

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: ☒ University ☐ National Lab ☐ Industry

User name: Dr. N. Varalakshmi

Institute/University/Organization: Sri padmavati Mahila Viswavidyalayam

Email ID: Varalakshmi.spmv@gmail.com Mobile No.: 8374811172

Name of Guide/PI: Dr. N. Varalakshmi

Guide/PI Email ID: lakshmiVara2008@gmail.com Guide/PI Mobile No.: 8374811172

Address of Institute/Organization: Sri padmavati Mahila Viswavidyalayam, Tirupathi Andhrapradesh, pincode: 517502

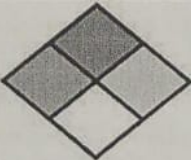
Sample information:

Number of samples	5
Sample code	① MCPurea ② MCN1.5 ③ MNCpvp ④ MCSurea 6
Sample type	⑤ MNC SDS 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:	

(Kindle note that User is desirable to be present at the time of analysis)

	STEM-EDS analysis			
TEM/HR Imaging & Diffraction	EDS analysis	EDS Mapping	EDS Line Scan	EELS
✓				

Material safety data:

Sample Properties	Carcinogenic (level) ☒ Toxic ☒ Radioactive ☒ Corrosive ☒ Explosive ☒ Flammable ☒ Other (specify): <u>all are with similar properties</u>
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	<u> </u>
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:	

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 SAIF, 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, IIT Bombay.

N. V. Kumar
Signature of the User

Date: 19/3/26

Place: Tirupati

N. V. Kumar
Signature of the In Charge/HOD/PI with College/P.I.

Guide seal / stamp

Sri Padmavati Mahila Visvavidyalayam
(Women's University), TIRUPATI-517 511

* Reference image for filling NFPA diamond:



IMPORTANT NOTE:

- Potentially hazardous/toxic/radioactive samples may not be accepted for analysis.
- User must generate a registration request via online ISTEM portal.
- 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 TEM images for the sample (if any) with the form.

After successful registration/payment process, you may send the samples in the sealed envelope mentioning 300kV FEG-TEM Instrument name and the ISTEM FBR number and send it to the following address or you can bring the samples in person on your scheduled appointment date

Head, SAIF

Indian Institute of Technology Bombay(IIT-Bombay),
Powai, Mumbai, Maharastra, Pincode: 400076

For any further query, kindly contact : Email: fegtem300@iitb.ac.in, Phone: 022-2159-6864