

**Chemistry 251**

**Winter 2009**

**NMR DAY LAB**

You will work in a group of 3-4

**NMR Sign up times for Weds. (sign up in groups of 4)**

2:10 \_\_\_\_\_

2:30 \_\_\_\_\_

2:50 \_\_\_\_\_

3:10 \_\_\_\_\_

3:30 \_\_\_\_\_

3:50 \_\_\_\_\_

4:10 \_\_\_\_\_

. Each group will take an NMR of an unknown sample.

At the beginning of lab your instructor will give a demo on how to operate the NMR spectrometer and after that your groups will get approx 5-10 minutes on the NMR spectrometer to acquire and print out an NMR spectrum of the unknown (there will be instructions for running the NMR available). If time is short or if you want to practice some more, you will be able to do so during the next lab session.

When obtaining your NMR spectrum, be sure to note if your spectrum has the TMS signal placed at 0 ppm and that you acquired integration values.

**Lab report:** (see 'report form' section on the website for more details). Once you have printed out the spectrum you will interpret the NMR and identify the unknown compound. The molecular formula of the unknown compounds is  $C_9H_{11}O_2N$

**Pre-lab.** There will be no prelab required for this experiment