Nuclear Magnetic Resonance (NMR) Core Facility: (Directed by Prof. Bruce Bowler and Managed by Assistant Research Prof. Dan Decato) The NMR Core Facility consists of three spectrometers. A Bruker 600MHz Ascend Magnet and Avance Neo Console [Chem 016] with two probe options running Topspin 4. One probe is a 5 mm inverse triple resonance high resolution probe (1H/13C/15N). The other probe is an 5mm iProbe BBFO 5mm BBF/1H (low-F) X nuclei optimized. Accessories include a VT gas Cooler (studies down to -120°C), and a 24 position SampleCase (autosampler). An Agilent 400 MHz NMR Spectrometer [Chem 016] with a 5 mm PFG OneNMR Probe (H-X Multinuclear, optimized for X-nuclei), variable temperature RT to +120°C running VnmrJ 4.2 on Centos 6.7. A Bruker 400 MHz NMR Spectrometer [Skaggs 155] with an Ascend magnet and an Avance III nano console running Topspin 3.2. The 400 Bruker is outfitted with Sample X-press autosampler (60 sample) and a BBO broadband probe optimized for X-nuclei detection with variable temperature range of RT to +50°C.