

Research Proposal

0 . Abstract

1. Introduction (with or without)
2. Specific aims (a few sentences: what do you want to do?)
3. Significance (one paragraph): How important is this research)
4. Background (what has been done?)
5. Proposed research (methods: how will you plan to do?)
6. Conclusions

Length of the proposal: ~1800 words

Due dates:

The title is due on Nov. 4

(3 points)

The outline is due on Nov. 13

(3 points)

The draft is due on Nov. 25 (4 points)

The final proposal is due on Dec. 4 (40 points)

Gas Chromatography

1. Introduction

2. Stationary phases

3. Retention in Gas-Liquid Chromatography

4. Capillary gas-liquid chromatography

5. Sample preparation and inlets

6. Detectors

(Chapter 2 and 3 in The essence of chromatography)

Detectors

1. Thermal conductivity detector (TCD): Bulk physical property

2. Ionization Detectors:

3. Optical Detectors

4. Electrochemical detector

5. Spectroscopic detectors (Chapter 9)