

### INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

# Conductive Atomic Force Microscopy (cAFM) - Central Facility

E mail: cafm@iitb.ac.in

#### **Registration Process:**

#### I) Internal Users:

Users within IIT Bombay can apply from http://drona.ircc.iitb.ac.in. The form should be completely filled up and all the sample details must be provided in the requisition form. Users need to be present at the time of analysis on the allotted appointment date/time. If a user wishes to change his/her time slot, an email should be sent immediately to cafm@iitb.ac.in requesting change in appointment.

#### II) External Users:

- Academic Institutions: You can come in-person or send your samples along with a letter from the Head / Guide on your College/Institute Original Letter Head for registration stating that the analysis is for research purpose. The letter should be addressed to Prof. Udayan Ganguly, Convener, Central Facility cAFM, Department of Electrical Engineering, IIT Bombay, Powai, Mumbai-400076.
- National R & D Lab's: You can come in-person or send a letter signed by an authorized signatory of your Institution on Original Letter Head for registration. The letter should be addressed to Prof. Udayan Ganguly, Convener, Central Facility cAFM, Department of Electrical Engineering, IIT Bombay, Powai, Mumbai-400076.
- Industry& Non- Government Agencies: You can come in-person or send a letter asigned by an authorized signatory of your Organization for registration. The letter should be addressed to Prof. Udayan Ganguly, Convener, Central Facility cAFM, Department of Electrical Engineering, IIT Bombay, Powai, Mumbai-400076.

You are requested to mention in your request letter that "We agree to acknowledge the "Conductive Atomic Force Microscopy (cAFM)", Central Facility of IIT Bombay when the data from the lab are used in our papers/reports/thesis".

The information on such acknowledgements with appropriate reference should be communicated to lab vide email *cafm@iitb.ac.in*. Kindly send the complete publication reference (Journal name/volume number/names of the authors/date of issue of the publication) etc.

### Basic Charges for External Users + GST (as applicable) for 3 hour slot: GST rate as on 1.8.2017

- 1) If the recipient of the report is from Maharashtra: 9% SGST and 9% CGST
- 2) If the recipient of the report is from outside Maharashtra: 18% IGST

## Revised charges for Internal and External Users using cAFM Facility (Conductive Atomic Force Microscopy):

• The charges are as per follows:

Item	Internal (IITB)	External (Academics)	External (Industry)	External ( R & D)	Comment
Tips					To be purchased by user from stock (re-usable)
Operator	1000	3300	5250	5250	Operator not needed for authorized users as they runstem the system Essentially Operator does 20 slots (average of 10 months) at 58,000 INR salary: 1000 INR / slot will break even; External user charge is 5x to contribute to "rainy day fund" for maintenance / breakdown / upgrades etc
					external user has 30% institute
Overhead		990	1575	1575	overhead
		4290	6825	6825	tips extra
		386	614	614	9% SGST
		386	614	614	9% CGST
					Total Charge for External Users if the recipient of the report is from Maharashtra
		5062	8053	8053	18% IGST
Total	1000	5062	8053	8053	Total Charge for External Users if the recipient of the report is from outside Maharashtra

• Internal Users bringing their own tips can be charged 50% discount for one slot.

rate chart	
Type of AFM tip	Cost per tip
AFM	4000
c-AFM/ MFM/ PFM/ KPFM	6000

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. Udayan Ganguly, Convener, Centra Facility cAFM, Department of Electrical Engineering, IIT Bombay, Powai, Mumbai - 400076, along with the Request Letter.

- **Appointment:** The users will be informed about their date and time-slot by email. If the day and time-slot is not suitable for you, an email request should be sent immediately for an alternate slot.
- **Sample Submission:** Samples are to be brought along on the date of your appointment for analysis.
- **Results:** After the sample analysis is complete the results can be collected by copying through CD.