Welcome everyone!

Today's Experiment Methyl Diantilis and ¹³C NMR

We will begin at 12:10pm.

Please add your group number to the beginning of your name. *Groups 1–6 will have datasets A–F, respectively.*

Use this time to ask questions and chat!

Carbon NMR; No Different than ¹H NMR

You wil not be expected to memorize these shifts, just to be able to rationalize the appearance of peaks at lower or higher ppm values based on electronic environment.

Carbon NMR uses ¹³C, the isotope of carbon with 6 protons and 7 neutrons (rendering its nucleus spin-acgtive), which represents only about 1% of all of the carbon atoms in the universe.

Contrary to proton NMR (as almost every hydrogen atom in the universe is spin active), we can only extract information about a carbon's chemical environment from the ¹³C NMR spectrum.

The likelihood of finding two ¹³Cs adjacent to one another in a molecule is near zero, so peak splitting (coupling) is no concern. Similarly, the low abundance renders integral values useless (they don't correlate to nuclide count).





