

NMR SPECTROMETER 400MHz

Make: Bruker

Model: AVANCE III HD

Major Specifications/ Accessories available:

9.4 T magnet.

a) 5mm BBO probe with gradient facility and auto sampler with VT facility.

Tuning range from ^{109}Ag to ^{31}P also observation of ^{19}F with ^1H decoupling.

b) 4mm CP/MAS probe with VT facility.

Tuning range from ^{15}N to $^{31}\text{P} + ^1\text{H}$.

Type of measurement/analysis available:

1D NMR, 2D NMR, Multi-nuclear NMR; Variable temperature measurements.

Sample requirement for liquid samples:

5 mg for ^1H NMR and 50 mg for ^{13}C NMR experiment. Compounds should be highly pure and soluble in commonly available solvents. Solubility, nature of compound [carcinogenic, toxic, lachrymatory, explosive, hygroscopic] and Structural formula [contemplated / known] to be mentioned. The sample must be soluble in 0.6 ml of deuterated solvent. Facilities available for 1D NMR, 2D NMR, Multi-nuclear NMR; Variable temperature measurements. RADIOACTIVE MATERIAL should not be submitted.

Sample requirement for solid samples:

For Solid State NMR, 750 mg fine powder is required.



NMR SPECTROMETER 500MHz

Make: Bruker

Model: AVANCE III HD

Major Specifications/ Accessories available:

11.7 Tesla Magnet.

a) 5mm BBO probe with gradient facilities and auto-sampler with VT facility.

Tuning range from ^{109}Ag to ^{31}P also observation of ^{19}F with ^1H decoupling.

b) 3,2mm CP/MAS probe with VT facility.

Tuning range from ^{15}N to $^{31}\text{P} + ^1\text{H} + ^{19}\text{H}$.

Type of measurement/analysis available:

1D NMR, 2D NMR, Multi-nuclear NMR; Variable temperature measurements.

Sample requirement for liquid samples:

5 mg for ^1H NMR and 50 mg for ^{13}C NMR experiment. Compounds should be highly pure and soluble in commonly available solvents . Solubility, nature of compound [carcinogenic, toxic, lachrymatory, explosive, hygroscopic] and Structural formula [contemplated / known] to be mentioned. The sample must be soluble in 0.6 ml of deuterated solvent. Facilities available for 1D NMR, 2D NMR, Multi-nuclear NMR; Variable temperature measurements. RADIOACTIVE MATERIAL should not be submitted.

Sample requirement for solid samples:

For Solid State NMR, 750 mg fine powder is required.

