

Central NMR Facility

Birla Institute of Technology and Science, Pilani (Pilani Campus)

A. Guidelines for availing NMR Facility by the students/faculty affiliated to BITS Pilani

The state of art NMR spectrophotometer (400 MHz Bruker) equipped with an auto-sampler is a central facility of BITS Pilani at Pilani Campus. The facility is available to all the students/faculty of BITS Pilani. For recovery of maintenance cost, nominal charges have been fixed for availing the facility for everyone affiliated with BITS Pilani. The details of the charges are as given below.

Sr. No.	Experiment	Existing Rate ^{§,¶}	Revised Rate ^{§,¶,Δ}
1	¹ H, ¹⁹ F or ³¹ P NMR (Max. Scan 512 or Max. Expt. time 30 min.)	₹ 100	₹ 50
2	¹³ C, DEPT or 2D NMR (Max. Scan 1024 or Max. Expt. Time 1 hr)	₹ 150	₹ 100
3	¹³ C, DEPT or 2D NMR with time b/w 1 to 2 hr	₹ 200	No change
4	Any single experiment with time b/w 2 to 3 hr	₹ 300	No change
5.	Any single experiment with time b/w 3 to 5 hr	₹ 500	No change
6.	Any single experiment with time b/w 5 to 10 hr	₹ 1000	No change

[§]Only CDCl₃ and D₂O will be provided. Same rates will be applicable if user provides his/her own solvent.
Extra Rs 100 will be charged for DMSO-d₆.
[¶]GST will be extra as per govt. rule (currently 18%).
^ΔIf ¹H and ¹³C are recorded together then charges for ¹³C NMR will be applicable.

Revised rates are effective from October 1, 2017.

Procedure for availing facility

- Payment must be made in advance either as demand draft/cash. Demand draft can be made in the favor of **BITS Pilani** payable at Pilani. Users can also take the advantage of advance payment by paying the charges for several samples in advance. The balance will be carry forwarded until the whole amount is utilized.
- After paying the requisite amount, user from Pilani Campus will prepare his/her own sample in the NMR sample preparation laboratory and transfer the same in NMR tube. A slip with sample information (Sample code, solvent and experiment required) will be tagged with the NMR tube.
- Users from Pilani Campus can submit samples from **9.00 AM to 5.00 PM** in NMR sample room (3102 A). NMR team will run samples twice a day **11.00 AM-12.00 Noon** and **4.00-5.00 PM** on Monday-Friday and from **11.00 AM-12.00 Noon** on Saturday.
- The sample will be recorded and data will be shared in soft copy to the user as per priority order (first come first serve basis). In special cases, urgent samples may be given priority on 50% extra charges. Please contact convener, NMR facility in such situation.
- Minimum sample requirement for recording ¹H NMR and ¹³C NMR are 5 mg and 20 mg, respectively. If data is not clear due to in-homogeneity or less amount of sample, then samples will not be recorded again.
- Users from Dubai, Goa, Hyderabad campus and off-campus should send their compounds well packed in eppendorf tubes (1.5 mL) and not in polybags. Sample preparation for these compounds will be done by an attendant.

Convener,
NMR Facility, BITS Pilani