

**CUNY ASRC Facilities Equipment Resources available for PIRE**NMR spectroscopy

- Bruker 600 MHz NMR spectrometer (14.1 T) with AVANCE III HD console  
*Probes:* PhoenixNMR 1.6-mm HXY solid-state probe (40 kHz MAS) with low-gamma capabilities, Bruker TCI cryoprobe, Bruker TXI probe
- Bruker 700 MHz NMR spectrometer (16.4 T) with AVANCE III HD console  
*Probes:* Bruker QCI-F cryoprobe, Bruker QXI probe
- Bruker 800 MHz NMR spectrometer (18.8 T) with a AVANCE III HD console  
*Probes:* Bruker TCI cryoprobe, Bruker TXI probe

Electron microscopy

- FEI Helios Nanolab 660 field-emission SEM with focused-ion beam (FIB)
- FEI Titan Halo 300 kV CryoTEM
- FEI Titan Themis 200 kV TEM

Surface science

- Bruker Multimode-8 AFM (atomic force microscope)
- Physical Electronics Versaprobe II XPS (X-ray photoelectron spectrometer)

Mass spectroscopy

- Physical Electronics nanoTOF (time-of-flight) mass spectrometer
- Bruker MALDI-TOF mass spectrometer
- Bruker's maXis-II ETD QTOF mass spectrometer

Nanofabrication

- CUNY ASRC 5,000 sq ft. clean room (class 100, 1,000, & 10,000 standards)