Rates
For automated instruments, we bill per experiment. The charge includes the operator time.

- 500 MHz auto: $32/experiment
- 400 MHz auto: $27/experiment
- 300 MHz auto: $23/experiment

For manual instruments, we bill according to instrument time used plus an operator charge for the amount of time required to setup and process the data. The parameters for the hands-on instruments can be adjusted according to individual needs.

- 400 MHz: $84/hr
- 500 MHz: $96/hr
- Operator Charge: $135/hr

Submitting Samples
Samples should be delivered to the NMR lab in a 5 mm NMR tube dissolved in an appropriate deuterated solvent.

Tube quality (Wilmad brand):
- 507 for 300 MHz and 400 MHz
- 528 for 500 MHz

Tube length:
- 8 inches for 300 MHz
- any length for 400 and 500 MHz

Sample height in the tube:
- 5 cm (0.7 mL) for Varian NMRs
- 4 cm (0.55 mL) for Bruker NMRs

NMR tubes or solvents can be purchased from us.

Submission Forms
Sample submission forms are available from our website and must be included with all samples.

Website
chem.umn.edu/research/facilities/nmr

Results
Results can be picked up in person, faxed, mailed as hard-copies, or provided as electronic raw data files or in PDF format.
We offer a range of services to external organizations including standard one-dimensional experiments on proton, carbon, fluorine, and phosphorus as well as more exotic nuclei like lithium, deuterium, nitrogen, boron, silicon, and aluminum. We can perform variable temperature (-100° to +100°C) experiments and collect solvent-suppressed spectra in 90% H2O and no-D solvents. 2-D experiments such as COSY, HSQC, and HMBC are also available. We pride ourselves on prompt sample turnaround times (often same-day service).

Using our six instruments, including our three autosamplers, we have the capability to deliver superior results for small (1 sample) jobs up to the large automation of hundreds of samples per week.

Spectrometers

- Bruker Avance III 500 with SampleCase (AV-500)
- Bruker Avance III HD with SampleXpress (AX-400)
- Bruker Avance III HD (AM-400)
- Varian Inova 300 with automatic sample changer (VI-300)
- Varian Inova 500 (VI-500)
- Bruker Avance III with SampleXpress (HD-500)