INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

Sophisticated Analytical Instrument Facility (SAIF)

200kV 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:

Accelerating Voltage : 200 kV ☐ 120kV ☐

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 ultarsonication, 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 ☐ Methanol ☐ Water ☐ Iso-propyl alcohol ☐ Acetone ☐ Toluene ☐ Non of the above ☐ IF none of the above, please mention the medium for dispersion and send it along with the samples. .....

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):

TEM/HR Imaging & Diffraction	EDS Analysis	STEM Mode: Line Scan	STEM Mode: Mapping

For STEM/EDS analysis, kindly mention the expected elements.

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

Sample Properties	Carcinogenic (level) ☐ Toxic ☐ Radioactive ☐ Corrossive ☐ Explosive ☐ Flammable ☐ Other (specify):_____
Moisture	Present ☐ Absent ☐ NA ☐
Volatile organic compound	Present ☐ Absent ☐ NA ☐
Stability of sample	Stable under RTP ☐ Hygroscopic ☐ Sublimes ☐ Reactive in: Air ☐ Light ☐ Heat ☐ Vacuum ☐ Moisture ☐ May decompose when exposed to accelerated electron beam ☐
Mention the storage and handling conditions if anything specific	
Whether incompatible with any material-	Yes ☐ No ☐ (Specify the materials): .....
Health hazards	Yes ☐ No ☐ (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

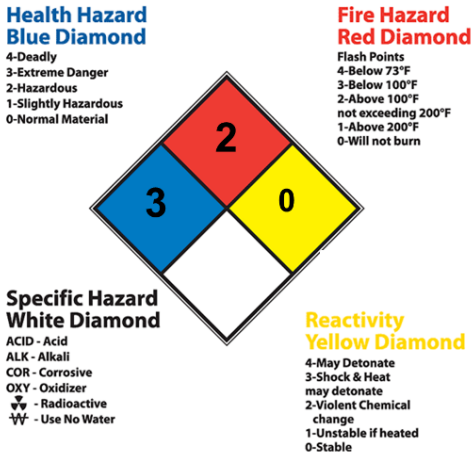
I declare that the "Content of this report is meant for our information only and we will not use the content of this report for advertisement, evidence, litigation or quote as certificate to third party" I accept that all the issued reports/results (Soft/hard) will not carry any Signature or Seal and 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: fegtemlab@iitb.ac.in, Contact: 022-2576-4690