

Spectrometer	Sample state	Cryogenic probes available	Probes available	Channels available	Research Infrastructure
1000 MHz (Bruker Avance III)	Solid-state/solution	5 mm TXI cryo $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	3.2 mm MAS $^1\text{H}$ , $^{13}\text{C}$ , $^{15}\text{N}$ 2.5 mm MAS $^1\text{H}$ , X ( $^{13}\text{C}$ to $^{31}\text{P}$ ) 1.3 mm MAS $^1\text{H}$ , X ( $^{15}\text{N}$ to $^{13}\text{C}$ ) 5 mm BBO, Z-GRD	Three + $^2\text{H}$ decoupling	RALF
950 MHz (Bruker Avance II)	Solution	5 mm TCI cryo $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ XYZ-GRD	Four + $^2\text{H}$ decoupling.	BMRZ
900 MHz (Bruker Avance)	Solution	5 mm TXI cryo $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ XYZ-GRD 5 mm TXI $^1\text{H}$ , $^{13}\text{C}$ , $^{31}\text{P}$ XYZ-GRD 5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	Four + $^2\text{H}$ decoupling.	BMRZ
900 MHz (Bruker Avance II)	Solution	5 mm TCI cryo HCN Z-GRD	5 mm TXI HCN XYZ-GRD 5 mm TXI HCP XYZ-GRD	Three + $^2\text{H}$	SONNMRLSF
900 MHz (Bruker Avance II)	Solution	5 mm TCI cryo $^1\text{H}$ - $^{13}\text{C}/^{15}\text{N}$ - $^2\text{H}$ Z-GRD	5 mm TXI $^1\text{H}$ - $^{13}\text{C}/^{15}\text{N}$ - $^2\text{H}$ Z-GRD	Three + $^2\text{H}$ decoupling.	CERM
900 MHz Varian INOVA	Solution	HCN 5mm z-PFG cryogenic probe with enhanced $^{13}\text{C}$ and $^1\text{H}$ sensitivity	HCN 5mm z-PFG probe	Four	HWB
850 MHz (Bruker Avance III)	Solid state (Wide Bore)		4mm TXI CP MAS $^1\text{H}\{^{13}\text{C}/^{15}\text{N}\}$ 3.2mm TXI CP MAS $^1\text{H}\{^{13}\text{C}/^{15}\text{N}\}$ 3.2mm BBI CP MAS $^1\text{H}\{\text{BB}\}$	Three	BMRZ
850 MHz (Bruker Avance III)	Solid state (Wide Bore)		3.2 mm MAS DVT $^{15}\text{N}/^{13}\text{C}/^1\text{H}$ 1.3 mm MAS $^1\text{H}$ - $^{19}\text{F}/\text{BB}/^{15}\text{N}$	Three	CERM
800 MHz (Bruker Avance)	Solution	5 mm TXI cryo $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ XYZ-GRD 5 mm QXI $^1\text{H}$ , $^{13}\text{C}$ , $^{15}\text{N}$ , $^{31}\text{P}$ XYZ-GRD 5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	Three + $^2\text{H}$ decoupling.	BMRZ
800 MHz (Bruker DRX)	Solution	-	5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	Four	BMRZ
800 MHz (Bruker Avance DRX)	Solution	5 mm TXI cryo $^1\text{H}$ - $^{13}\text{C}/^{15}\text{N}$ - $^2\text{H}$ Z-GRD	2.5 mm HP (SEL $^1\text{H}/\text{HP}$ ) prototype dedicated, 5 mm TXI $^1\text{H}$ - $^2\text{H}/^{13}\text{C}$ - $^{15}\text{N}$ Z-GRD, 5 mm QXI $^1\text{H}$ - $^{31}\text{P}/^{13}\text{C}/^{15}\text{N}$ XYZ-GRD	Four with lockswitch for $^2\text{H}$ decoupling	CERM
800 MHz Varian INOVA	Solution	HCN 5mm z-PFG cryogenic probe with enhanced $^{13}\text{C}$ and $^1\text{H}$ sensitivity		Four	HWB
800 MHz (Varian nmrs)	Solution	HCN 5mm z-PFG cryogenic probe	-	Four	RALF
800 MHz (Bruker Avance III)	Solid State /Solution		3.2 mm MAS $^1\text{H}/^{13}\text{C}/^{15}\text{N}$ 2.5 mm MAS $^1\text{H}/\text{X}$ 1.3 mm MAS $^1\text{H}/^{13}\text{C}/^{15}\text{N}$ 5 mm TXI $^1\text{H}$ - $^{13}\text{C}$ - $^{15}\text{N}$ - $^2\text{H}$ Z-GRD SampleJet with cooling rack	Three + $^2\text{H}$ decoupling	RALF
750 MHz (Bruker Avance II)	Solution		5 mm TXI HCN XYZ-GRD 5 mm QXI HPCN Z-GRD 8 mm TXI HCN Z-GRD	Three + $^2\text{H}$	SONNMRLSF
700 MHz (Bruker Avance)	Solution	5 mm TXI cryo $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	Three + $^2\text{H}$ decoupling.	BMRZ
700 MHz (Bruker Avance II)	Solid state		3.2 mm HR-MAS $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ 3.2 mm HR-MAS $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ (low E)	Three	SONNMRLSF
700 MHz (Bruker Avance II)	Solid state (Wide Bore)		3.2 mm MAS $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ 4 mm MAS $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$	Three	CERM
700 MHz (Bruker Avance II)	Solution	5 mm TXO cryo for direct $^{13}\text{C}$ detection $^{13}\text{C}/^{15}\text{N}$ - $^1\text{H}$ - $^2\text{H}$ Z-GRD	TXO probe for direct $^{13}\text{C}$ detection $^{13}\text{C}/^{15}\text{N}$ - $^1\text{H}$ - $^2\text{H}$ Z-GRD	Three with lockswitch for $^2\text{H}$ decoupling	CERM

700 MHz MHz (Bruker Avance DRX, with standard BACS120 autosampler)	Solution	5 mm TCI cryo $^1\text{H}$ - $^{13}\text{C}/^{15}\text{N}$ - $^2\text{H}$ Z-GRD	5 mm TXI $^1\text{H}$ - $^2\text{H}/^{13}\text{C}$ - $^{15}\text{N}$ Z-GRD, 5 mm TXI $^1\text{H}$ - $^2\text{H}/^{13}\text{C}$ - $^{15}\text{N}$ XYZ-GRD	Three and $^2\text{H}$ decoupling	CERM
700 MHz (Bruker Avance II)	Solid-state/solution		4 mm HR-MAS $^1\text{H}$ , X 4 mm MAS $^1\text{H}$ , X ( $^{33}\text{S}$ to $^{31}\text{P}$ ) 3.2 mm MAS $^1\text{H}$ , $^{13}\text{C}$ , $^{15}\text{N}$ 2.5 mm MAS $^1\text{H}$ , X ( $^{33}\text{S}$ to $^{31}\text{P}$ ) 5 mm BBO 5 mm TXI Z-GRD	Four + $^2\text{H}$	RALF
600 MHz (Bruker Avance III)	Solution	5 mm TXI cryo $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD, 5 mm TCIP cryo $^1\text{H}$ , $^{31}\text{P}$ , $^{13}\text{C}$ Z-GRD	-	Three + $^2\text{H}$ decoupling.	BMRZ
600 MHz (Bruker Avance II)	Solution	5 mm TXI cryo $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ XYZ-GRD	Three + $^2\text{H}$ decoupling.	BMRZ
600 MHz (Bruker DRX)	Solution+ MAS	-	5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ XYZ-GRD 5 mm TXI $^1\text{H}$ , $^{13}\text{C}$ , $^{31}\text{P}$ Z-GRD 5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD MAS- TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	Four	BMRZ
600 MHz (Bruker DRX with standard BACS120 autosampler)	Solution	-	5 mm TXI $^1\text{H}$ , $^{15}\text{N}$ , $^{13}\text{C}$ Z-GRD	Four	BMRZ
600 MHz (Bruker Avance DRX)	Solution	5 mm TCI cryo HCN Z-GRD	5 mm TXI HCN Z-GRD 5 mm BBI Z-GRD 5 mm QNI HCPN Z-GRD	Three + $^2\text{H}$	SONNMRLSF
600 MHz (Bruker Avance DRX)	Solution		5mm TXI HCN Z-GRD 5mm BBI Z-GRD 8mm TXI HCN Z-GRD 2.5 mm TXI HCN Z-GRD	Three + $^2\text{H}$	SONNMRLSF
600 MHz (Bruker Avance DRX with 40A Grad. Ampl. for diffusion measurements)	Solution		5 mm TXI $^1\text{H}$ - $^2\text{H}/^{13}\text{C}$ - $^{15}\text{N}$ Z-GRD 4 mm HR-MAS $^1\text{H}$ - $^{13}\text{C}/^{15}\text{N}/^2\text{H}$ MAS-GRD 5 mm SEL $^1\text{H}$ , 5 mm SEL $^1\text{H}/\text{HP}$ 5 mm BBO 10 mm BBO 10 mm BB (LowFreq) 5 mm BBI	Three	CERM
600 MHz (Bruker Avance II, with standard BACS120 autosampler, Bruker liquid handler system)	Solution	5 mm TCI cryo $^1\text{H}$ - $^{31}\text{P}/^{13}\text{C}/\text{D}$ Z-GRD with ATMM	5 mm TXI $^1\text{H}$ - $^2\text{H}/^{13}\text{C}$ - $^{15}\text{N}$ Z-GRD with ATMM	Three + $^2\text{H}$ decoupling	CERM
600 MHz Varian Inova	Solution	HCN 5mm PFG cryogenic probe	HCN 10mm z-PFG; HX 5mm z-PFG; HCN 5mm z-PFG; gHX nanoprobe; 5mm ID z-PFG probe	Three	HWB
600 MHz Varian Direct Drive (autosampler)	Solution	HCN 5mm PFG cryogenic probe with enhanced $^{13}\text{C}$ sensitivity	HCN 5mm z-PFG probe	Three	HWB
600 MHz Bruker Avance III with SampleJet autosampler	Solution	5mm cryo TCI $^1\text{H}$ , $^{13}\text{C}$ , ( $^{15}\text{N}$ ) z-PFG with ATMM 1.7mm cryo TCI $^1\text{H}$ , $^{13}\text{C}$ , ( $^{15}\text{N}$ ) z-PFG with ATMM 5mm QCP cryo Z-GRD with ATMM		Four	HWB
600 MHz (Varian vnmrs)	Solution	HCN 5mm z-PFG cryogenic probe with enhanced $^{13}\text{C}$ and $^1\text{H}$	-	Four	RALF

		sensitivity			
600 MHz (Varian vnmrs)	Solution/ Solid State		5mm $^1\text{H}/^{13}\text{C}/^{15}\text{N}/^{31}\text{P}$ 3.2 mm MAS $^1\text{H}, ^{13}\text{C}, ^{15}\text{N}$	Four	RALF
WB-600 MHz (Bruker Avance)	Solid state (Wide Bore)		4mm TXI CP MAS $^1\text{H}\{^{13}\text{C}/^{15}\text{N}\}$ 4mm CP MAS $^1\text{H}\{^{13}\text{C}-^{31}\text{P}\}$ static probe flat coil $^1\text{H}, ^{13}\text{C}, ^{15}\text{N}, ^{31}\text{P}$ 4mm HFX 4mm HCN E-free	Three	BMRZ
WB-400 MHz (Bruker Avancell)	Solid state (Wide Bore)	3,2mm HCN Cryo-MAS	4mm TXI CP MAS $^1\text{H}\{^{13}\text{C}/^{15}\text{N}\}$ 7mm CP MAS $^1\text{H}\{^{13}\text{C}-^{31}\text{P}\}$ static probe flat coil $^1\text{H}, ^{13}\text{C}, ^{15}\text{N}, ^{31}\text{P}$ solenoid coil $^1\text{H}, ^{31}\text{P}$	Three	BMRZ
500 MHz (Bruker Avance II)	Solution	-	5 mm TXI $^1\text{H}, ^{15}\text{N}, ^{13}\text{C}$ XYZ-GRD	Four	BMRZ
500 MHz (Bruker DRX)	Solution	-	5 mm TXI $^1\text{H}, ^{15}\text{N}, ^{13}\text{C}$ XYZ-GRD	Four	BMRZ
500 MHz (Bruker Avance II)	Solution		5mm TXI HCN Z-GRD 5mm BBI Z-GRD 5mm TXI CIDNP Z-GRD	Three	SONNMRLSF
500 MHz (Bruker Avance DRX)	Solution		5 mm QXI HCN Z-GRD 5 mm QNI HP Z-GRD 5 mm BBI Z-GRD	Three	SONNMRLSF
500 MHz (Bruker Avance II)	Solid state (Wide Bore)		3.2 mm HR-MAS $^1\text{H}, ^{15}\text{N}, ^{13}\text{C}$ 7mm MAS CP BB(N-P/H) VTN 4mm MAS CP Triple(N-P/H) BB sol 7.5 man/pneumatic CP BB(N-P/H) sol VTN 10mm BBI(D/Ag-P/H) 5/8mm Diff30 BBO(D-P/H)	Three	SONNMRLSF
500 MHz (Bruker Avance DRX)	Solution	5 mm TCI cryo $^1\text{H}-^{13}\text{C}/^{15}\text{N}-^2\text{H}$ Z-GRD	5 mm TXI $^1\text{H}-^2\text{H}/^{13}\text{C}-^{15}\text{N}$ Z-GRD, 5 mm BBI	Three	CERM
500 MHz actively shielded Bruker DRX AVANCE II (BACS60 autosampler)	Solution	HCN 5mm z-PFG cryogenic probe	HCN 5mm z-PFG TXI probe; 5mm $^1\text{H}$ probe; 5mm $^2\text{H}/^1\text{H}/\text{BB}$ probe; 5mm $^2\text{H}/^1\text{H}/\text{BB}/^{13}\text{C}$ probe	Four	HWB
500 MHz actively shielded Varian Unity+	Solution		HCN 5mm z-PFG probe; Auto-X 5mm dual broadband probe $^1\text{H}-^{19}\text{F}/^{15}\text{N}-^{31}\text{P}$ ; 5mm BB probe	Three	HWB
500 MHz (Bruker Avance III)	Solid-state (Wide Bore)		3.2 mm very low T-MAS (100K) $^1\text{H}/^{13}\text{C}/^{15}\text{N}$ 4 mm MAS $^1\text{H}, \text{X}, \text{Y}$ 4 mm MAS $^1\text{H}, \text{X}$ 2.5 mm MAS $^1\text{H}, \text{X}$ 2.5 mm MAS $^1\text{H}$ 1.3 mm MAS ( $^1\text{H}-^{19}\text{F}$ )/X 7 mm MAS $^1\text{H}, \text{X}$ 4 mm HR-MAS Z-GRD $^1\text{H}, \text{X}$	Three	RALF
400 MHz (Bruker Avance with standard BACS120 autosampler)	Solution	-	5 mm TXI $^1\text{H}, ^{15}\text{N}, ^{13}\text{C}$ Z-GRD 5 mm BBI $^1\text{H}, \text{BB}$ Z-GRD	Three	BMRZ
WB-400 MHz (Bruker Avance)	Solid state (Wide Bore)		7mm TXI CP MAS $^1\text{H}\{^{13}\text{C}/^{15}\text{N}\}$	Three	BMRZ
400 MHz (Bruker Avance DPX)	Solution		5 mm BBO Z-GRD 5 mm SEL $^1\text{H}$ for paramagnetic spectroscopy	Two	CERM
360 MHz (Bruker AMX)	Solution		5 mm BBI Z-GRD	Two	SONNMRLSF

<b>EPR</b>		<b>Specifics</b>		
Bruker Elexsys E580 Spectrometer		Operating frequency X-band and Q-band, cw-EPR, pulsed EPR, ENDOR and PELDOR		BMRZ
homebuilt EPR S-band		Operating frequency 3.5 GHz, pulsed EPR homebuilt EPR G-band		BMRZ
homebuilt EPR G-band		Operation frequency 180 GHz, cw and pulse EPR, ENDOR, PELDOR		BMRZ
Bruker Elexsys E500 CW Spectrometer		Operation frequency X-band, CW EPR		BMRZ
<b>Relaxometers</b>		<b>Field Range</b>		
FFC Stelar		10 kHz - 40 MHz		CERM
90 MHz Bruker		4 - 90 MHz		CERM
<b>Others</b>				
Hypersense system for dynamic nuclear polarization experiments	Solid state metabolomics with dissolution device connected to Varian 500	<sup>13</sup> C internal probe		HWB