

CHEM3810 Organic Chemistry Laboratory

Course Description:

This laboratory course includes experiments of various important reaction classes. Examples of these reactions are nucleophilic substitution, addition reactions, elimination reactions, epoxidation, oxidation and reduction reactions of organic compounds, reactions involve enols and carbanions, etc. These experiments allow students to acquire more in-depth understanding of reactivity and selectivity of the various types of important organic reactions. This course strengthens students' skills for carrying out organic reactions, and their experience in determining the structures of organic compounds by spectroscopic methods.

Co-requisite:

CHEM3220

List of Experiments (for reference only):

- Chemoselective reduction of aldehyde by sodium borohydride
- Grignard reaction – Synthesis of triphenylcarbinol
- Oxidation of menthol to menthone by pyridinium chlorochromate
- Wittig synthesis of 1,2-diphenylethenes
- Epoxidation of Alkenes
- Azotropic preparation of an imine from benzaldehyde and aniline
- Synthesis of dimedone by Michael addition and intramolecular Claisen condensation
- Claisen-Schmidt condensation of benzaldehyde and acetophenone