

## About the Department

Department of Chemistry at Indian Institute of Technology Indore was started in 2009 with a vision of establishing a centre of excellence and a state-of-the-art facility in chemical sciences research, education, and scientific leadership in technology transfer to industry. The department has pledged to train and develop next generation scientific leaders by providing an opportunity for independent and meticulous thinking in research problems related to healthcare, energy, and environment. The graduate students are exposed to learn in an environment of modern facilities par with international standards to fulfil their scientific passion of creativity. Our department is well equipped with state-of-art sophisticated instrumentation facilities to facilitate research in almost all areas of chemistry and interdisciplinary research.

## Contact Details

- Convener: Dr. Chelvam Venkatesh ([cvenkat@iiti.ac.in](mailto:cvenkat@iiti.ac.in))
- Faculty In-charge: Dr. Sampak Samanta ([sampaks@iiti.ac.in](mailto:sampaks@iiti.ac.in))  
Dr. Selvakumar Sermadurai ([selva@iiti.ac.in](mailto:selva@iiti.ac.in))
- NMR facility staff: Mr. P. K. Parthiban  
Mr. Manish Kushwaha

**All the correspondence should be address to:**

### The Convener

500 MHz NMR Facility

Department of Chemistry, Room No. 1D-401

Indian Institute of Technology Indore

Khandwa Road, Simrol

Indore-453552, M.P., India

Tel: +91-7316603343, Email: [500nmrfacility@iiti.ac.in](mailto:500nmrfacility@iiti.ac.in)

# DST-FIST 500 MHz NMR Facility

Department of Chemistry

Indian Institute of Technology Indore



### 500 MHz NMR Facility

DEPARTMENT OF CHEMISTRY

INDIAN INSTITUTE OF TECHNOLOGY INDORE

INDORE, MADHYA PRADESH

Website: [www.chemistry.iiti.ac.in/500nmrfacility.html](http://www.chemistry.iiti.ac.in/500nmrfacility.html)

Phone: +91-731-660 3415/3340

## NMR Facility

The Nuclear Magnetic Resonance Spectroscopy (NMR) facility in the Department of Chemistry at Indian Institute of Technology Indore is funded by DST under FIST programme in the year 2018-19. The NMR spectrophotometer (500 MHz: Bruker Ascend 500) is established in a fully equipped modern spectroscopic laboratory, for detection of a wide variety of nuclei (1D- and 2D H, <sup>13</sup>C, <sup>19</sup>F, and <sup>31</sup>P) with high resolution, and ultra-sensitivity over a broad range of temperature. Experienced NMR facility staffs are available for serving the needs of academia, and industry clients. To maintain the state-of-the-art research facility and to provide expedite support in high end research, a minimum charge has been fixed for availing the facility.

### Important Note

- Samples (well packed in eppendorf tubes (1.5 mL) and not in polybags), requisition form along with demand draft/online transaction detail should be sent to:

**The Convener, DST-FIST 500 MHz NMR Facility**

Department of Chemistry

Room No. 1D-401 PoD

Indian Institute of Technology Indore

Simrol, Khandwa Road

Indore-453552, M.P., India

Tel: +91-7316603343; Email: [500nmrfacility@iiti.ac.in](mailto:500nmrfacility@iiti.ac.in)

- The user should check the solubility of the sample and suggest best solvent for recording NMR. Please supply around 5 mg sample for recording <sup>1</sup>H NMR and 25 mg for other nuclei.
- If the data is not clear due to in-homogeneity or less amount of sample, then samples will not be recorded again. You will receive an email acknowledgement as soon as the samples reach us and samples will not be sent back after analysis.
  - The samples will be recorded, and the data will be shared in soft copy to the user as per priority order (first come first serve basis).

- If the time exceeds for special experiments as per the user instruction, every additional half hour will be charged thereof with Rs 250/- for academic institution and Rs 750/- for industrial samples.
- Acknowledgement policy: The use of 500 MHz NMR facility at Department of Chemistry, IIT Indore automatically implies an acknowledgment in research articles published, conferences and/or any other presentations. The following acknowledgment is requested: “The authors gratefully acknowledge the DST-FIST NMR facility at Department of Chemistry, Indian Institute of Technology Indore for recording NMR spectra”.
- Sample submission form will be available from 500 MHz NMR facility, IIT Indore [www.chemistry.iiti.ac.in/500nmrfacility.html](http://www.chemistry.iiti.ac.in/500nmrfacility.html)

S. No.	Experiment	Rate (Academia)	Rate (Industry)
1	<sup>1</sup> H, <sup>19</sup> F, <sup>31</sup> P (Expt. time 30 min or less)	₹ 200.00	₹ 500.00
2	<sup>13</sup> C, DEPT (Expt. time 30 min or less)	₹ 300.00	₹ 700.00
3	2D (per measurement or expt. time 1 h or less)	₹ 500.00	₹ 1000.00
4	<i>Solvent charge (per sample)</i>		
	CDCl <sub>3</sub> , D <sub>2</sub> O	NIL	NIL
	DMSO-d <sub>6</sub> , Acetone-d <sub>6</sub>	₹ 150.00	₹ 300.00
	Methanol-d <sub>4</sub>	₹ 500.00	₹ 1000.00

*18% GST is applicable in addition to these base charges*

### Payment

Online	Name: <b>The Registrar, Indian Institute of Technology Indore</b>
Mode	A/C No: 36948979864 (SBI) IFSC code: SBIN0030524
Demand Draft	Payee: <b>The Registrar, Indian Institute of Technology Indore</b> Payable at: Indore