

Instruments and Rates

Biochemistry NMR Core

Instrument	Bruker AN400	Agilent MR400	Varian UI500 ¹	Bruker AN600 ²
¹ H Frequency	400 MHz	400 MHz	500MHz	600 MHz
Spectrometer console	AVANCE NEO Nano	400-MR DD2	Unity Inova	AVANCE NEO
Probe (5mm, Z-Gradient)	SmartProbe BBO	OneNMR	HCN	Prodigy BBO
Sample Changer	24-Positions	12-Positions	No	24-Positions
AutoTune	Yes	Yes	No	Yes
Observable Nuclear	¹ H, ¹⁹ F, ³¹ P - ¹⁰⁹ Ag	¹ H, ¹⁹ F, ³¹ P - ¹⁵ N	¹ H, ¹³ C	¹ H, ¹⁹ F, ³¹ P - ¹⁵ N ³
Variable Temperature	RT to 80°C ^{4,5}	RT to 80°C ^{4,5}	RT to 80°C ⁵	-40°C to 80°C ^{4,5}
NMR Software	TopSpin 4.0.7	VnmrJ 4.2	VnmrJ 4.2	TopSpin 4.0.7
	IconNMR 5.1			IconNMR 5.1
¹ H Sensitivity	568:1	565:1	759:1	1500:1 ⁶
¹³ C Sensitivity	272:1	195:1	86:1	900:1 ⁶
¹⁹ F Sensitivity	562:1	645:1	N/A	1350:1 ⁶
³¹ P Sensitivity	225:1	171:1	N/A	490:1 ⁶
¹⁵ N Sensitivity	36:1	22:1	N/A	90:1 ⁶
Rate ⁷ - Internal Self Run	\$15/hr	\$15/hr	\$15/hr	To Be Determined
Rate ⁷ - Internal Staff Run	\$45/hr	\$45/hr	\$45/hr	To Be Determined
Rate ⁷ - External Staff Run	\$135/hr	\$135/hr	\$135/hr	To Be Determined
Location	L4.504	L4.504	L1.236	L1.100

1 - The Varian UI500 will be decommissioned sometime in November 2019

2 - The Bruker AN600 will be installed sometime in November/December 2019

3 - Exclude nuclei between ¹⁹⁹Hg and ¹⁵³Eu

4 - Instrument is in automation mode and VT is by appointment only.

5 - VT training required

6 - Numbers are from vendor's probe specs sheet

7 - Effective 04/01/2019