formulation will be optimized and then evaluated.\textsuperscript{52} The following factors will be considered for optimization studies:
   - Concentration of polymers required for mucoadhesion
   - Concentration of penetration enhancers
   - Dose of the medicament
   - Mixing time for hydration etc.

6. Evaluation: The invitro, ex vivo studies will be carried out as per the general requirements for evaluation of the delivery system.\textsuperscript{53,54}
   - Bioadhesion time
   - Release profile of drug from the delivery system
   - Effect of penetration enhancers
7. **Stability**: Stability studies will be carried out as per the ICH guidelines for the developed dosage form.\textsuperscript{55}

- Effect of temperature and humidity on the designed dosage form
- Effect of different storage conditions on the dosage form