## **Central NMR Facility**

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

## B. Guidelines for availing NMR Facility by external researchers from academia and industry.

The Central NMR Facility at Pilani Campus of BITS Pilani houses a 400 MHz NMR spectrophotometer (Bruker AVANCE III) equipped with BBFO probe and auto-sampler. The facility provides state-of-the-art experimental facilities to the faculty of three campuses of BITS Pilani and researchers in the region. Details of the charges for *external researchers from academia and industry* are as given below.

S. No.	Experiment	Rate*,¶	Rate*,¶
		Academic institutions	Industry
1	${}^{1}$ H, ${}^{19}$ F, ${}^{31}$ P, ${}^{13}$ C, <b>DEPT</b> (Expt. time 30 min or less) ${}^{\circ}$	₹ 300	₹ 1000
2	2D: COSY, HSQC, HMBC, DQFCOSY, TOCSY, NOESY,	₹ 750	₹ 2000
	<b>ROESY</b> (per measurement or exp time 1 h or less) <sup><math>\delta</math></sup>		
	Solvent charges (per sample)		
	$CDCl_3, D_2O$	_\$	₹ 100
	DMSO-d <sub>6</sub> , Acetone-d <sub>6</sub> ,	₹ 150	₹ 300
	Methanol-d <sub>4</sub>	₹ 500	₹ 1000

<sup>\*</sup>These are the minimum charges. Additional charges may be levied depending on the nature and complexity of the problem.

Payment must be made in advance by a **demand draft (DD)** in the favour of "**BITS Pilani**" payable at Pilani. If the payment received is more than the actual analyses charges incurred, refund will not be possible. However, the excess amount may be adjusted against future analyses by the same user. Samples (well packed in eppendorf tubes (1.5 mL) and not in polybags), requisition form along with demand draft should be sent to

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- The user should check the solubility of the sample and suggest best solvent for recording NMR.
- ➤ Minimum sample requirement for recording <sup>1</sup>H NMR and <sup>13</sup>C NMR are 5 and 25 mg, respectively. If data is not clear due to in-homogeneity or less amount of sample, then samples will not be recorded again.
- > Samples will be discarded after the experiment.
- > 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.

Convener NMR Facility, BITS Pilani

<sup>¶</sup>Service charges will be extra as per govt. rule (currently 12% + education cess).

<sup>§</sup>Same rates will be applicable even if user provides his/her own solvent.

<sup>&</sup>lt;sup>∂</sup> If time exceeds, every additional half hour will be charged thereof with 250/- for academic institution and Rs 750/- for industrial samples.