

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

Sophisticated Analytical Instrument Facility (SAIF)

300kV Field Emission Gun Transmission Electron Microscope (HRTEM)

Analysis Request Form

Applicant Details

User belongs to: IIT Bombay University National Lab Industry

User name:

Institute/University/Organisation:

Email ID: Mobile No.:

Name of Guide/PI:

Guide/PI Email ID: Guide/PI Mobile No.:

Address of Institute/Organization:

Sample information:

Number of samples	
Sample code	
Sample type	Biological/Polymer/Metal/Thin film/Ceramic or Composite material/ Nano particles or Nano materials/Other.....
Detailed description of all samples	
Expected Morphology	
Expected Particle Size	

- Powder sample will be dispersed in the solvent and after ultrasonication, it will be loaded/drop casted on the TEM grid. The grid will be dried under IR lamp. The representative TEM Images will be taken for that sample.
- In case of bulk sample, the sample dimension should be 3.0mm diameter circular disc with a thinned electron transparent central area and should be prepared at the user end (Ion Milling, polishing etc.)
- Biological and pharmaceutical sample preparation should be carried out at the user end (staining, ultra-microtomy, fixation etc.)

Medium of dispersion for powder sample	Ethanol <input type="checkbox"/> Methanol <input type="checkbox"/> Water <input type="checkbox"/> Iso-propyl alcohol <input type="checkbox"/> Acetone <input type="checkbox"/> Toluene <input type="checkbox"/> Non of the above <input type="checkbox"/> IF none of the above, please mention the medium for dispersion and send it along with the samples.
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Ultra-sonication time for Dispersion of powder sample in above mentioned solvent :

Do you want to follow the same procedure : Yes No
If "No" please specify another procedure:


Type of analysis (Kindly tick):

		STEM Mode			
TEM/HR Imaging & Diffraction	EDS Analysis (Spectrum only)	EDS analysis (spectrum+ image)	Line Scan analysis	Mapping analysis	EELS

For STEM / EDS/ EELS analysis, kindly mention the elements to be analysed

Material safety data:

If you are submitting more than one sample which are different in nature/composition, submit separate MSDS

Sample Properties	Carcinogenic (level) <input type="checkbox"/> Toxic <input type="checkbox"/> Radioactive <input type="checkbox"/> Corrosive <input type="checkbox"/> Explosive <input type="checkbox"/> Flammable <input type="checkbox"/> Other (specify): _____
Moisture	Present <input type="checkbox"/> Absent <input type="checkbox"/> NA <input type="checkbox"/>
Volatile organic compound	Present <input type="checkbox"/> Absent <input type="checkbox"/> NA <input type="checkbox"/>
Stability of sample	Stable under RTP <input type="checkbox"/> Hygroscopic <input type="checkbox"/> Sublimes <input type="checkbox"/> Reactive in: Air <input type="checkbox"/> Light <input type="checkbox"/> Heat <input type="checkbox"/> Vacuum <input type="checkbox"/> Moisture <input type="checkbox"/> May decompose when exposed to accelerated electron beam <input type="checkbox"/>
Mention the storage and handling conditions if anything specific	
Whether incompatible with any material-	Yes <input type="checkbox"/> No <input type="checkbox"/> (Specify the materials):
Health hazards	Yes <input type="checkbox"/> No <input type="checkbox"/> (irritant to skin/irritant to eyes/harmful to skin/ toxic if inhaled/toxic if ingested)
First aid measures	Eye/Skin/Inhalation/ Ingestion/Others (specify):
Disposal Method of sample	
Please fill appropriate numbers in the NFPA diamond: (*reference image attached below)	
Additional information if any:	

*Along with this form MSDS should be submitted if available.

Note: All Samples will be discarded after 15 days of analysis. If you wish to collect the samples then you are required to make arrangement for the same. SAIF office will not dispatch the same to users under any circumstances

Declaration

I confirm that the samples submitted for analysis are for research purpose only and the above furnished details are correct and true to the best of my knowledge. I understand that I will be held responsible for any damages arising from incorrect information provided by me against material safety data.

I agree to acknowledge DST and SAIF/CRNTS, IIT Bombay for providing (Instrument name) analytical facility for my research work, in my publications. I also agree to send the publication reference (Journal name/volume number/names of the authors/date of issue of the publication etc) to office.saif@iitb.ac.in

I declare that the "Content of this report is meant for our information only and we will not use the content of this report for advertisement, evidence, litigation or quote as certificate to third party" I accept that all the issued reports/results (Soft/hard) will not carry any Signature or Seal and Stamp of SAIF/CRNTS IIT Bombay.

Signature of the User

Signature of the In Charge/HOD/PI with College/P.I.
Guide seal / stamp

Date:

Place:

* Reference image for filling NFPA diamond:



IMPORTANT NOTE:

- Potentially hazardous/toxic/radioactive samples may not be accepted for analysis.
- Requisition letter addressing Head,SAIF/CRNTS along with completed form and DD of required amount should be send by post or submitted in person to **SAIF/CRNTS office, IIT Bombay, Powai, Mumbai-400076.**
- The Demand Draft should be in favour of "**The Registrar, IIT Bombay**"
- Your appointment will be as per the queue, once we receive the Requisition letter, duly filled form and advance payment. Partially filled form will not be registered.
- It is desirable that that you/ your representative will be present for the analysis.
- In case if the user will not able to be present for analysis, the representative data will be taken for the samples.
- **Attach reference images for the sample (if any) with the form.**
- For any further query, kindly contact on
Email: fegtem300@iitb.ac.in, Contact: 022-2576-4698