Advanced Laboratory Requirement

A requirement for the M.S. and Ph.D. degrees in Chemical Physics is an advanced laboratory course. This requirement has been routinely fulfilled by students taking appropriate courses in Physics, Chemistry and Biochemistry, AOSC and Materials Engineering. An alternative is an internship similar to the laboratory rotations currently used in the Maryland Biophysics Program.

The Laboratory Internship requires students to be associated with an experimental research group for a semester. This association will take the form of a self-contained experimental research project to be completed during the semester. The project is chosen by each student in consultation with the leader of the research group and will normally require four to five hours of laboratory work per week and two to three hours of outside work that includes reading and mastering background text book materials and relevant scientific articles, preparing reports and presentations, and completing work assigned by the group leader. It is also expected that the student will participate in meetings held by the group.

An essential requirement of the internship is the maintenance of a laboratory notebook in which all information about the laboratory work and associated materials are recorded. A second requirement is a final report that fully documents the work of the semester in a professional format with appropriate figures and references. This report will be read and graded by the student's supervisor and will be part of the student's permanent record.

Chemical Physics Research groups are listed on the Chemical Physics website. Students wishing to fulfill the Advanced Laboratory requirement with an internship should contact the head of the research group of interest well in advance of the semester when the work will be done.