

## Nuclear Magnetic Resonance Spectroscopy

Honeychuck group members are major users of the DRX 400 and DPX 300 NMRs, and keep them in good running order with the help of our Technology Specialist Christopher Bennett. We make routine use of NMR in much of our work, observing nuclei that include  $^1\text{H}$ ,  $^{13}\text{C}$ , and  $^{19}\text{F}$  for structural analytical purposes.

The Bruker Avance DRX 400 and DPX 300 NMRs are located in the GMU NMR Center in Planetary Hall Room 18. The DRX 400 is a research grade solution phase 5 probe instrument. The probes are: direct QNP, direct broadband, inverse broadband, direct CH, and high resolution dedicated  $^1\text{H}$ . The DPX 300 is a solution phase instrument with 2 probes: a QNP and a broadband probe. Both instruments utilize modern HP towers running Linux, and both have variable temperature capabilities which use ultra dry boiloff from a 230 psi liquid nitrogen source.

Visit the GMU NMR Center: <http://nmr.gmu.edu>