Schedule of Experiments

Group	Experiment #	Weeks	Dates	Report Due
I	1	2-3	1/22-2/2	2/16/07
I	2	4-5	2/5-2/16	**3/2/07**
II	3	6-7	2/20-3/2	**3/16/07**
II	**4**	**8-10**	**3/5-3/23**	4/6/07
Spring Break!		11	3/26-3/30	
III	5	12-13	4/2-4/13	4/20/07
III	6	14-15	4/16-4/27	5/4/07
Extra Credit, Final Exam		16-17	4/30-5/8	

You can use weeks 10 and 12 to finish exp #4

Heat of Combustion lab:

- Try to finish in one lab period!

- More time available weeks 10 and twelve (*be aware experiment 5 is due week 12)*

- Remember: you can do your Labview experiment in group III

Week 9 Announcements

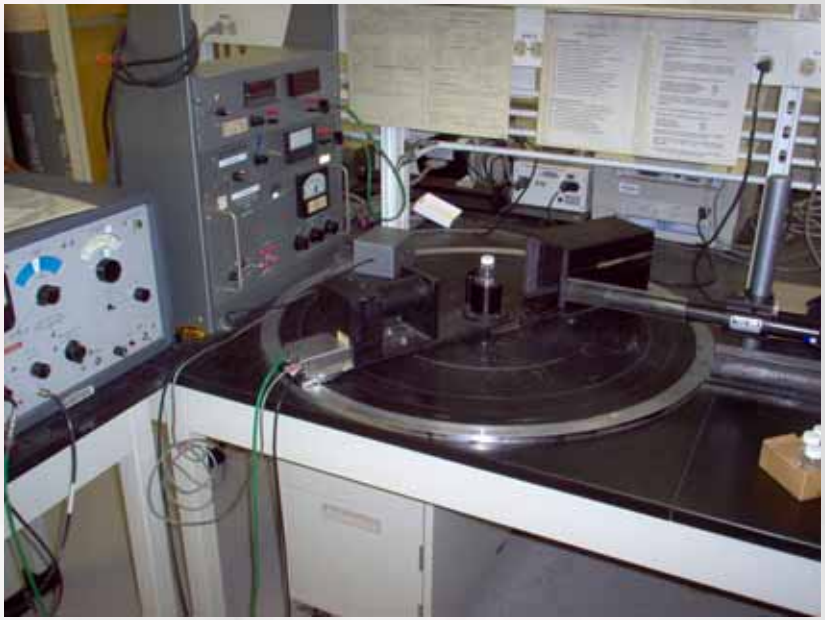
- Experiment #1 & 2 submissions and grading are complete
- GSIs will be returning remaining experiment #2 reports (after lecture)
- Keep on top of lecture material w/homeworks
- Experiment #3 – *due this week*
  - Oral reports: please see GSIs if you have not scheduled yet
  - Written: drop boxes by 5 PM Friday March 16th
  - All grading rubrics for Group II are posted

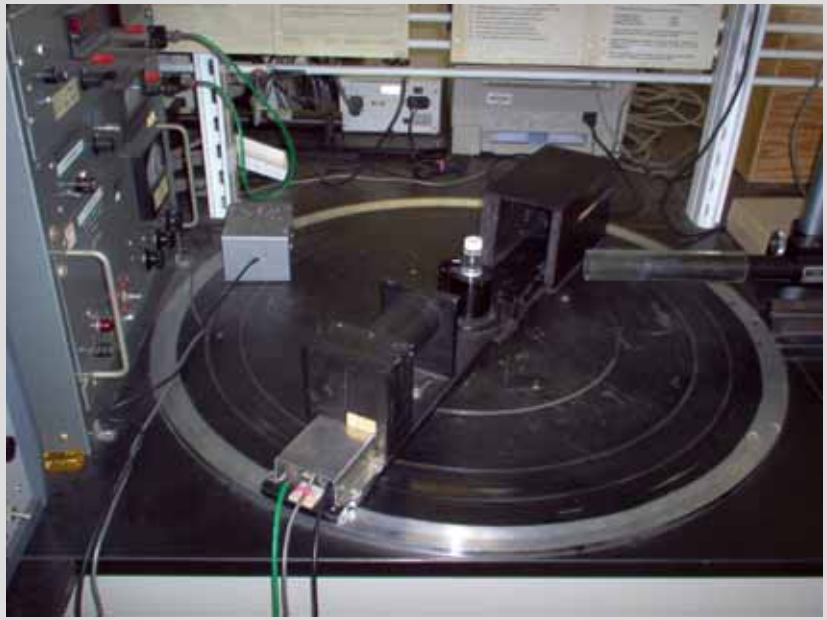
Experiment 5, Group III Pre-labs (Week 10)

Study of Brownian Motion of polymer beads using light scattering	Emily	Tuesday March 20 @ 3:15 & Friday March 23 @ 2:15
X-Ray Diffraction	Matt	Monday March 19 @ 4:15 & Thurs. March 22 @ 4:15
Heat Capacity of Nickel (LabVIEW)	Andrew	Monday March 19 @ 3:15 & Thurs. March 22 @ 2:15
Pulse NMR Spectroscopy	Phil	Tuesday March 20 @ 2:15 & Friday March 23 @ 1:15

Group III, Experiments 5 & 6

Study of Brownian Motion of polymer beads using light scattering



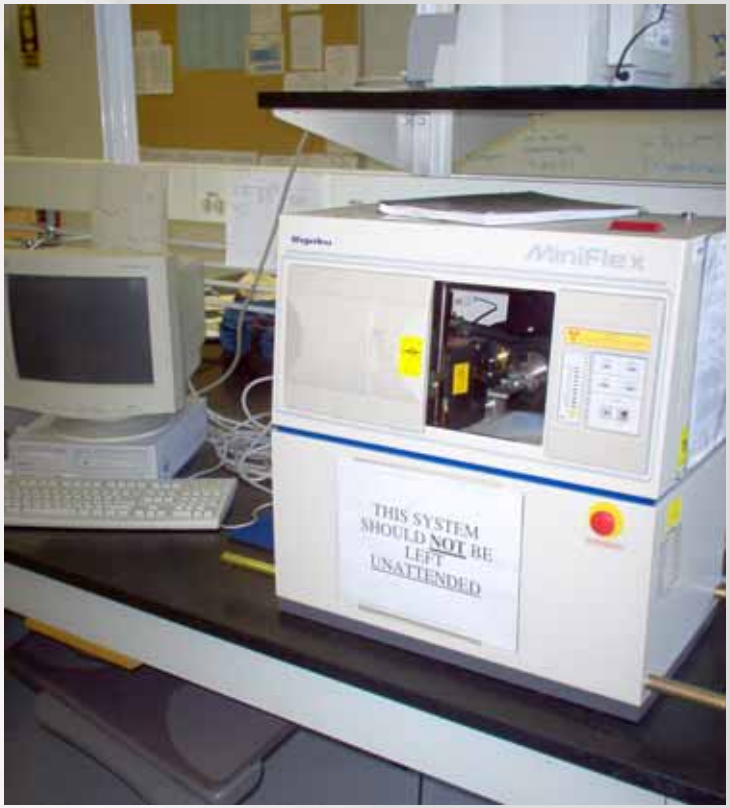


GSI: Emily Chu

Study the angle and time dependence of light scattering on polymers -- how does the polymer size and shape influence the outcome?

Group III, Experiments 5 & 6

X-Ray Diffraction

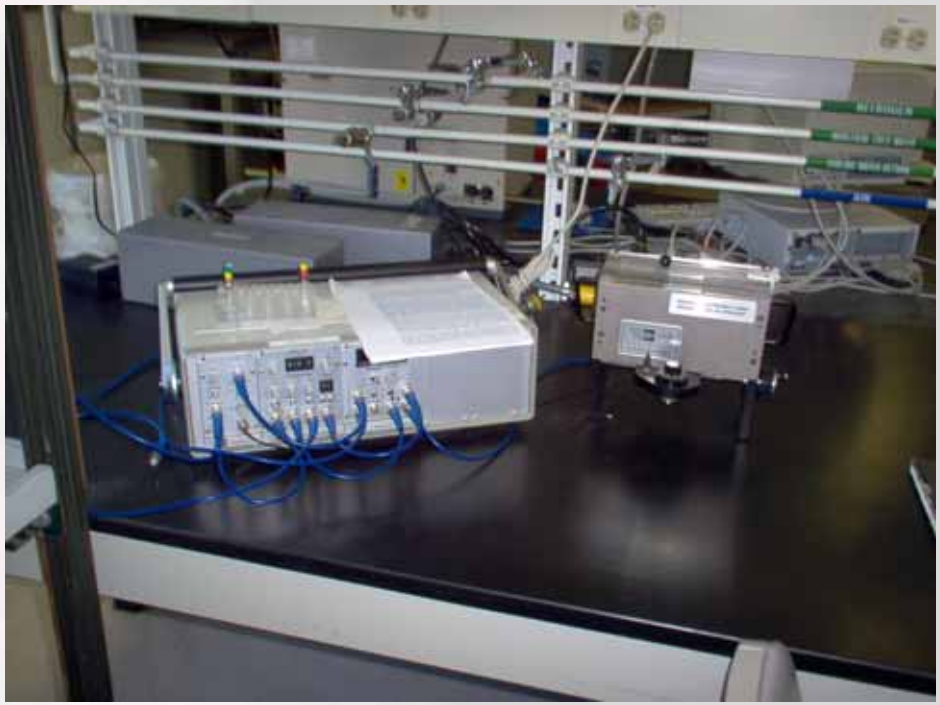


GSI: Matt Graham

Determine the crystal structures of simple solids. Learn about x-ray crystallography.

Group III, Experiments 5 & 6

Pulsed NMR Spectroscopy

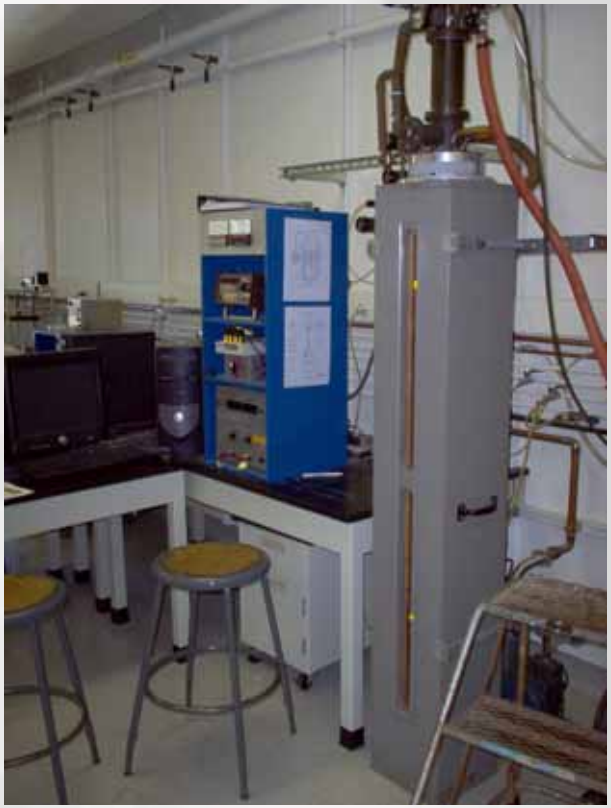


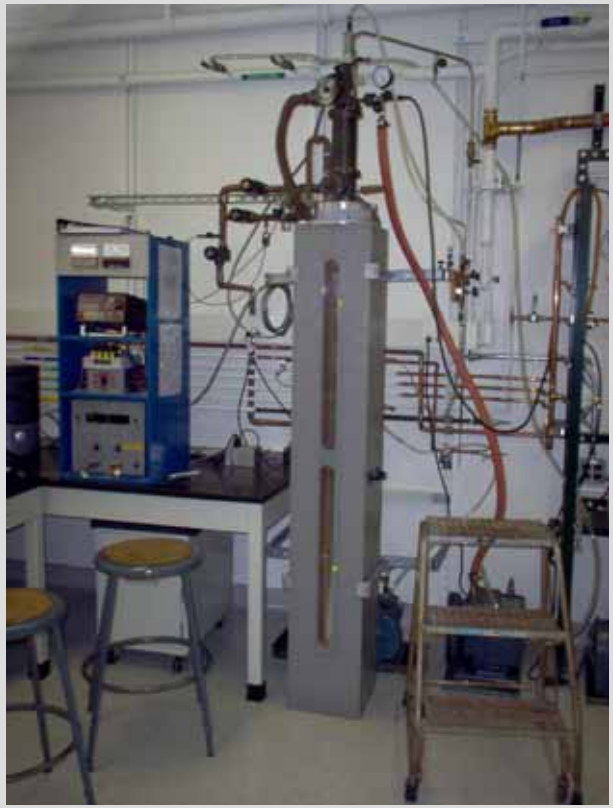
GSI: Phil Croteau

How do the applied pulse sequences influence the outcome and relaxation processes? Learn the physics behind NMR.

Group III, Experiments 5 & 6

Heat Capacity of Nickel (LabVIEW)





GSI: Andrew Duffin

Measure the heat capacity of nickel. Use a 4.4 K liquid helium cryostat.

STAY TUNED . . .

We are working on repairing/building two additional experiments.

We are uncertain if they will be ready in time for this course, but let GSIs know if you are interested in:

- Scanning Tunneling Microscopy (STM)
- Fluorescence Microscopy

Pre-Spring Break Checklist

- ❑ Experiment #3: Complete an oral or written report *this week*
- ❑ Physical adsorption: submit all work by the end of the week
- ❑ Do a Group III pre-lab, March 19th-23rd
  - ❑ Sign-up sheets now posted in 301 Latimer
- ❑ Prepare your experiment #4 submission –they will be due the first week back