1.3: Laboratory Rules and Notebooks

Laboratory Rules

1. Students are expected to have read the procedures and to understand the reactions and apparatus before starting an experiment. If you finish an assignment ahead of time, or in cases where an experimental procedure calls for allowing a reaction to reflux or stand until the next laboratory period, ask for permission to use the time to catch up with unfinished earlier experiments (e.g. spectroscopy).
2. Before you begin an experiment, obtain the teaching assistant's approval. Normally, this approval will be signified by the TA initialing the page in your laboratory notebook that contains the title of the experiment and a report of hazards as well as an experimental plan.
3. If no yield is obtained in an experiment, obtain the teaching assistant's written approval before repeating the experiment.
4. This class offers the student a unique opportunity to work with equipment which is commonly used in graduate school as well as many inorganic laboratories. They are very sensitive and are not really meant for the multiple user mode necessary for the class. The instruments are prone to breakdown. We ask, therefore, that everyone takes good care of the instruments. You will be graded on technique which involves making sure that the instrument is in the proper condition before, during and after its use. **If complaints occur from subsequent groups, points will be subtracted from report grades.**
5. Students who miss a laboratory session must bring a doctor's note explaining the medical reason for their absence. The missed session must be made up in "catch-up day", or (with the TA's *written* permission) the student may do the missed work during breaks in other experiments.
6. Laboratory reports which show evidence of plagiarism or copying from another student's laboratory report will be given a grade of zero for all affected sections. If the plagiarism is substantial (as determined by the instructor) then the entire report will be given a grade of zero. **Don't even copy from your own partner's report!**

Laboratory Notebooks

Carefully prepared write-ups of each experiment are to be kept in a bound, ruled notebook. The notebook must have a Table of Contents, and all entries are to be made in ink. Handwriting must be neat and legible. Data are to be entered in the notebook at the time they are obtained. No page should ever be torn out of the notebook.

Parts A and B of the write-up should be neatly written in your laboratory notebook.

Title of Experiment

Reference to the procedure being used.

A. Pre-Lab Write-Up List all chemical s to be used, physical state, fw, and chemical safety (see **Sources for Chemical Hazard Data**). To be done before class and initialed by TA.

I. Main Reactions: Write balanced equations.

II. Side Reactions: (If any. Write balanced equations if possible.)

III. List of spectra required.

IV. Quantities of Materials.

B. Experimental Write-up

I. Procedure: (Only give variations in procedure from that in the reference)

II. Observations: (To be recorded as they are obtained.)

a. Comments: (On unusual color changes, difficulties, etc.)

b. Products: (Physical characteristics, weight, m.p. or b.p. ranges, spectra, etc.)

c. Experimental yields : (Show all calculations)

d. Spectroscopic and other data : (Use correct units)

Synthetic products should be placed in tared bottles or vials of an appropriate size and labeled.

Student Name Chemistry 124L

Product Name

Tare Weight Notebook Reference