

CHEM 252

SPECTROSCOPY UNKNOWN

For your **spectroscopy unknown** you will simply obtain IR, NMR and Mass spectra of your sample using the instruments in the instrument room. The Mass spectra of your unknown will be provided or, if you wish, you can obtain you Mass spec by running your sample on the GC-MS in lab.

Due: Weds, May 27th

Once you have acquired your spectra and identified your unknown turn in this sheet

Name_____

Unknown #_____

Identity of unknown: draw both the structure and the name of you unknown below.

Attach your NMR, IR and MS spectra to this sheet

Analyze the NMR of your compound with the appropriate interpretation (as you did for the NMR day unknown).

Analyze the IR spectrum by listing the major absorptions observed and to what functional groups they pertain to. (you do not have to report anything in the finger print region)

Analysis of MS: List only the 'molecular ion' (molecular weight of your unknown)