



**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, POWAI, MUMBAI**  
**Scanning Probe Microscope-Facility (SPM) – I**  
**Central Facility**  
**Department of Metallurgical Engineering and**  
**Materials Science**  
 Email: [spm\\_mems@iitb.ac.in](mailto:spm_mems@iitb.ac.in)

**Registration Form for External Users**

**External User Registration No:** ..... **Date:** .....

- 1) Name of the User: .....
- 2) Name of the Institute/Organization: .....
- .....
- 3) GSTIN (if available): .....
- 4) Email and Tel No: .....
- 5) Number of samples: .....
- 6) Specifications of samples: Material(s) and Substrate (if any)
- .....
- 7) Nature of sample (Hard/Soft): .....
- 8) Mode of SPM (Contact/Tapping/Others):
- .....
- 9) Scan size & Resolution required: .....
- 10) Any other remarks: .....

MATERIAL IS NOT POISONOUS/TOXIC IN ANY WAY (Please provide MSDS data sheet)

*Please tick the appropriate box:*

[  ] We **agree** to acknowledge the Scanning Probe Microscope Facility -I (SPM) @ MEMS of IIT BOMBAY in our Publications/Reports/Thesis/Product development/prototype development/ proof of concept in which the data is used.

[  ] We **do not agree** to acknowledge the Scanning Probe Microscope Facility -I (SPM) @ MEMS of IIT BOMBAY in our Publications/Reports/Thesis/Product development/prototype development/ proof of concept in which the data is used.

Signature of the User: .....

Note: 1) Samples should be brought by the user at the allotted time and the user should be present while the samples are being examined, 2) Size of the sample should not be more than 12 mm X 12 mm X 2 mm. 3) Please see the attached instructions before putting up the request.

**For Official Use only:**

Date of experiment:	Name of the operator:
Results sent date:	Signature of operator:

## Scanning Probe Microscope Facility (SPM) -I @MEMS

**Registration:** To avail the SPM-I@MEMS (Atomic Force Microscope) Facility, located in the Room Number G021, Ground floor of the Department of Metallurgical Engineering and Materials Science, IIT Bombay, registration is absolutely essential.

Registration Process:

### I) Internal Users:

User within IIT Bombay can apply from

<https://drona.ircc.iitb.ac.in/ircc/NewFac/CentralFacilityIndex.jsp?facilityCode=MT005>

The form should be completely filled up and all the sample details must be provided in the requisition form. The user needs to stay in the laboratory during the entire duration of the experiment, as per the slot assigned. If a user wishes to change his/her time slot, an email should be sent immediately to [spm\\_mems@iitb.ac.in](mailto:spm_mems@iitb.ac.in) requesting change in appointment.

### II) External Users:

Registration Link:

<https://rnd.iitb.ac.in/research-facility/scanning-probe-microscope-facility-i>

External Users can register through above link. External Payment should be made in advance by a Demand Draft (DD) drawn in favour of “The Registrar, IIT Bombay, P and C Account”. The same should be sent to “Prof. Dipti Gupta, Convener, Scanning Probe Microscope Facility (SPM) -I, Central Facility, Department of Metallurgical Engineering and Materials Science, IIT Bombay, Powai, Mumbai 400076”. Appointments will be given after complete registration and payment. Any query related to the sample preparation should be emailed to “spm\_mems@iitb.ac.in”

### Academic Institutions:

You can come personally or send a letter from the Guide/HoD on the Institution’s Original Letter Head stating that the analysis is for research purpose, to qualify for academic concession along with the Registration Form and Demand draft. The letter should be addressed to “Prof. Dipti Gupta, Convener, Scanning Probe Microscope Facility (SPM) -I, Central Facility, Department of Metallurgical

Engineering and Materials Science, IIT Bombay, Powai, Mumbai 400076”

### **Industry & Non- Government Agencies:**

You can come personally or send a letter signed by an authorized signatory of your Institution on Original Letter Head along with the Registration Form and Demand draft. The letter should be addressed to “Prof. Dipti Gupta, Convener, Scanning Probe Microscope Facility (SPM) -I, Central Facility, Department of Metallurgical Engineering and Materials Science, IIT Bombay, Powai, Mumbai 400076”

### **National R & D Lab’s:**

You can come personally or send a letter signed by an authorized signatory of your Institution on Original Letter Head stating that the analysis is for research purpose along with the Registration Form and Demand draft. The letter should be addressed to “Prof. Dipti Gupta, Convener, Scanning Probe Microscope Facility (SPM) -I, Central Facility, Department of Metallurgical Engineering and Materials Science, IIT Bombay, Powai, Mumbai 400076”

You are requested to check the appropriate box in the registration form if you agree (or not) to acknowledge the Scanning Probe Microscope Facility -I (SPM) @ MEMS of IIT BOMBAY in your Publications/Reports/Thesis/Product development/prototype development/ proof of concept in which the data is used.

If you agree, you are requested to mention in your request letter that “We agree to acknowledge the Scanning Probe Microscope -I (SPM) Central Facility of IIT Bombay when the data obtained from this facility are used in our Publications/Reports/Thesis/Product development/prototype development/ proof of concept”. List of such acknowledgements with appropriate reference will be communicated to SPM-I @MEMS facility vide email to “[spm\\_mems@iitb.ac.in](mailto:spm_mems@iitb.ac.in)”.

Kindly send the publication reference (Journal name/volume number/names of the authors/date of issue of the publication etc) to us as the continuing functioning of the lab needs this feedback.

## **General Instructions to the Users**

1. The experimental data provided is only for research / development purposes. These cannot be used as certificates in legal disputes.
2. The users should know the approximate roughness of the sample before submission for analysis.
3. MSDS (Material Safety Data Sheet) should be given along with samples to ensure that the samples are not toxic or hazardous. Samples will not be accepted unless accompanied by MSDS.
4. The Sample will be mounted on steel disc with the help of double-sided adhesive tape for strong adhesion, so the sample may get damaged during removal.
5. Please bring a CD with you for data collection.

Date: May 5, 2022

### Revised Usage charges for the SPM-I@MEMS facility

In view of the directive from IRCC to increase the funds collected from usage of the SPM-I@ MEMS facility, the SPM-I@ MEMS. FMC have decided on the following new rates for internal and external users:

- IIT Bombay users: 1000 INR/slot (A slot is 3 hrs)
- Academic & National Labs: 5000 INR/slot + 18% GST
- Industry: 8000 INR/slot + 18% GST

A 50% discount will be provided for users bringing their own tips.

Users are requested to arrive at the scheduled appointment time. TA's will not be responsible to carry out the experiment in case user is late by more than 30 minutes.

**The new charges will be effective 1<sup>st</sup> June 2022 onwards.**

The slot cancellation policy will be as follows:

- Upto 24 hours before slot time: no cancellation charges will be levied.
- Upto 12 hours before slot time: 50% cancellation charge will be levied.
- Less than 12 hours before slot time: full slot charges will be levied.

For slot cancellation, user has to notify by sending an email to 30004112@iitb.ac.in

<p>Digital Signature Dipti Gupta (i11121) 07-May-22 11:29:33 PM</p>	<p>Digital Signature Rajiv O Dusane (671008) 08-May-22 04:27:59 PM</p>	
<p>Dipti Gupta (MEMS)</p>	<p>Rajiv O Dusane (MEMS)</p>	
<p>Digital Signature Ajay Singh Panwar (i09085) 01-Jun-22 02:19:11 PM</p>	<p>Digital Signature Nithyanand Prabhu (121053) 10-May-22 05:32:46 PM</p>	<p>Digital Signature Ramaswamy Murugavel (i97070) 10-May-22 01:53:23 PM</p>
<p>Ajay Panwar (MEMS)</p>	<p>Nithyanand Prabhu (MEMS)</p>	<p>R. Murugavel (MEMS)</p>