

TEM Sample Preparation Central Facility

Registration: To avail the TEM Sample Preparation Facility, located on the 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/NewFac/CentralFacilityIndex.jsp?facilityCode=MT004”](https://drona.ircc.iitb.ac.in/NewFac/CentralFacilityIndex.jsp?facilityCode=MT004)

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 sample preparation, as per the slot assigned.

II) External Users:

Registration Link:

<http://rnd.iitb.ac.in/research-facility/transmission-electron-microscopy-sample-preparation-facility-i>

External Users can register through above link. Please make payment in advance as per charges mentioned later. Payment should be done by online transfer to the following bank account.

Bank Details for Electronic Transfer:

Sent by:	Indian Institute of Technology Bombay.
Bank Name:	State Bank of India, IIT Powai Branch, Mumbai-400076, India
Bank A/c No:	10725729173
IFSC/RTGS/NEFT:	SBIN0001109
MICR no:	4000002034
Branch Code:	1109
Telephone No.:	+91-22-2572-1103

Proof of online transfer should be sent to the Prof-In-Charge, Prof. Prita Pant at the address mentioned below.

Appointments will be given after complete registration and payment. Any query related to the sample preparation should be emailed to “temsampleprep@iitb.ac.in”.

Academic Institutions:

You may 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 to qualify for academic concession. The letter should be addressed to Prof-In-Charge; Prof. Prita Pant, TEM Sample Preparation Laboratory, Department of Metallurgical Engineering and Materials Science, IIT Bombay, Powai, Mumbai-400076

Industry & Non- Government Agencies:

You may come in-person or send your samples along with a letter for registration. The letter should be addressed to Prof-In-Charge, Prof. Prita Pant, TEM Sample Preparation Laboratory, Department of Metallurgical Engineering and Materials Science, IIT Bombay, Powai, Mumbai-400076

National R & D Lab's:

You may come in-person or send your samples along with a letter from your Institute for registration stating that the analysis is for research purpose. The letter should be addressed to Prof-In-Charge, Prof. Prita Pant, TEM Sample Preparation Laboratory, Department of Metallurgical Engineering and Materials Science, IIT Bombay, Powai, Mumbai-400076

You are requested to mention in your request letter that “We agree to acknowledge the TEM Sample Preparation Facility of IIT Bombay when the data from the samples made in the TEM Sample Preparation Facility are used in our papers/reports/thesis”. List of such acknowledgements with appropriate reference will be communicated to TEM Sample Preparation Facility vide email to “temsampleprep@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.

Charges:

Experiment		IITB Student	Academic Institutes Rs.+18%GST	National R&D Labs. Rs.+18%GST	Industry & Other Non Gov. Agencies Rs.+18%GST
TEM Sample Preparation	Planar	1000/- per sample	2000/- per sample +18%GST	2500/- per sample +18%GST	5000/- per sample +18%GST
	Cross sectional	2000/- per sample	4000/- per sample +18%GST	5000/- per sample +18%GST	10000/- per sample +18%GST

Partial work without TEM sample preparation charges (For IITB students only)

Ultrasonic cutting	300/- per hour
low speed Diamond saw cutter	200/- per hour

GENERAL INSTRUCTIONS TO THE USERS

It needs to be noted here that TEM Sample Preparation is a destructive method of sample preparation, which involves cutting, grinding, polishing, thinning, some of the steps being also done manually. The users should understand that because of the nature of this sample preparation, even though done extremely carefully, at each step, there is a finite probability of causing mechanical damage to the sample, which gets accrued if the sample under consideration is a brittle material.

The samples are made only for research / development purposes. These cannot be used as certificates in legal disputes.

Maximum of 2 samples at a time.

The users should know the nature (hardness, strength, toughness, interfacial bonding for cross-sectional samples etc.) and dimensions of the sample before submitting it.

Date: 30-01-2023

Facility management committee

Prof. Prita Pant (ME & MS) (facility in charge)

Digital Signature
Prita Pant (i06001)
31-Jan-23 11:32:08 AM

Prof. MJNV Prasad (ME & MS)

Digital Signature
Prasad MJNV (i12134)
31-Jan-23 11:47:48 AM

Prof. N. J. Balila (ME & MS)

Digital Signature
Nagamani Balila (i16280)
31-Jan-23 10:47:08 AM

Prof. N. Prabhu (ME & MS)

Digital Signature
Nithyanand Prabhu (121053)
02-Feb-23 11:55:46 AM

Prof. Amartya Mukhopadhyay (ME & MS)

Digital Signature
Amartya Mukhopadhyay (i11106)
31-Jan-23 10:53:29 AM

Digital Signature
Sushil Mishra (i12139)
31-Jan-23 10:46:32 AM

Prof Sushil Mishra (Mechanical Engineering)

Digital Signature
Sankara Sarma V (i12071)
31-Jan-23 10:42:58 AM

Prof. Sankara Sarma V. Tatiparti (DESE)

Digital Signature
Anil Kottantharayil (i06163)
01-Feb-23 12:56:13 PM

Prof Anil Kottantharayil (Electrical Engineering)