The Reed College chemistry building contains the following instrumentation:

- **FT-NMR** – Bruker Avance 400 MHz (equipped with a broad band channel to observe any X-nuclei)
- **FT-IR** – ThermoNicolet Nexus 670 and (3) IR100 (equipped with ATR accessories)
- **GC-MS** – Varian 3800
- **UV/Vis** – Cary 100Bio, Perkin-Elmer Lambda25, (3) Lambda11, Lambda3, and (12) Hewlett-Packard 8453 (equipped with diode array detectors)
- **HPLC** – Dynamax (equipped with absorption detector and automated fraction collector)
- **Calorimetry and thermal analysis** – Perkin-Elmer DSC7 differential scanning calorimeter, Perkin-Elmer DTA7 differential thermal analyzer interfaced with Paragon1000 FT-IR spectrophotometer, Perkin-Elmer TGA7 thermalgravimetric analyzer, MicroCal isothermal titration microcalorimeter
- **Atomic absorption** – GBC908AA/GBC932plus
- **Spectrofluorimeter** – PTI, PanVera Beacon2000 fluorescence polarizing
- **Liquid scintillation analyzer** – Packard TriCarb2900TR
- **X-ray** – Scintag XDS 2000 powder diffractometer and stand-alone generator for single crystal diffraction studies;
- **Laser lab** – nitrogen-pumped dye laser, pulsed Nd:YAG tag laser
- **Gamma ray spectroscopy** – EG&G 92x system with HpGe detecto
- **Nuclear reactor** – Triga Mark I (for neutron activation analyses).