# Central Research Facility (CRF), Indian Institute of Technology Ropar, Punjab

Powder XRD
Email: pxrd.crf@iitrpr.ac.in, Ph.: 01881-23-3053 Mr. Kamlesh Satpute (JTS, P-XRD Operator)

**Section-A** 

	Wir. Raimesii Salpute (315, 1-ARD Operator)	
Requisition Form No.		Date:

A. Name of User:

B. Mobile No and Email ID:	
C. Department/Address of user:	
D. Supervisor/Designated person from orga	anization
<ul> <li>E. Category I Internal PhD Student/Proceedings of Category III Consultancy work</li> <li>Category III External Academic Under Category IV Industry User</li> <li>F. Number of Slots required</li> <li>G. Total Amount (Rs.) [As per Annexology</li> </ul>	User / Govt. R & D Labs ( ) ( ) ( )
Signature of User	Signature of Supervisor/Designated person
[For Inte	ernal Users Only]
Institute Budget { }	From any other source Scheme / external projects within the Institute { }
Budget Head:  Noted in budget Sheet vide Sr. No	Scheme / Project No Principal Investigator  (No GST will be charged. Applicable Sample Charges will be deposited in "IIT Ropar Revenue Account, A/c No. 37360100716, IFSC-SBIN0013181, Rupnagar (Punjab)
Dealing Assistant HoD	Dealing Assistant Supervisor/PI
[For Externa	al/TBIF Users Only]
GST no (If any)  Transaction details (As per Annexure-1)	
[CRF Office: Veri	ified that job is completed]
Lab. Assistant/Operator	Officer In-charge
	nts Section after job is done]
Amount credited in respective Equipment/Lab of	•
Dealing Assistant JA	AO/AO AR/DR (Accounts)

## Charges & Payment Details for P-XRD (Per Slot-each slot is of 30 min)

	Inte	ernal	External	
Measurements Type	IIT Ropar/TBIF (Ropar) Users	IIT Ropar Consultancy	External Educational Institution/ Govt. R&D Labs	Industry
GONIO SCAN, GLANCING ANGLE (max. 2 samples per slot) RESIDUAL STRESS TEXTURE SAXS TEMPERATURE DEPENDENT XRD (upto 1200) (min 2 slots for each sample)	150	250	750	1500

## \*\* For External Users

- Additionally, 18% GST is applicable for TBIF and External Users as per GOI norms
- Payment can be made through any mode to this account number such as NEFT/RTGS/UPI payment gateways/QR scanner

## **Bank Details for transfer of sample Analysis charges**

Name of Institute	Indian Institute of Technology
Name of the Institute	Registrar, IIT Ropar
Account	
holder/Designation	
Bank Account Name	IIT Ropar Revenue Account
Type of bank	Saving Account
Account	
Complete Account	37360100716
Number	
RTGS/IFSC code of	SBIN0013181
the Branch	
MICR Code	140002008
Name of Bank	State Bank of India
UPI ID	theregistrar716@sbi



#### • Checklist to be submitted:

- o Completely filled and signed Job Requisition Form
- o Duly prepared Samples (or mention if preparation is reqd.)
- o Self-addressed envelope with appropriate postal stamps (if invoice is reqd. by post)
- o Proof of payment with transaction details

### Section-B

## Name of Equipment- Powder XRD Facility

#### 1. <u>Sample Details:</u>

Total No. of Samples	No. of Scan Per sample required	Total No. of Scan	Time per scan	Total no. of Slots reqd.	Remark

#### 2. Measurement Required:

#### **➢** Gonio Scan:

	2- theta Scan Range		Step size				
Measurements Type	from	to					
Wide angle analysis							
Low angle analysis							
				Temp.			
High Temperature analysis				Hold Time			
Texture Analysis					•	1	
				Please Provide the peak positions in 2-theta			
Residual Stress analysis							

#### **2-Theta Scan:**

	2-theta Scan Range		Step Size			
Measurements type	From	Time				
				Glancing angle details (omega angle		s (omega angle)
Glancing angle analysis						
SAXS						

## 3. Analysis Charges Details:-

Total No. of slots	Charges per slot	Amount	GST@18%	Gross Amount (Rs)

**Declaration:** I, \_\_\_\_\_\_\_, hereby declare that I have read and understood the instructions outlined below in Annexure-1 and 2 before submitting the samples and payments. I acknowledge that the samples being supplied for analysis are intended solely for academic and/or research and development purposes. I further confirm that the results of the analysis will not be used, under any circumstances, to settle or resolve any legal disputes or issues.

Signature of User

## For CRF office use only

Job Requisition	Job form Received	Job Assigned	Job completed on	Data files	P-XRD Log
form No.	on (Date)	To (Name)	(Date)	handed over to	Book
				user	Pg No., S. No.

Sign of Operator Officer In-charge

#### INFORMATION FOR USERS

Following guidelines help ensure a smooth and efficient process for sample analysis while maintaining safety and accountability in the laboratory

## **General Instructions**

- Kindly discuss with operator about experiment details prior to filling the form and payment submission. Call the operator within working hours only.
- Please fill up the requisition form correctly. Incomplete form is liable to be rejected.
- Head of the Departments/Centers/Principal Investigators of the sponsored/Consultancy Projects are required to sign the form before submission.
- Without submission of requisition form measurements will not be done.
- Only users are requested to be present in person during assigned measurement slot.
- The users are not allowed to use the machine at their own under normal circumstances
- Users must adhere to laboratory safety protocols
- For visit to any lab, please contact Technical Officer, CRF, IIT Ropar or mail at <a href="mailto:crf@iitrpr.ac.in">crf@iitrpr.ac.in</a>
- The user needs to inform operator at least 1 day in advance if they are not using the booked slot due to ANY reason
- Sample Analysis: Samples analysis will be conducted by JTS/TA on any working day starting at allotted slot
- **Logbook Entry Requirements**: Users are requested to maintain a logbook entry as per the lab format mandatorily with signature upon completion of job.
- Analysis Data: Users are requested to collect their processed and raw data after analysis. Please bring your own working CD/DVD to take the data (Pen-drive/ external hard disk, etc., are not allowed).
- Sample collection after measurements to be arranged by users. Otherwise, samples will be discarded after one week.
- Kindly submit a self-addressed envelope with postage stamp if invoice required to be posted. Invoice may take a weeks' time to be sent.

#### **Equipment Specific Instructions**

Address for sending samples by post:

Mr. Kamlesh Satpute,
Room No-115,
XRD lab,
SSB Block, IIT Ropar, Bada Phool, Rupnagar, Punjab-140 001

- Research publications emerging out of the P-XRD facility, CRF at IIT Ropar must be duly acknowledged.
- Kindly share the publication details to crf@iitrpr.ac.in
- Sample slot time includes mounting, optimization, measurement and unmounting of sample.
- A user can bring maximum 12 samples at a time in a week
- Finely grinded powder sample in sufficient quantity should be brought to the XRD Lab
- Repeat measurement on any sample will be considered as new/additional job.