LABORATORY NOTEBOOK BEST PRACTICES Jeffrey Lancaster, Ph.D. jeffrey.lancaster@columbia.edu

Notebook Procedures

When you get a lab notebook, immediately put your initials and notebook number on the binding; e.g. JRL-1 or JRL-2, etc.

Write in ink on the inside left front cover:

- Name
- Address
- Telephone
- · Date of first entry
- Date of last entry

Save the first ten (10) pages in the front for a table of contents and the last ten pages in the back for an index.

Description of Experiments

Start each new experiment at the top of a new page. Leave the opposite page blank or use for jotting notes. Leave about an inch margin on the left so that comments may be inserted later.

The name of the game is information retrieval. If someone else cannot find the information in a reasonable fashion in your notebook or reports (without you standing over their shoulder explaining what that funny squiggle mark is or what the weight must have been) it cannot be published, period. This means the material must be legible, detailed and most important, easy to reproduce.

Paper is cheap, but time is valuable. Don't be a piker with your notebook. At the top of each page the following material should appear:

- The time and date the experiment was started
- A written description of the experiment by a title or a chemical equation
- If a reaction is being performed, the weights and number of moles of material should be indicated under the appropriate formula
- Appropriate literature references should be included

Spectral data and other forms of documentation are important in the identification and characterization of reactions and processes. Any additional information can be kept in binders separate from the lab notebooks, but must be labeled in such a way as to be easily identified with relationship to the lab notebook. Each additional bit of documentation must contain the page of the lab notebook on which the material being analyzed was obtained (e.g. JRL-1-p34).