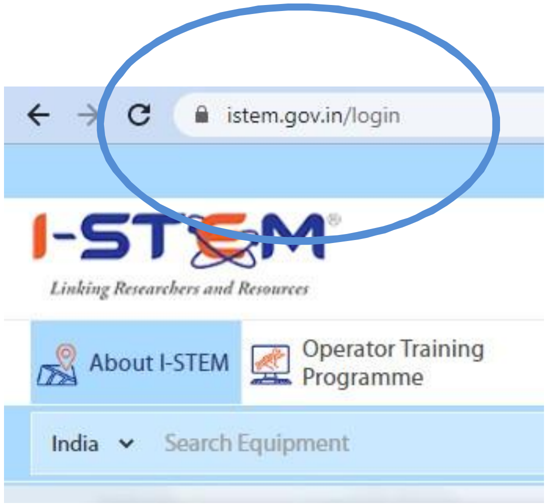
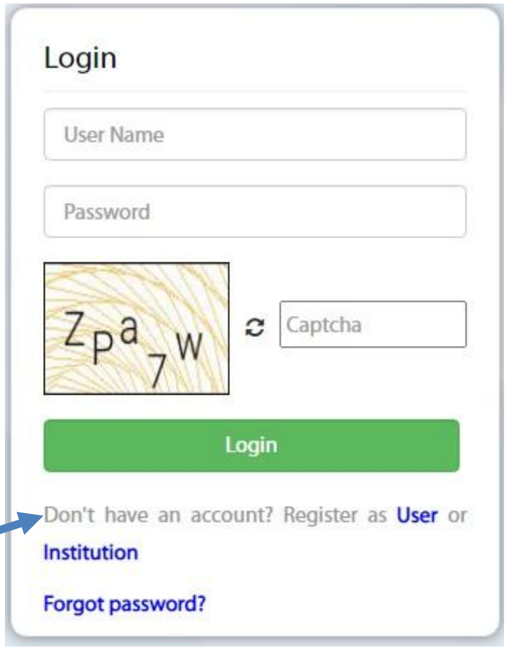
Steps for
user registration
&
Sample analysis request
through I-STEM

Steps for User Registration

User Registration (One time only): Login and password created - https://www.istem.gov.in





Login

User Name

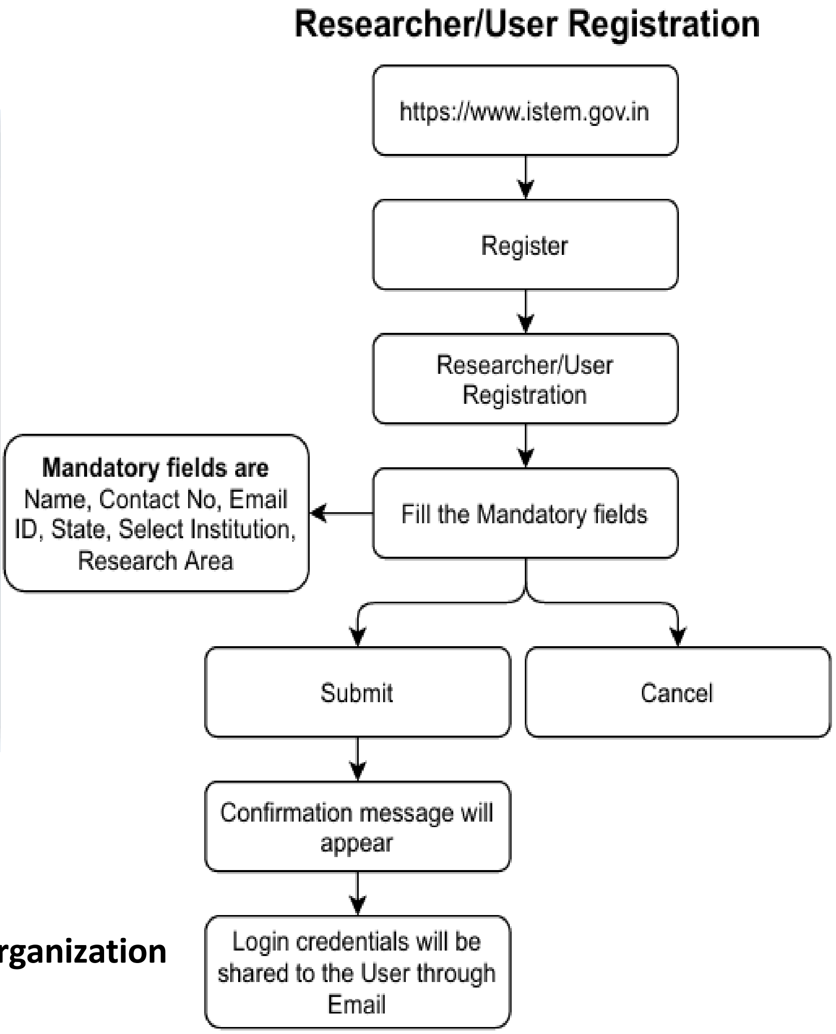
Password

Captcha

Login

Don't have an account? Register as **User** or **Institution**

Forgot password?



Researcher/User Registration

https://www.istem.gov.in

Register

Researcher/User Registration

Fill the Mandatory fields

Mandatory fields are Name, Contact No, Email ID, State, Select Institution, Research Area

Submit

Cancel

Confirmation message will appear

Login credentials will be shared to the User through Email

NOTE:

a. If you do not have an account, Register in I-STEM Portal
(it will take ~ 1 hours for activation from I-STEM management).
You will receive email confirmation from I-STEM about approval.

b. If your institute/organization is not on the list, kindly click on **other organization** and then proceed further

c. For trouble with OTP/authentication, kindly read the registration mail, wait for 1 day for authentication, if the issue is not resolved then contact: I-STEM support: support@istem.co.in

FIB-SEM Instrument details on ISTEM

d. After approval, you will be allowed to Login in I-STEM. Enter login ID & password.

Name: Focused Ion Beam Scanning Electron Microscope (FIBSEM)

Equipment Code : 2736841

Make : Thermo Fisher Scientific
Model : HELIOS 5 UC
Institution : Sophisticated Analytical Instrument Facilities (SAIF) IIT Bombay
Reference Website : www.saif.iitb.ac.in

I-STEM Link for sample registration:
https://www.istem.gov.in/equipment-info/36841/Focused-Ion-Beam-Scanning-Electron-Microscope--FIBSEM-

NOTE:
FIBSEM can be searched in the box using the Equipment name or Equipment code

Steps for Sample Registration

Once the FIB-SEM equipment link is open Click on : **LOGIN**

Equipment Info

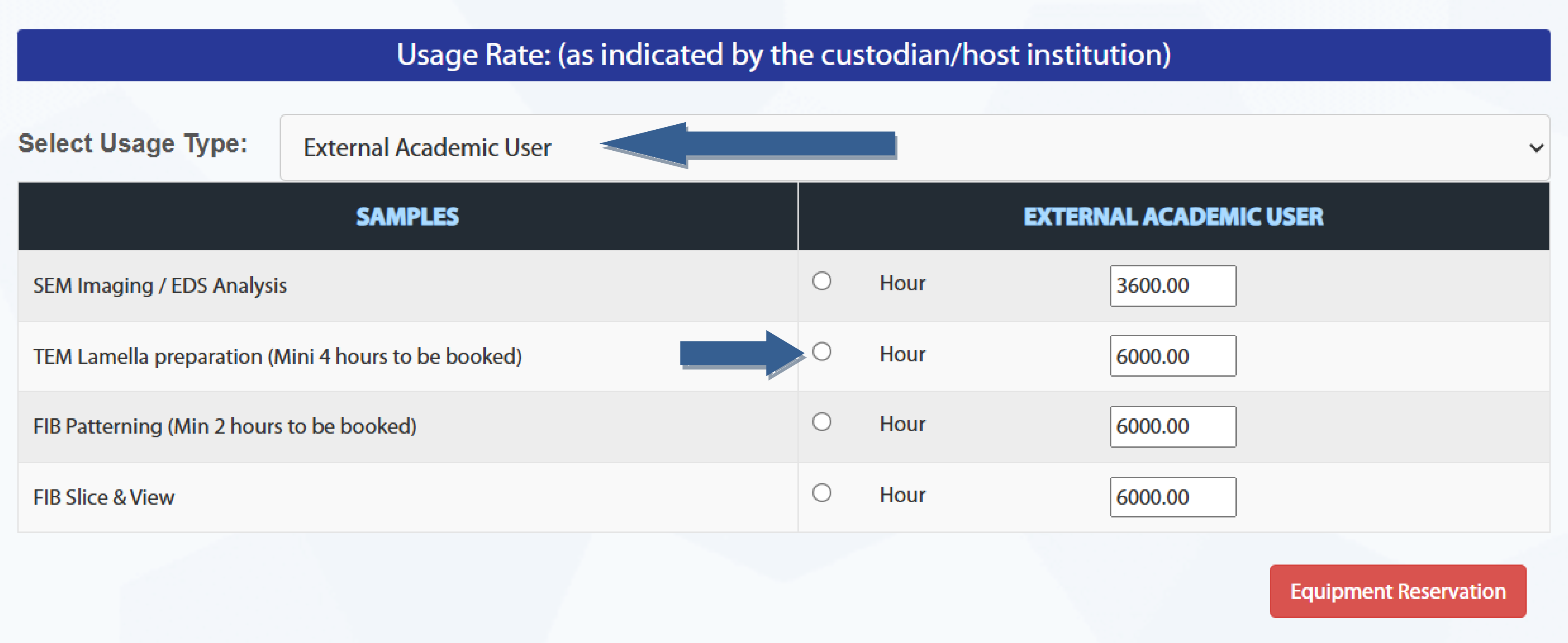
Focused Ion Beam Scanning Electron Microscope (FIBSEM)

Equipment Code : 2736841
Make : Thermo Fisher Scientific
Model : HELIOS 5 UC
Institution : Sophisticated Analytical Instrument Facilities (SAIF) IIT Bombay
Department : SAIF
Funding Agency Details : DST, Govt. of India
Pooling of Equipment slot : No
Last AMC Done :

Reference Website : www.saif.iitb.ac.in

Steps for Sample Registration

- Select the type of sample analysis and then press Equipment reservation.
- Example : Institution -- “External Academic User”. Please select the category correctly if not the form will be rejected.



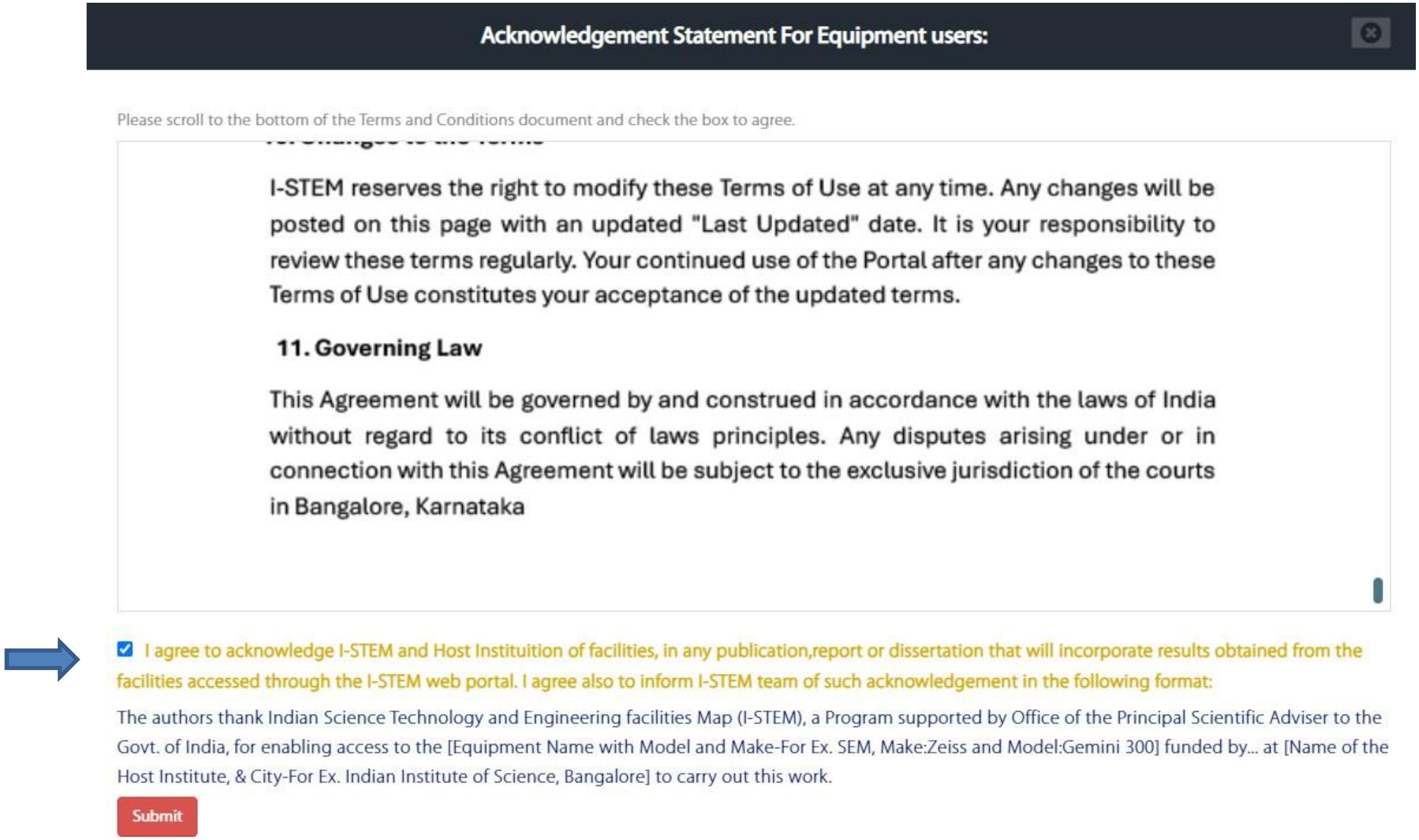
Usage Rate: (as indicated by the custodian/host institution)

Select Usage Type: External Academic User

SAMPLES	EXTERNAL ACADEMIC USER		
SEM Imaging / EDS Analysis	○	Hour	3600.00
TEM Lamella preparation (Mini 4 hours to be booked)	○	Hour	6000.00
FIB Patterning (Min 2 hours to be booked)	○	Hour	6000.00
FIB Slice & View	○	Hour	6000.00

Steps for Sample Registration

Scroll down (If you do not scroll down “submit” button will not be visible). Check to I agree further click “Submit”.



Acknowledgement Statement For Equipment users:

Please scroll to the bottom of the Terms and Conditions document and check the box to agree.

I-STEM reserves the right to modify these Terms of Use at any time. Any changes will be posted on this page with an updated "Last Updated" date. It is your responsibility to review these terms regularly. Your continued use of the Portal after any changes to these Terms of Use constitutes your acceptance of the updated terms.

11. Governing Law

This Agreement will be governed by and construed in accordance with the laws of India without regard to its conflict of laws principles. Any disputes arising under or in connection with this Agreement will be subject to the exclusive jurisdiction of the courts in Bangalore, Karnataka

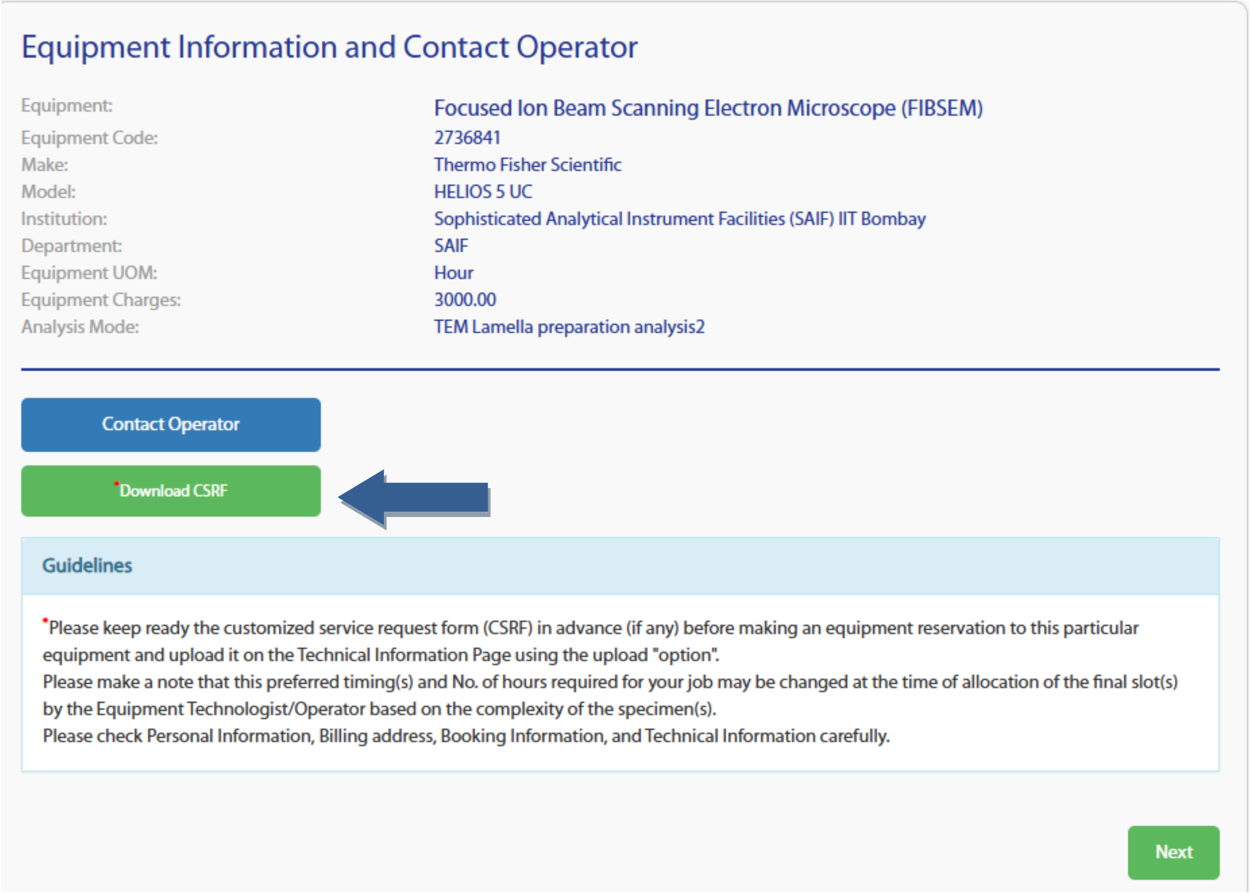
☑ I agree to acknowledge I-STEM and Host Instituition of facilities, in any publication,report or dissertation that will incorporate results obtained from the facilities accessed through the I-STEM web portal. I agree also to inform I-STEM team of such acknowledgement in the following format:

The authors thank Indian Science Technology and Engineering facilities Map (I-STEM), a Program supported by Office of the Principal Scientific Adviser to the Govt. of India, for enabling access to the [Equipment Name with Model and Make-For Ex. SEM, Make:Zeiss and Model:Gemini 300] funded by... at [Name of the Host Institute, & City-For Ex. Indian Institute of Science, Bangalore] to carry out this work.

Steps to download MSDS & Cover Letter format

- Click “Download CSRF” button which contains **Material Safety Data Sheet (MSDS)** and **Cover letter format**. Please fill the MSDS with sign and stamp from your organisation.

- This **Covering Letter** should be on your Institute’s Original Letterhead which should have your Institute complete postal address with state and pin code dully signed and with Institute’s official seal. Any Letter with incomplete details and without Institute’s official stamp will not be entertained.



Equipment Information and Contact Operator

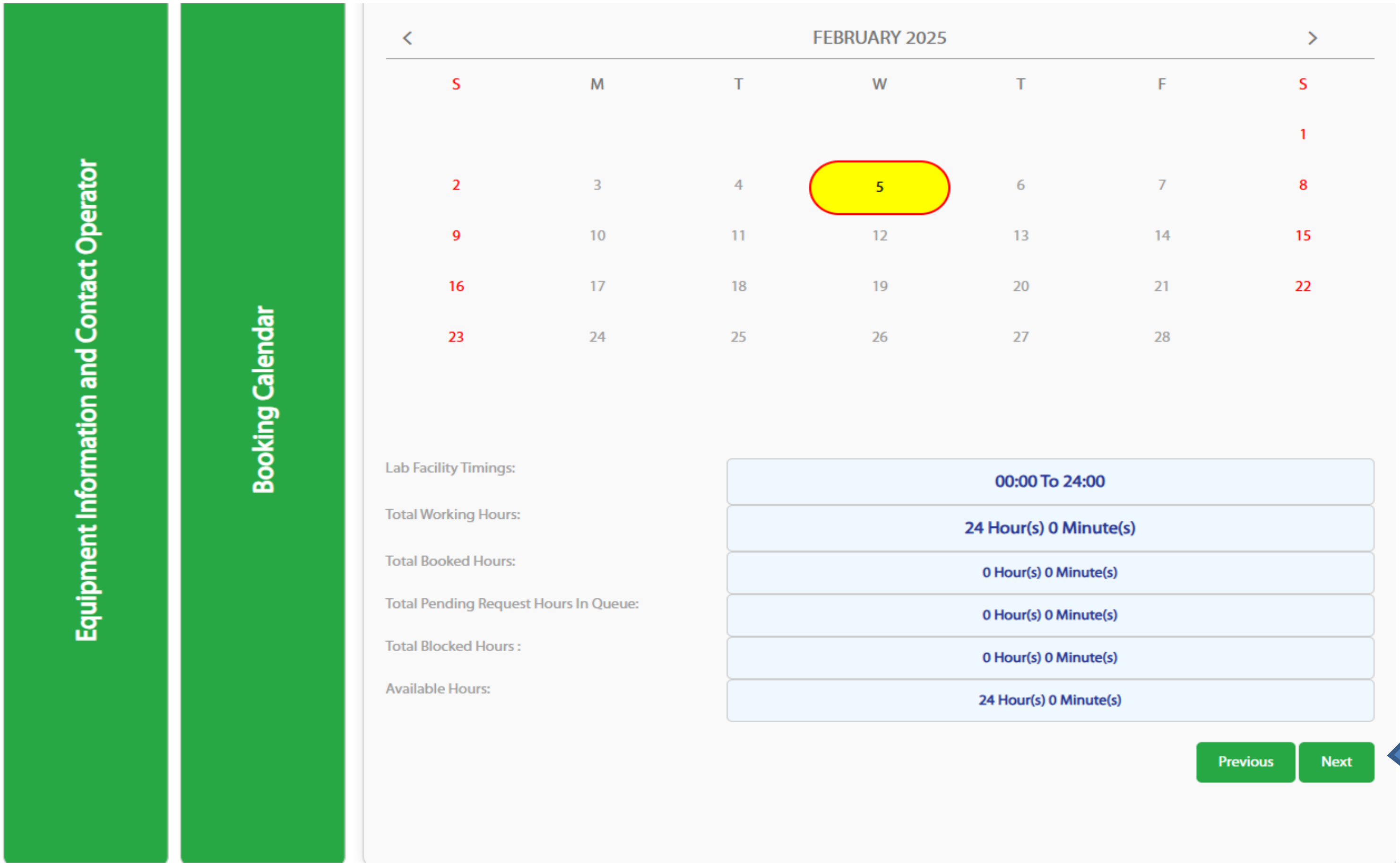
Equipment: Focused Ion Beam Scanning Electron Microscope (FIBSEM)
Equipment Code: 2736841
Make: Thermo Fisher Scientific
Model: HELIOS 5 UC
Institution: Sophisticated Analytical Instrument Facilities (SAIF) IIT Bombay
Department: SAIF
Equipment UOM: Hour
Equipment Charges: 3000.00
Analysis Mode: TEM Lamella preparation analysis2

Guidelines

*Please keep ready the customized service request form (CSRF) in advance (if any) before making an equipment reservation to this particular equipment and upload it on the Technical Information Page using the upload "option".
Please make a note that this preferred timing(s) and No. of hours required for your job may be changed at the time of allocation of the final slot(s) by the Equipment Technologist/Operator based on the complexity of the specimen(s).
Please check Personal Information, Billing address, Booking Information, and Technical Information carefully.

1. Material Safety Data Sheet (MSDS) or CSRF or SRF
2. Cover letter duly filled, signed & stamp

Steps to choose preferred dates



FEBRUARY 2025

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

Lab Facility Timings: 00:00 To 24:00

Total Working Hours: 24 Hour(s) 0 Minute(s)

Total Booked Hours: 0 Hour(s) 0 Minute(s)

Total Pending Request Hours In Queue: 0 Hour(s) 0 Minute(s)

Total Blocked Hours : 0 Hour(s) 0 Minute(s)

Available Hours: 24 Hour(s) 0 Minute(s)

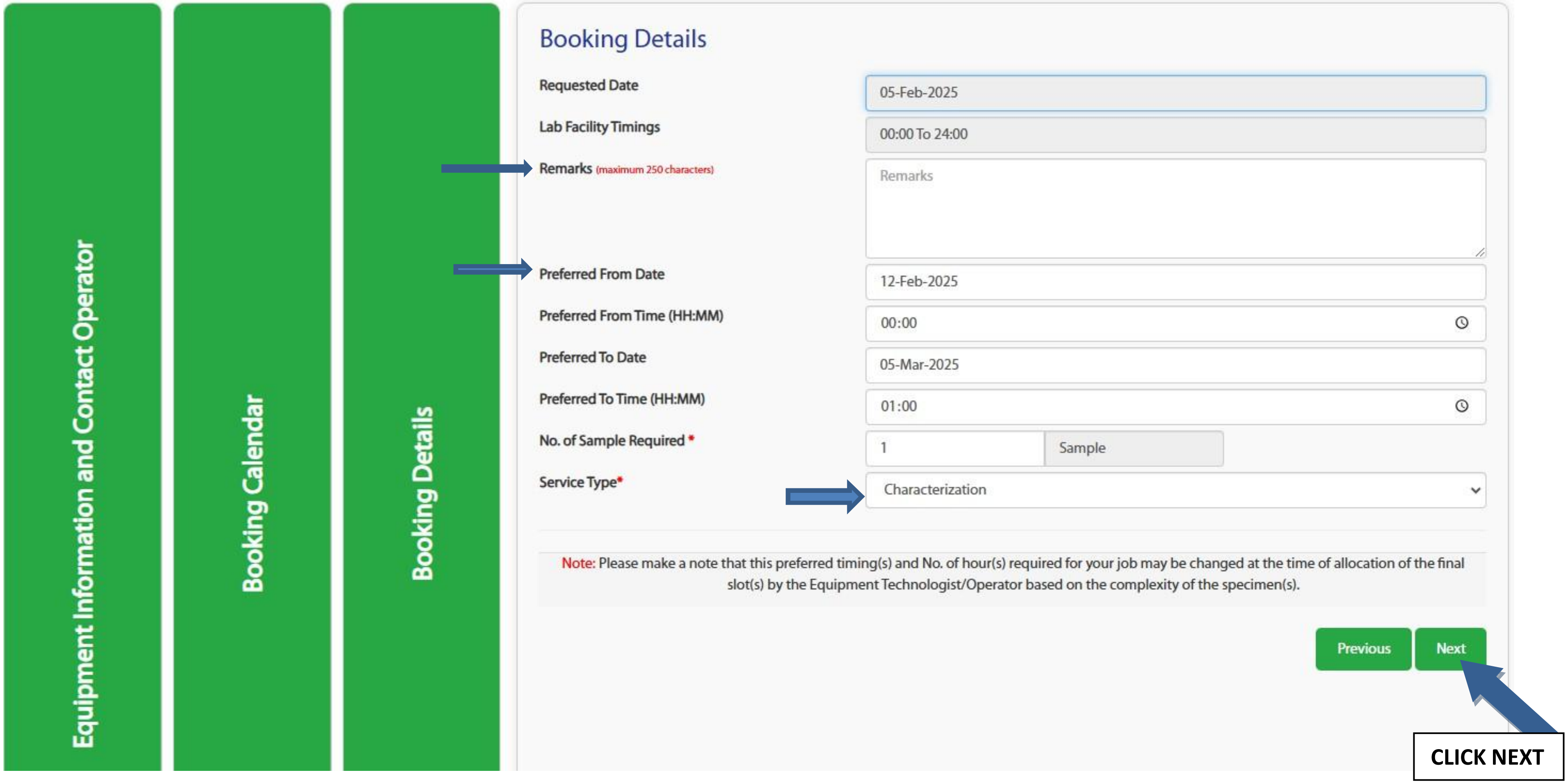
Click next

NOTE:

- The date selection by the user is a preferred date.
- For exact date and equipment availability kindly contact the FIB-SEM lab , fibsem@iitb.ac.in
- In-person appointment will be given via email once the registration process is completed.
- Postal samples will be analyzed as per the queue.

Steps to choose preferred dates

As shown below please enter “Preferred From date” and “Preferred To date”.



Booking Details

Requested Date	05-Feb-2025
Lab Facility Timings	00:00 To 24:00
Remarks (maximum 250 characters)	Remarks
Preferred From Date	12-Feb-2025
Preferred From Time (HH:MM)	00:00
Preferred To Date	05-Mar-2025
Preferred To Time (HH:MM)	01:00
No. of Sample Required *	1 Sample
Service Type*	Characterization

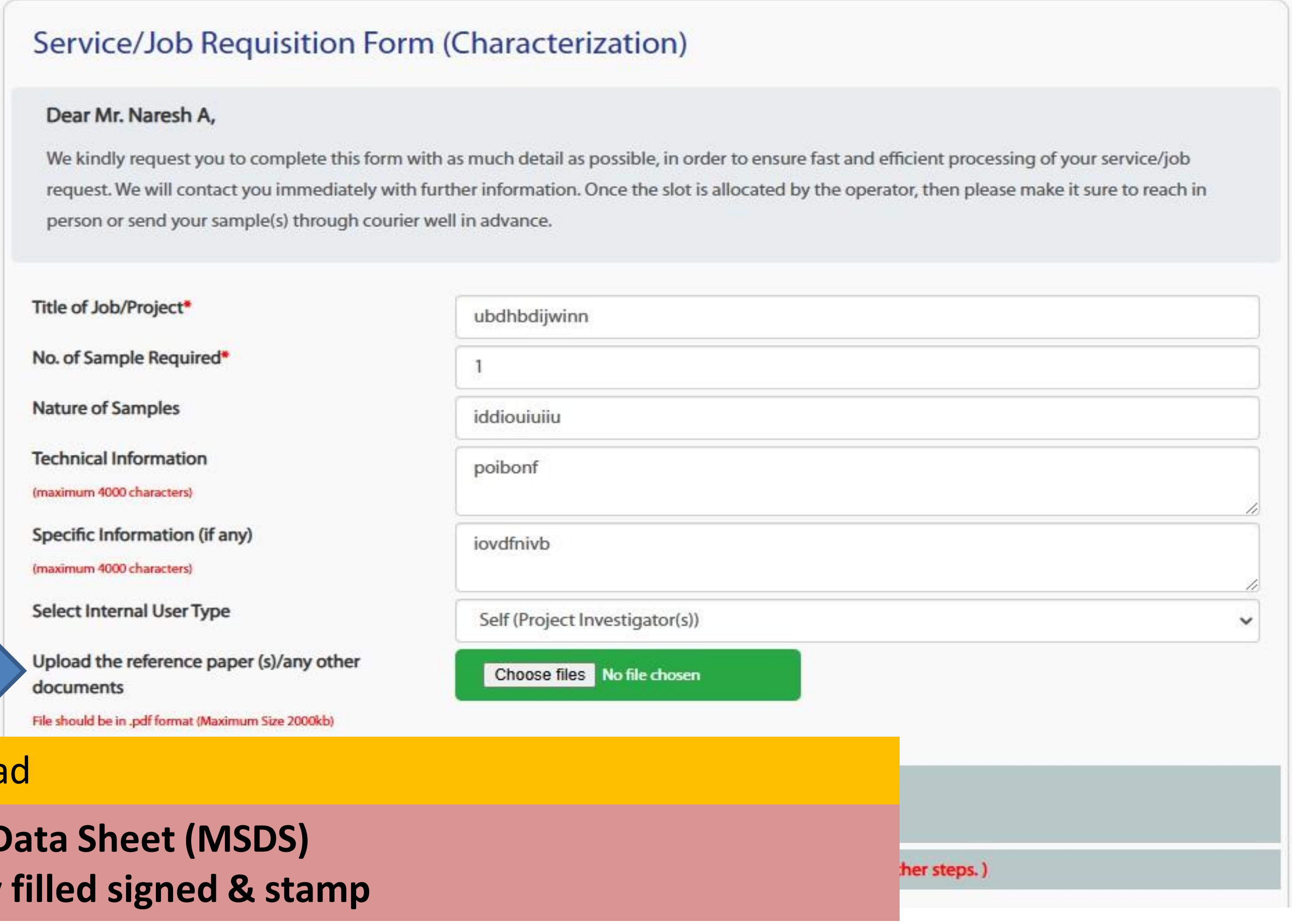
Note: Please make a note that this preferred timing(s) and No. of hour(s) required for your job may be changed at the time of allocation of the final slot(s) by the Equipment Technologist/Operator based on the complexity of the specimen(s).

CLICK NEXT

Steps for Sample registration (to Upload documents)

Uploading documents:

- Tab-**UPLOAD THE REFERENCE PAPER(s)/ANY OTHER DOCUMENTS. (As shown by blue arrow)**
- Upload the filled MSDS form with the required signatures and stamp along with the cover letter. Multiple documents can be uploaded.



Service/Job Requisition Form (Characterization)

Dear Mr. Naresh A,

We kindly request you to complete this form with as much detail as possible, in order to ensure fast and efficient processing of your service/job request. We will contact you immediately with further information. Once the slot is allocated by the operator, then please make it sure to reach in person or send your sample(s) through courier well in advance.

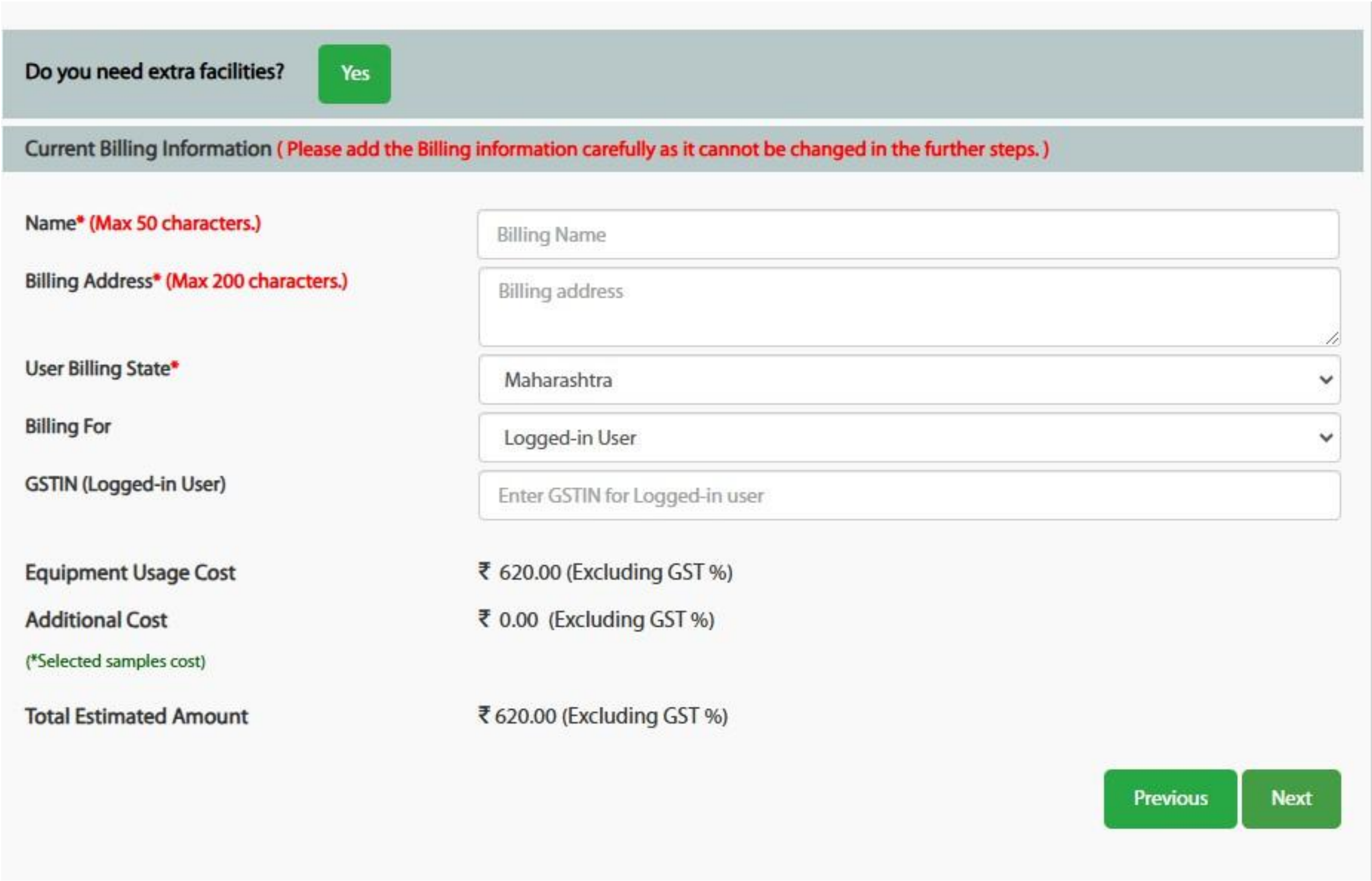
Title of Job/Project*	ubdhbdijwinn
No. of Sample Required*	1
Nature of Samples	iddiouiuiiu
Technical Information (maximum 4000 characters)	poibonf
Specific Information (if any) (maximum 4000 characters)	iovdfnivb
Select Internal User Type	Self (Project Investigator(s))
Upload the reference paper (s)/any other documents File should be in .pdf format (Maximum Size 2000kb)	Choose files No file chosen

Mandatory to upload

1. Material Safety Data Sheet (MSDS)
2. Cover letter duly filled signed & stamp

Steps for Sample registration

Fill all the details and Please click on “Next”.

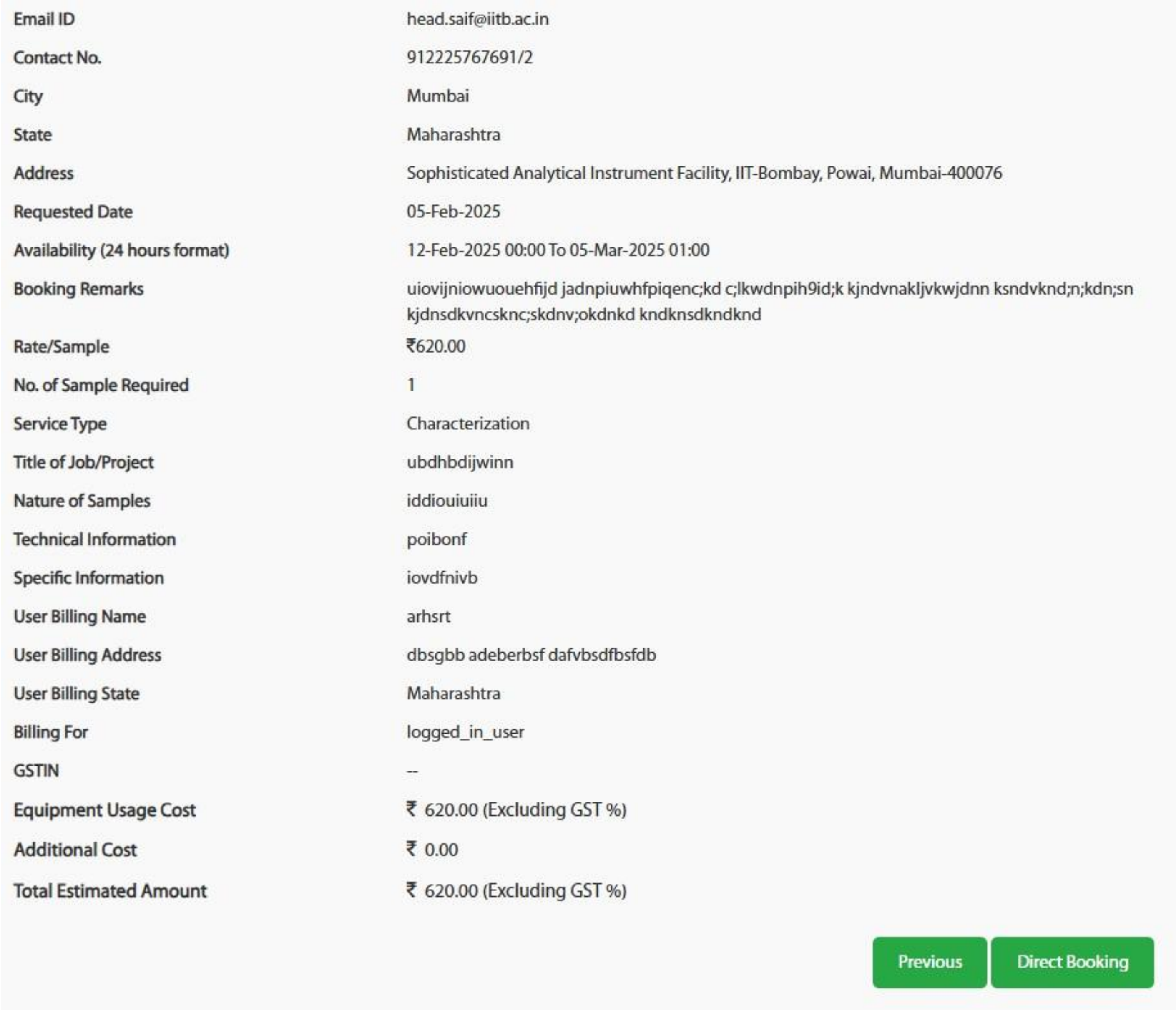


Current Billing Information (Please add the Billing information carefully as it cannot be changed in the further steps.)

Name* (Max 50 characters.)	Billing Name
Billing Address* (Max 200 characters.)	Billing address
User Billing State*	Maharashtra
Billing For	Logged-in User
GSTIN (Logged-in User)	Enter GSTIN for Logged-in user
Equipment Usage Cost	₹ 620.00 (Excluding GST %)
Additional Cost (*Selected samples cost)	₹ 0.00 (Excluding GST %)
Total Estimated Amount	₹ 620.00 (Excluding GST %)

Steps for Sample registration

Check all details and if details are correct



Email ID	head.saif@iitb.ac.in
Contact No.	912225767691/2
City	Mumbai
State	Maharashtra
Address	Sophisticated Analytical Instrument Facility, IIT-Bombay, Powai, Mumbai-400076
Requested Date	05-Feb-2025
Availability (24 hours format)	12-Feb-2025 00:00 To 05-Mar-2025 01:00
Booking Remarks	uiovijniowuouehfijd jadnpiuwhfpiqenc;kd c;lkwdnpih9id;k kjndvnakljvkwjdnn ksndvknd;n;kdn;sn kjdnsdkvncsknc;skdnv;okdnkd kndknsdkndknd
Rate/Sample	₹620.00
No. of Sample Required	1
Service Type	Characterization
Title of Job/Project	ubdhbdijwinn
Nature of Samples	iddiouiuiiu
Technical Information	poibonf
Specific Information	iovdfnivb
User Billing Name	arhsrt
User Billing Address	dbsgbb adeberbsf dafvbsdfbsfdb
User Billing State	Maharashtra
Billing For	logged_in_user
GSTIN	--
Equipment Usage Cost	₹ 620.00 (Excluding GST %)
Additional Cost	₹ 0.00
Total Estimated Amount	₹ 620.00 (Excluding GST %)

Click Direct Booking

After generating FBR:

1. After we receive the completed MSDS form and covering letter, The concerned Lab In-charge will **Assign date & time for sample analysis as per queue.** **(Please NOTE :** The date/time mentioned on I-STEM only refers to the **MSDS approval date which followed by request for payment.** Facility registration will be completed only after the payment is processed. **This date does not indicate the slot date, appointment date, or sample submission date.)**

2. If you wish to be **present during your slot/appointment**, please **email the FIB-SEM lab at fibsem@iitb.ac.in,** please mention your FBR number. Kindly bring a printed copy of the MSDS, cover letter original and receipt with you.

3. Separate FBR needs to be generated for separate type of analysis required.

4. Users who wish to send samples via post/courier, are requested to send samples in sealed envelope. Please mention the FBR number and instrument name on the envelope to avoid the delay in the analysis process. Also, ensure that a copy of the Cover letter, receipt and the MSDS is included with the samples. Samples will be analyzed as per the queue.

Postal Address : Head, SAIF-Mumbai
Indian Institute of Technology Bombay, Powai
Mumbai, Maharastra
Pincode: 400076

For payment

- After the initial registration process is done, Lab In-charge will send the bank details via email.
- Please make the payment and send the receipt of payment (in PDF format) to Lab In-charge via email.

Sample preparation instructions for SEM

- **Powder sample:** Cross-section analysis of powder is not possible. **Mentioning sample type and sample description is mandatory in MSDS**. For these samples kindly choose Surface or Cross section for charges calculation.
- **Suspension samples**: Cross-section analysis of suspension is not possible. Please mention medium for suspension on MSDS. For these samples kindly choose Surface or Cross section for charges calculation.
- **Sample dimensions should be less than 10 mm x 10 mm x 4 mm (height)** for obtaining high resolution images.
- **Medium for Dispersion Ethanol /Methanol / Water /Iso-propyl alcohol.** Any other medium should be provided by the user. Dispersion will be done by ultrasonication.
- Kindly **mark the edge of the sample to be observed for Cross section.**
- Base of the sample should be flat for mounting on sample holder.
- Biological samples will be accepted only after primarily fixation with suitable fixative.
- Samples should be in dry form. Hydrated samples must be dried properly before sending.
- Sample preparation if any should be done at user end (cutting the sample for CS, freeze fracturing, sample fixation for biological samples, staining of samples, oven drying should be done by the user)
- The samples should withstand high vacuum (~ 10 -5 Pa). **Wet samples cannot be done.**
- Potentially hazardous/toxic/radioactive samples may not be accepted for analysis.

For any further query, kindly contact on
Email: fibsem@iitb.ac.in, Contact: 022-2159-6861

IMPORTANT NOTE:

- Users must complete online registration for sample analysis.
- After the online registration is completed, the appointment will be scheduled as per the queue. Partially filled form will not be registered.
- **For In-person analysis, users will be informed about their date and time of slot by e-mail.**
- We prefer that you/ your representative, who know/understands the sample/material and what is expected to be seen, will be present on the day of appointment. If the user is not present representative data will be taken for the samples.
- If you are opting only for EDS, the image given along with EDS will not be a high resolution image.
- Attach/Upload/Mail reference images for the sample (if any) with the form.

If you are looking for any other equipment you can visit the following sites:

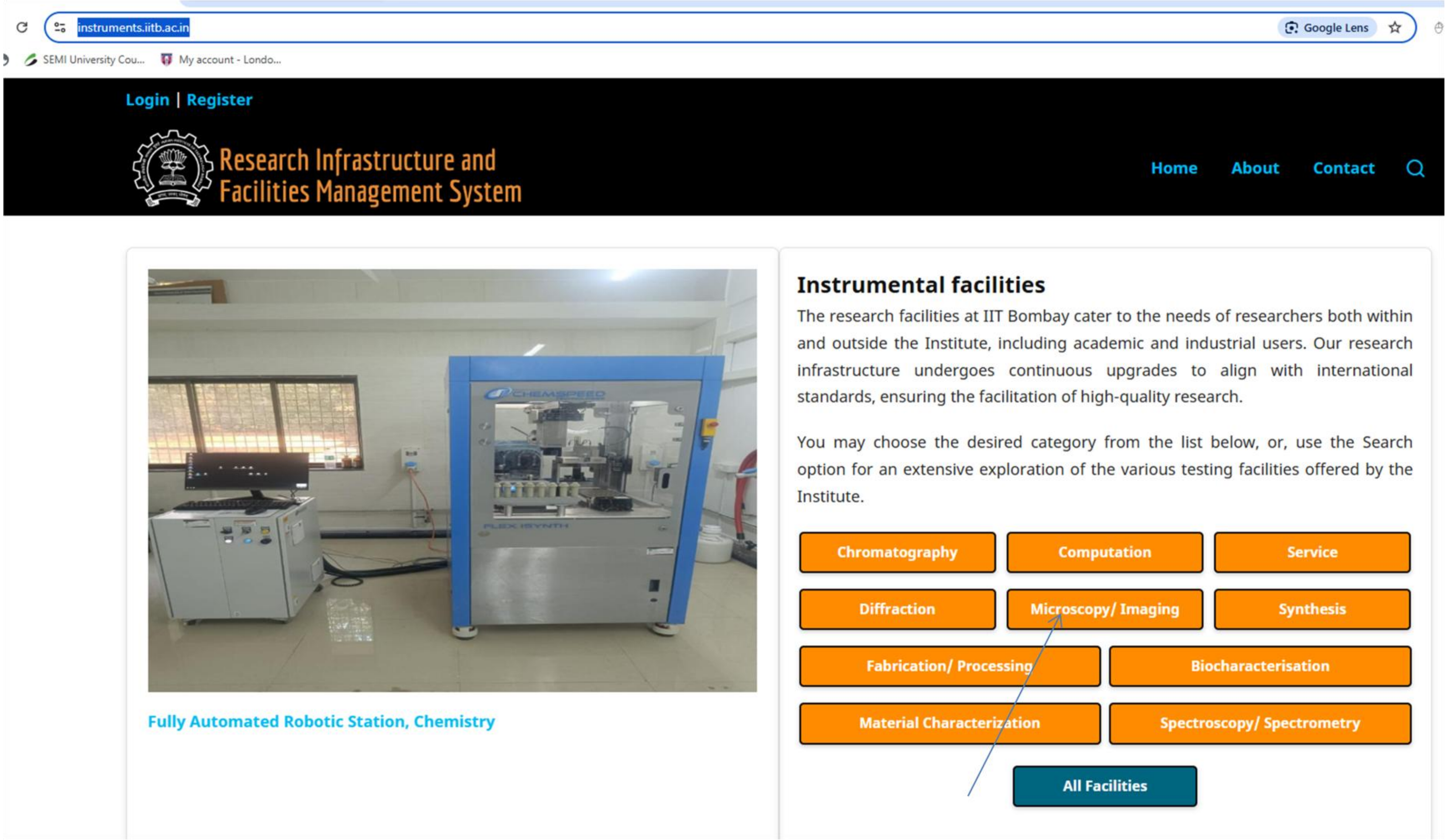
- **Centre for Sophisticated Instruments and Facilities (CSIF):** https://instruments.iitb.ac.in/

- **Sophisticated Analytical Instrument Facility (SAIF) :** http://www.saif.iitb.ac.in/facility.html

Equipment details, Contact information, booking links for other equipment are available on these sites

Steps for sample registration
Centre for Sophisticated Instruments and Facilities (CSIF): https://instruments.iitb.ac.in/

Go to- https://instruments.iitb.ac.in/



Instrumental facilities

The research facilities at IIT Bombay cater to the needs of researchers both within and outside the Institute, including academic and industrial users. Our research infrastructure undergoes continuous upgrades to align with international standards, ensuring the facilitation of high-quality research.

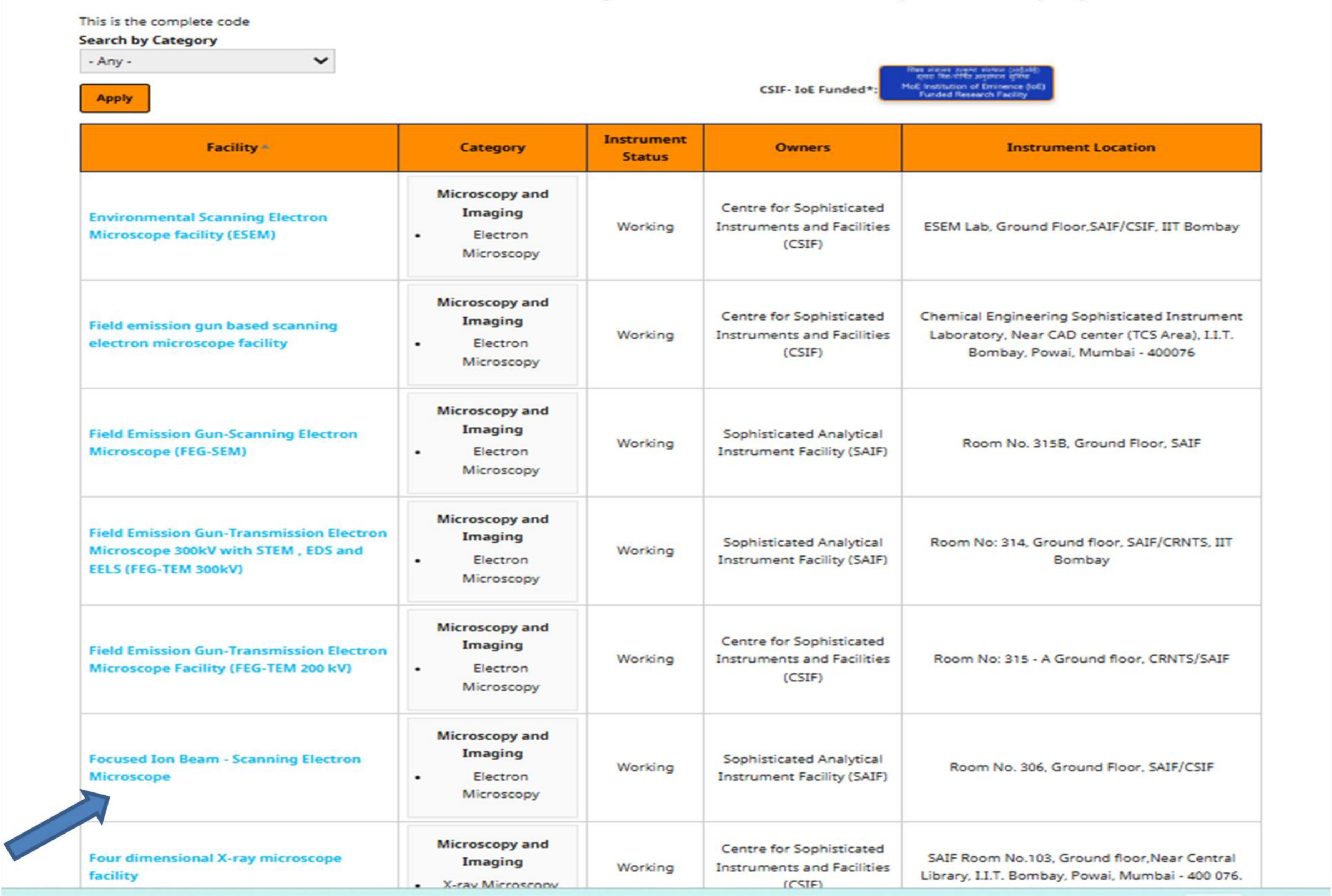
You may choose the desired category from the list below, or, use the Search option for an extensive exploration of the various testing facilities offered by the Institute.

Fully Automated Robotic Station, Chemistry

Click on “Microscopy/Imaging”

Steps for sample registration
Centre for Sophisticated Instruments and Facilities (CSIF): https://instruments.iitb.ac.in/

Go to Focused Ion Beam-Scanning Electron Microscope in 2nd page and click



This is the complete code

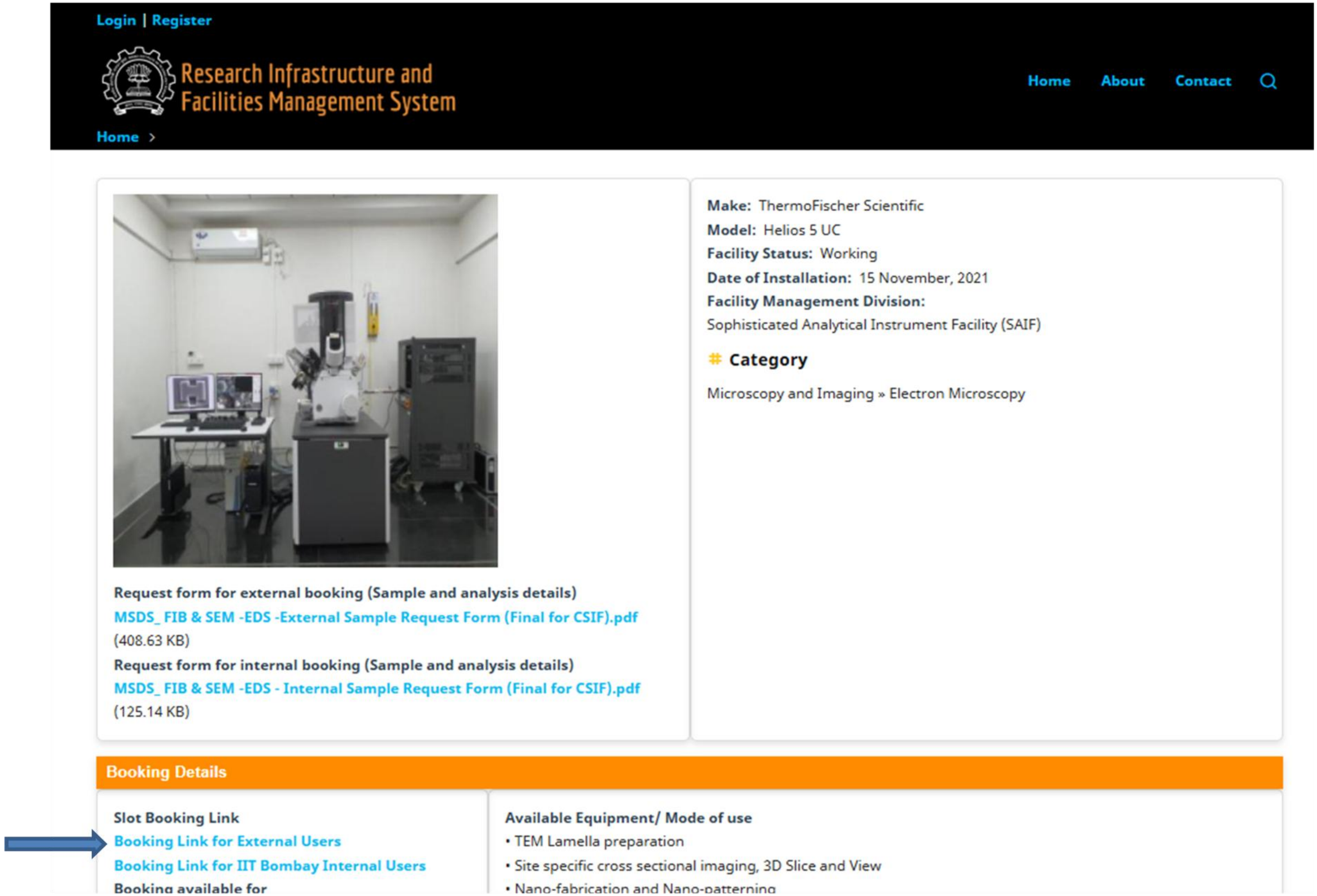
CSIF- IoE Funded*:

Facility	Category	Instrument Status	Owners	Instrument Location
Environmental Scanning Electron Microscope facility (ESEM)	Microscopy and Imaging • Electron Microscopy	Working	Centre for Sophisticated Instruments and Facilities (CSIF)	ESEM Lab, Ground Floor,SAIF/CSIF, IIT Bombay
Field emission gun based scanning electron microscope facility	Microscopy and Imaging • Electron Microscopy	Working	Centre for Sophisticated Instruments and Facilities (CSIF)	Chemical Engineering Sophisticated Instrument Laboratory, Near CAD center (TCS Area), I.I.T. Bombay, Powai, Mumbai - 400076
Field Emission Gun-Scanning Electron Microscope (FEG-SEM)	Microscopy and Imaging • Electron Microscopy	Working	Sophisticated Analytical Instrument Facility (SAIF)	Room No. 315B, Ground Floor, SAIF
Field Emission Gun-Transmission Electron Microscope 300kV with STEM , EDS and EELS (FEG-TEM 300kV)	Microscopy and Imaging • Electron Microscopy	Working	Sophisticated Analytical Instrument Facility (SAIF)	Room No: 314, Ground floor, SAIF/CRNTS, IIT Bombay
Field Emission Gun-Transmission Electron Microscope Facility (FEG-TEM 200 kV)	Microscopy and Imaging • Electron Microscopy	Working	Centre for Sophisticated Instruments and Facilities (CSIF)	Room No: 315 - A Ground floor, CRNTS/SAIF
Focused Ion Beam - Scanning Electron Microscope	Microscopy and Imaging • Electron Microscopy	Working	Sophisticated Analytical Instrument Facility (SAIF)	Room No. 306, Ground Floor, SAIF/CSIF
Four dimensional X-ray microscope facility	Microscopy and Imaging • X-ray Microscopy	Working	Centre for Sophisticated Instruments and Facilities (CSIF)	SAIF Room No.103, Ground floor,Near Central Library, I.I.T. Bombay, Powai, Mumbai - 400 076.

Steps for sample registration

Centre for Sophisticated Instruments and Facilities (CSIF): https://instruments.iitb.ac.in/

Click on the link " Booking link for external Users" as shown by arrow mark.



Make: ThermoFischer Scientific
Model: Helios 5 UC
Facility Status: Working
Date of Installation: 15 November, 2021
Facility Management Division:
Sophisticated Analytical Instrument Facility (SAIF)

 # Category

Microscopy and Imaging » Electron Microscopy

Request form for external booking (Sample and analysis details)
MSDS_ FIB & SEM -EDS -External Sample Request Form (Final for CSIF).pdf
(408.63 KB)
Request form for internal booking (Sample and analysis details)
MSDS_ FIB & SEM -EDS - Internal Sample Request Form (Final for CSIF).pdf
(125.14 KB)

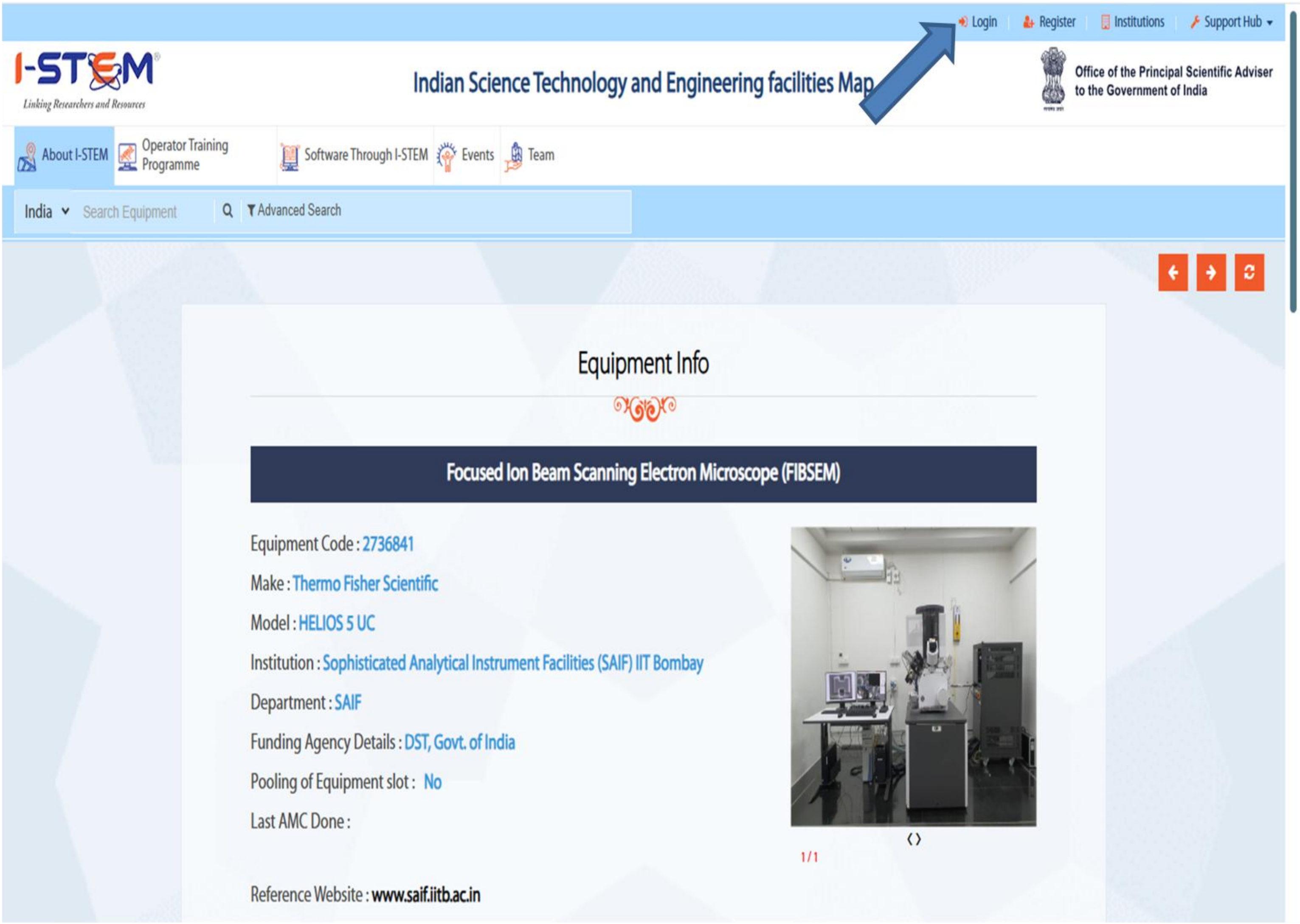
Booking Details

Slot Booking Link
Booking Link for External Users
Booking Link for IIT Bombay Internal Users
Booking available for

Available Equipment/ Mode of use
- TEM Lamella preparation
- Site specific cross sectional imaging, 3D Slice and View
- Nano-fabrication and Nano-patterning

Steps for sample registration
Centre for Sophisticated Instruments and Facilities (CSIF): https://instruments.iitb.ac.in/

Click on “Login” as shown by arrow



Equipment Info

Focused Ion Beam Scanning Electron Microscope (FIBSEM)

Equipment Code : 2736841

Make : Thermo Fisher Scientific

Model : HELIOS 5 UC

Institution : Sophisticated Analytical Instrument Facilities (SAIF) IIT Bombay

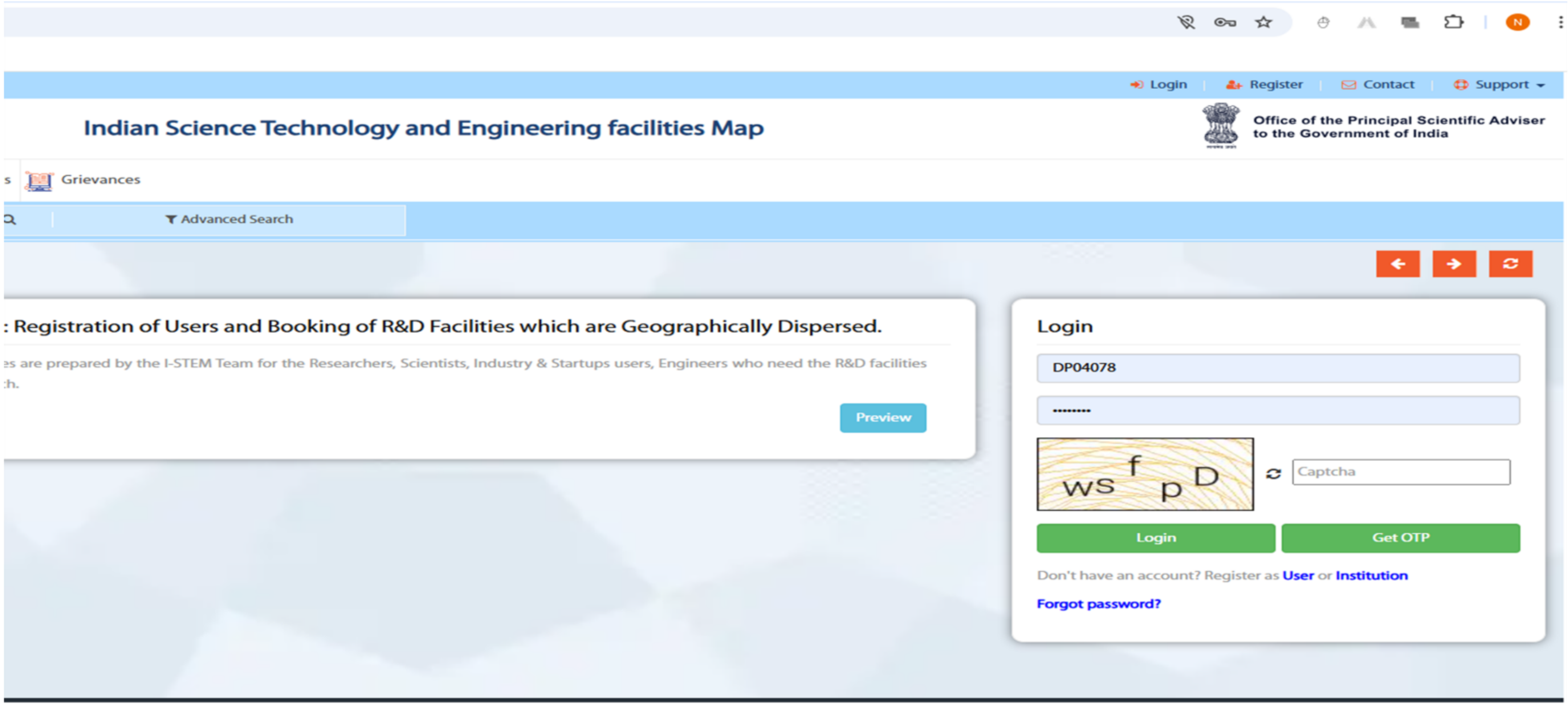
Department : SAIF

Funding Agency Details : DST, Govt. of India

Pooling of Equipment slot : No

Last AMC Done :

Reference Website : www.saif.iitb.ac.in



Indian Science Technology and Engineering facilities Map

Office of the Principal Scientific Adviser to the Government of India

: Registration of Users and Booking of R&D Facilities which are Geographically Dispersed.

es are prepared by the I-STEM Team for the Researchers, Scientists, Industry & Startups users, Engineers who need the R&D facilities h.

Login

DP04078

••••••••

WS f p D

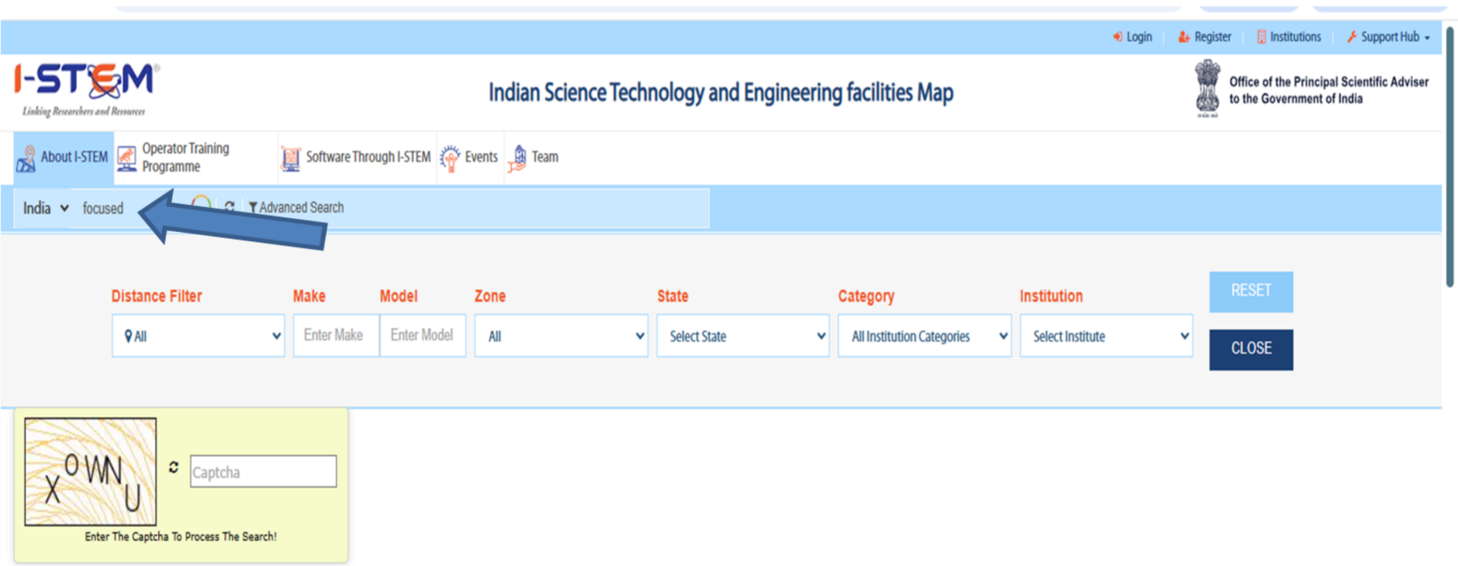
Don't have an account? Register as **User** or **Institution**

Forgot password?

1. If you do not have an account, Register in I-STEM Portal (it will take ~ 1 hours for activation from I-STEM management). You will receive email confirmation from I-STEM about approval. After approval, you will be allowed to Login in I-STEM.
2. Enter login ID & password.

Steps for sample registration
Centre for Sophisticated Instruments and Facilities (CSIF): https://instruments.iitb.ac.in/

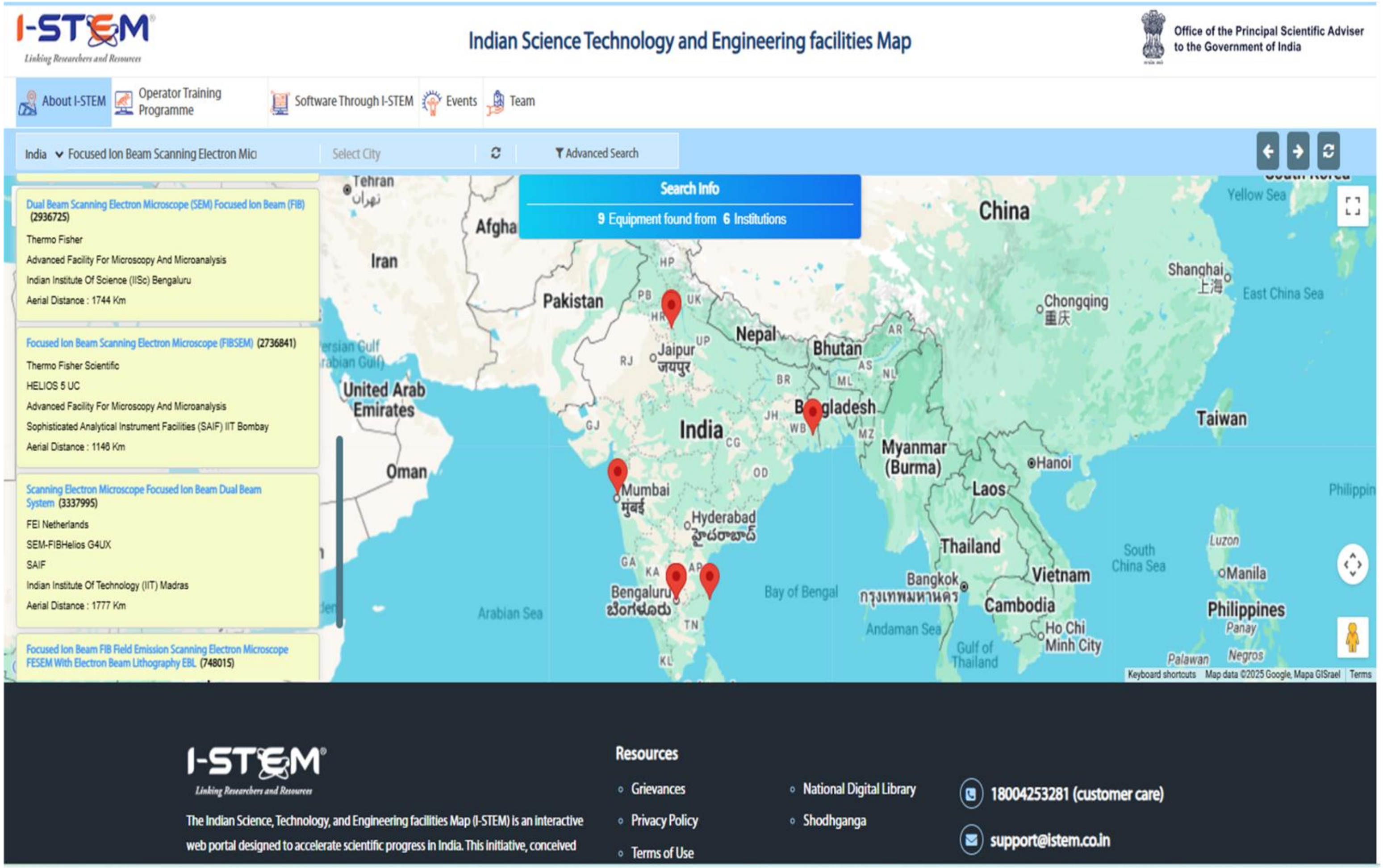
Write few characters as shown by blue arrow mark of your instrument and press “Search”.
Enter CAPTCHA.



Enter The Captcha To Process The Search!

Steps for sample registration
Centre for Sophisticated Instruments and Facilities (CSIF): https://instruments.iitb.ac.in/

Select the Type of instrument "**Focused Ion Beam Scanning Electron Microscope** Equipment code: **2736841**. further proceed filling the form.



Dual Beam Scanning Electron Microscope (SEM) Focused Ion Beam (FIB) (2936725)
Thermo Fisher
Advanced Facility For Microscopy And Microanalysis
Indian Institute Of Science (IISc) Bengaluru
Aerial Distance : 1744 Km

Focused Ion Beam Scanning Electron Microscope (FIBSEM) (2736841)
Thermo Fisher Scientific
HELIOS 5 UC
Advanced Facility For Microscopy And Microanalysis
Sophisticated Analytical Instrument Facilities (SAIF) IIT Bombay
Aerial Distance : 1146 Km

Scanning Electron Microscope Focused Ion Beam Dual Beam System (3337995)
FEI Netherlands
SEM-FIBHelios G4UX
SAIF
Indian Institute Of Technology (IIT) Madras
Aerial Distance : 1777 Km

Focused Ion Beam FIB Field Emission Scanning Electron Microscope FESEM With Electron Beam Lithography EBL (748015)

I-STEM
Linking Researchers and Resources

The Indian Science, Technology, and Engineering facilities Map (I-STEM) is an interactive web portal designed to accelerate scientific progress in India. This initiative, conceived

Resources
- Grievances
- Privacy Policy
- Terms of Use
- National Digital Library
- Shodhganga

18004253281 (customer care)
support@istem.co.in