

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT
CENTRE FOR MATERIALS CHARACTERIZATION
CENTRAL NMR FACILITY

NMR Facility- JEOL 500 MHz (Requisition Form)

Requisition Form No: _____ **(Office)**

Date: _____

| | | | |
|-------------------|--|-------------------------|--|
| Name of the User: | | Phone: | |
| Student / Emp ID: | | Institute/Organization: | |
| E-mail ID: | | Department: | |
| GST | | | |

Samples Information:

| S. No | Sample Name | Solvent | Weight / amount of the sample | Experiment(s) | | Spectral range or Spectral width in ppm |
|-------|-------------|---------|-------------------------------|---|---|---|
| | | | | 1D (¹ H/ ¹³ C/ ³¹ P/ ¹⁹ F/ ¹¹ B ¹³ C DEPT135/90/45/ NOE / TEMPERATURE DEPENDENT) | 2D (COSY/HMQC/ HMBC/ NOESY/ROESY/ TOCSY etc.) | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

*In the case toxic samples, nature of toxicity and precautions to be taken should be mentioned

*Radioactive/Explosive/Unstable samples are NOT accepted for analysis.

1. Billing/Invoice Address (Clearly mention the details for invoice).

2. Payment Details:

| Date | Transaction Ref No. | Amount |
|------|---------------------|--------|
| | | |

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Signature of the User/Student

Endorsement by Guide/HOD

Place:

Name & Signature

Date:

(Guide/HOD)

INSTRUCTIONS FOR EXTERNAL USERS

General Instructions

- External slots will be booked based on the receipt of the requisition form. For slot booking and any other information please mail us to: nmradmin@nitc.ac.in / **0495 228 5344**
- Samples can also be sent by courier along with duly filled requisition form and payment receipt to the address given below. (Payment mode is UPI shall be shared by CMC Staff upon request to email)

**Central NMR Facility,
Room No. 103, Ground Floor,
Chemistry Department
NITC Campus PO, NIT Calicut, Kozhikode,
Kerala-673601**

- The form without payment details will be rejected.
- Samples will not be returned after analysis. if you need samples back please collect it directly with in a week of date of dispatch of results.

NMR User Charges:

| Internal (A): ¹ H Deuterated solvents provided by user. Internal (B): Deuterated Solvents Not Provided | | Internal (A) | Internal (B) - NIT Calicut | External Academic Institutes | National Labs / Govt. R&D labs | PSUs / Industries |
|--|---------------------|--------------|----------------------------|------------------------------|--------------------------------|-------------------|
| 1H NMR (First 10 minutes) + 25 for every additional 15 minutes | CDCl ₃ | 50 | 125 | 200 | 375 | 600 |
| | DMSO-d ₆ | 50 | 350 | 450 | 1050 | 1700 |
| | D ₂ O | 50 | 400 | 500 | 1200 | 2000 |
| | Acetone | 50 | 950 | 1050 | 2850 | 4700 |
| | Acetonitrile | 50 | 1050 | 1150 | 3150 | 5200 |
| | Methanol | 50 | 1150 | 1250 | 3450 | 5750 |
| 13C and other nuclei# (First 10 minutes) + 25 for every additional 15 minutes | CDCl ₃ | 50 | 125 | 200 | 375 | 600 |
| | DMSO-d ₆ | 50 | 350 | 450 | 1050 | 1700 |
| | D ₂ O | 50 | 400 | 500 | 1200 | 2000 |
| | Acetone | 50 | 950 | 1050 | 2850 | 4700 |
| | Acetonitrile | 50 | 1050 | 1150 | 3150 | 5200 |
| | Methanol | 50 | 1150 | 1250 | 3450 | 5750 |

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| | | | | | | |
|---|--------------------------|------|------|------|------|------|
| DEPT (First 10 minutes) + 25 for every additional 15 minutes | CDCl ₃ | 100 | 150 | 200 | 375 | 600 |
| | DMSO-d ₆ | 100 | 375 | 450 | 1050 | 1700 |
| | D ₂ O | 100 | 425 | 500 | 1200 | 2000 |
| | Acetone | 100 | 975 | 1050 | 2850 | 4700 |
| | Acetonitrile | 100 | 1075 | 1150 | 3150 | 5200 |
| | Methanol | 100 | 1175 | 1250 | 3450 | 5750 |
| 2D-COSY (First 10 minutes) + 25 for every additional 15 minutes | CDCl ₃ | 100 | 150 | 200 | 375 | 600 |
| | DMSO-d ₆ | 100 | 375 | 450 | 1050 | 1700 |
| | D ₂ O | 100 | 425 | 500 | 1200 | 2000 |
| | Acetone | 100 | 975 | 1050 | 2850 | 4700 |
| | Acetonitrile | 100 | 1075 | 1150 | 3150 | 5200 |
| | Methanol | 100 | 1175 | 1250 | 3450 | 5750 |
| 2D-NOESY/ROESY (First 10 minutes) + 25 for every additional 15 minutes | CDCl ₃ | 100 | 150 | 200 | 375 | 600 |
| | DMSO-d ₆ | 100 | 375 | 450 | 1050 | 1700 |
| | D ₂ O | 100 | 425 | 500 | 1200 | 2000 |
| | Acetone | 100 | 975 | 1050 | 2850 | 4700 |
| | Acetonitrile | 100 | 1075 | 1150 | 3150 | 5200 |
| | Methanol | 100 | 1175 | 1250 | 3450 | 5750 |
| Variable Temp. Experiments (VT charges) + charges for each measurement as above at each temperature | Additional /hr | 100 | 100 | 200 | 400 | 600 |
| Solid state | 1 st hr | 1000 | 1000 | 1500 | 2500 | 4000 |
| Solid state | Additional charges/hr | 500 | 750 | 1000 | 1500 | 2000 |

^Deuterated solvents provided by user

19F, 31P, 27Al, 11B, 77Se, 125Te, 95Mo, 29Si measurements also will be done at same charges

- For solid state NMR analysis, sample details must be provided.
- If TMS spike is required, additional cost of Rs.50/- to be added.
- Sample details such as solubility, stability/degradation possibilities should be disclosed at the time of submission of the sample. The centre will not be responsible for any wrong data obtained due to the degradation of sample.
- Sufficient quantity of the sample should be made available for analysis.
- Analysis and in-depth interpretation of the results are not included in the above charges.
- Such services shall be provided on a consultation basis. For further details, contact the Faculty-In-Charge.
- All users who wish to avail the facility need to book the slot well in advance.
- All investigators are expected to acknowledge the services of the centre in publications and similar articles.