

INSTRUMENT FACILITIES AVAILABLE AT THE INDIVIDUAL SAIFs

Sophisticated Analytical Instrument Facility, IISc., Bangalore

Sl. No.	Instrument	Make/ Model	Major Specifications/ Accessories available	Type of measurement/analysis available
1.	FT-NMR Spectrometer	Bruker DSX 300	Solid state spectrometer; Operating frequency: 300 MHz; Wide bore; Variable temperature accessory (for CPMAS – only high temperature); High power transmitter suitable for solid state NMR; Magic angle sample spinning; Probes- CP and wideline (multinuclear); Doty probe with variable angle (multinuclear)	1D and 2D-SLF of dilute nuclei; CPMAS with spinning sideband suppression.
2.	FT-NMR Spectrometer	Bruker AMX 400	High resolution spectrometer; Operating frequency: 400 MHz; Wide bore; Variable temperature accessory; 5mm QNP probe (^1H , ^{13}C , ^{31}P , ^{19}F); 10 mm BB probe; 5 mm BBI probe with z-gradient; Small object (upto 20 mm) imaging	1D and 2D NMR of all NMR active nuclei; Inverse experiments; Imaging of small objects.
3.	FT-NMR Spectrometer	Bruker DRX 500	High resolution spectrometer; Operating frequency: 500 MHz; Narrow bore; 3 channels (^1H , ^{13}C , ^{15}N); Variable temperature accessory; 5mm selective ^1H probe; 5 mm BBI probe with z-gradient; 5mm QNP probe (^1H , ^{13}C , ^{31}P , ^{19}F); Triple resonance probe (^1H , ^{13}C , ^{15}N)	1D and 2D NMR of all NMR active nuclei; Inverse experiments; Gradient experiments; 3D experiments.