# राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर हमीरपुर177005-(हि .प्र.) NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P.)-177005 [An Institute of National Importance under Ministry of Education (शिक्षा मंत्रालय)]

#### E-TENDER NOTICE

Sealed online e-Tender in two bid system are hereby invited by the undersigned for the supply of following items on behalf of the Director, NIT, Hamirpur from the Eligible/ Experienced/ Resourceful, manufacturer's dealer/authorized distributor etc. having experience in appropriate field and who have successfully completed works of similar type, so as to reach in the office of the undersigned as per date & time mentioned below.

Sr. No.	Name of works/item	Qty/ No.	Earnest Money In Rs.	Time Limit
1	Supply and installation of upgraded X-ray Diffractometer under buy back offer viz (replacement of old X-ray Diffraction Machine with new upgraded X-ray Diffractometer upgraded with phi scan and advance softwares etc in the DoMSE of NIT Hamirpur)	1	190000	90 days

1. Availability of bid document and mode of submission:-The bid document is available online and bid should be submitted in online mode on website <a href="http://www.eprocure.gov.in/">http://www.eprocure.gov.in/</a> and <a href="http://www.nith.ac.in/">http://www.nith.ac.in/</a>. Bidder would be required to register in the web-site which is free of cost. For submission of bids, the bidder is required to have Digital Signature Certificate (DSC) from one of the authorized certifying authorities (CA).

#### 2. Key dates: (1)

1	Date of online publication	09.09.2022 at 6.00 PM
2	Document download start and end date	09.09.2022 to 03.10.2022 10.30 AM
3	Bid submission start and end date	09.09.2022 to 03.10.2022 10.30 AM
4	Physical submission of EMD, technical documents and cost of tender document etc.	On or before 05.30 PM on 03.10.2022
5	Date of opening of technical bid	04.10.2022 at 11.30 AM

- (II) Objections/representation if any against the bidders will be entertained only within three days after publication/uploading of technical bid opening summary on net and thereafter that the date of opening of financial bid of technically qualified bidders will be published /uploaded on net.
- 3. Tender Details:-The tender Documents shall be uploaded in 2 cover:-

Cover 1:-Shall contain scanned copies of all "Technical Documents/Eligibility information".

Cover 2:- Shall contain "BOQ/Financial Bid", where supplier will quote his offer for each item.

- (a) Submission of Original Documents: The bidders are required to submit (a) original demand draft towards the cost of bid document if any and (b) original bid security/Earnest Money deposit (EMD) and other technical documents in the Store & Purchase section, NIT Hamirpur-177005 (HP) as specified in the key dates of <a href="Sr. no.2">Sr. no.2</a> on tender opening dates & schedule, failing which the bids will be declared non-responsive. <a href="EMD">EMD</a> in the form of DD/FDR must be attached with in favour of Director, NIT, Hamirpur (H.P) -177 005. The EMD should remain valid for a period of 90 days beyond the final bid validity period. EMD of unsuccessful bidders shall be returned after the expiry of the final bid validity or before the 30th day of the award of contract. The EMD of the successful bidder shall be released after successful execution of supply order.
- 4. BID OPENING DETAIL: The bids shall be opened as per schedule specified in the key dates of <a href="Sr. no.2">Sr. no.2</a>, in the store & Purchase section, NIT, Hamirpur by the authorized officer. In their interest the tenderer are advised to be present along with original documents at the time of opening of tenders. If the office happens to be closed on the date of opening of the bids as specified, the bids will be opened on the next working day at the same time & venue.
- 5. The bids shall remain valid for acceptance for a period of not less than 90 days after the deadline date for bid submission. Other details can be seen in the bidding documents. The officer inviting tender shall not be held liable for any delays due to system failure beyond its control. Even though the system will attempt notify the bidder of any bid updates. The Employer shall not be liable for any information not received by the bidder. It is the bidders responsibility to verify the website for the latest information related to the tender.
- 6. The copy of enlistment order & renewals, Copy of PAN issued by Income tax Department and copy of GST Certificate must accompany in the cover-1
- 7. The bidder preferably must have successfully supplied similar items in recent years. The bidders shall have to produce supporting documents giving date of award, date of commencement and completion from the concerned competent authority and should be included in cover-1
- 8. Destination: F.O.R. destination i.e. NIT, Hamirpur (HP) and the rates must include the charges for Packing, Forwarding, Freight, etc., if any.
- 9. Price/Rate: The price of items may be quoted in Indian rupees.
- 10. GST:- All the firms may invariably mention their GST/PAN numbers on tender failing which quotations may not be considered valid. Further, this Institution does not issue any Concessional form, so the GST applicable as per actual rates must be mentioned in the offer. In case GST is not mentioned, the rates shall be treated as inclusive of all taxes.
- 11. The bidders/firms have to supply the complete catalogue/brochure of the products to be supplied along with the Technical bid.
- 12. The technical bids will be evaluated on the basis of terms & conditions of the tender and details of the product to be supplied as per condition 11 of the tender notice. The committee reserves the right to reject any technical bid on the basis of technical specifications/catalogue/brochure submitted.
- 13. Conditional/ telegraphic tenders shall summarily be rejected.
- 14. For any clarifications bidders are requested to contact FI (Purchase), NIT Hamirpur at his E-mail ID i.e. fip@nith.ac.in.
- 15. The tender/bid shall be kept in a sealed envelope superscribed as "Tender for (Name of work and date of opening\_\_\_\_\_\_".
- 16. The jurisdiction of the law of court shall be at Hamirpur (HP).

No: NIT/HMR/DoMSE/S&PS/ 2022/ 988 - 990

FI (Purchase)
Dated: 9/9/2.2

#### Copy forwarded to the following for information please:-

1. The HOD, DoMSE, NIT, Hamirpur

2. Dr. Nitesh Kumar, Assistant Professor, DoMSE for information please.

The FI (CC), for getting the advertisement displayed in the Institute website for wider publicity under head: - Supply and installation of upgraded X-ray Diffractometer under buy back offer viz (replacement of old X-ray Diffraction Machine with new upgraded X-ray Diffractometer in the DoMSE of NIT Hamirpur.

FI (Purchase)

Pls. upload on the headside



#### राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर हमीरपुर177005-(हि .प्र.) NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P.)-177005 [An Institute of National Importance under Ministry of Education (शिक्षा मंत्रालय)]

NIT-SBD

Subject: - Supply and installation of upgraded X-ray Diffractometer under buy back offer viz (replacement of old X-ray Diffraction Machine with new upgraded X-ray Diffractometer upgraded with phi scan and advance softwares etc in the DoMSE of NIT Hamirpur)

Sealed online E-Tender in two bid system are hereby invited by the undersigned for the supply of following items on behalf of the Director, NIT, Hamirpur from the Eligible/ Experienced/ Resourceful, manufacturer's dealer/authorized distributor etc. having experience in appropriate field and who have successfully completed works of similar type, so as to reach in the office of the undersigned as per date & time mentioned in the tender notice.

Sr. No.	Name of works/item	Qty/ No.	Earnest Money In Rs.	Time Limit
1	Supply and installation of upgraded X-ray Diffractometer under buy back offer viz (replacement of old X-ray Diffraction Machine with new upgraded X-ray Diffractometer upgraded with phi scan and advance softwares etc in the DoMSE of NIT Hamirpur)  (For detailed specifications please see below)		190000	90 days

## <u>Detailed Technical Specifications for High Resolution X-Ray Diffraction Machine for</u> <u>Powder, Thin films and Bulk solid Materials</u>

The diffractometer should be equipped with the following components having specifications as listed:

#### 1. X-Ray Generator

Parameters	Specifications
Power	Maximum output power 3 KW or higher
Input voltage range	208 – 240 V
Stability	$\pm 0.1\%$ per $\pm 10\%$ main variations
Cooling	The system should have requisite cooling system - external chiller for smooth and stable running. The external chiller should be quoted from reputed brand.

#### 2. X-Ray Tube

Parameters	Specifications
Power	2.2 KW or higher
Insulation	Ceramic
Anode material/Target	A Cu anode; The system should also be able to work with other X- ray sources like Cr
Focus	Fine focus, long line fine focus with Ni- $K_{\beta}$ Filter. Facility to switch between line and point focus applications without disconnecting cables

#### 3. Goniometer

Parameters	Specifications
Geometry	Vertical (keeps sample horizontal and stationary)
Operation mode	Theta - Theta -90 to 165 deg or better range (with capability of transmission
2 theta measurement range	mode) for accuracy level upto 0.0025°
Min step size	0.0001° or lower.

#### 4. Optics

Parameters	Specifications
	Bragg Brentanno and Parallel Beam
Slit configuration/alignment	Lit and Soller slit along with Anti-scatter slit assembly to
Slit specification	reduce air scattering particularly for low angle measurements,
	Peceiving slit and Beta Iller
Fluorescence suppression	Suitable hardware and software for suppressing secondary
	d must be inclined.
Optical system alignment	Complete automatic alignment without manual intervention is needed Automatic Alignment should be done by the software for the alignment of source height, source angle, mirror optic, crystal optic, slit height, sample surface and detector angle

#### 5. Detector

	Specifications
Parameters	Powder, Thin film or SAX measurement
Туре	Powder, I fill I fill of SAA medical same detector must also work in
Operation mode	OD & 1D mode must be possible. The same detector must also work in normal mode or in fluorescence reduction mode.
	normal mode of in recognition

#### 6. Sample Stages

Parameters	Specifications  Computer controlled rotating sample stage with ability to control &
Sample stage type	This stage should facilitate both reflection & transmission measurements with horizontal sample. Capable to accommodate
Sample stage for thin film study	Phi scan for oriented thin films should be available. Rotation speed should be upto 60 rev per minute or better. Sample holder for SAXS/Thin film should be provided.  Holder for powder and bulk samples should also be provided.
For small samples	Zero background sample holders to hold small early should be supplied which can be used with rotating sample stage.

## 7. Data acquisition and Processing

Software with minimum 03 user license for 03 independent computers should be provided with following features:

Fully automatic profile fitting (Rietveld analysis)

- Crystallite size calculation (Scherrer method)
- Strain analysis
- Quantitative Phase analysis
- Background subtraction and smoothing
- Kα2 elimination and Peak search
- Multiple peak separation and Multiple plotting
- Inbuilt JCPDS or ICDD database

#### 8. Installation and Commissioning

The instrument to be installed tested and commissioned by representative of supplier in India at NIT Hamirpur to the satisfaction of user. The tools and tackles required for the installation of the system is the responsibility of the vendor.

Training: The vendor must provide the training on the site of installation.

#### 9. Accessories

Products	Specifications
Computer	Suitable branded computer (i5 or better) with pre-loaded software, 8GB RAM, 1Tb HD with DVD writer, 24 inch LED screen with windows 10 OS.
Spares	A color laser printer should also be provided.  Commitments to supply spares for at least 10 years to be ensured.

#### 10. AFTER SALES SERVICE

- Minimum three years warranty (not including the down time) on ALL the equipments and accessories must be offered. Warranty would start from date of installation completion.
- The vendor should be agreeable to enter into Comprehensive Annual Maintenance Contract with NIT Hamirpur at a reasonable price, for maintaining the equipment in proper working conditions, after the warranty period is completed.
- 3. Service response time, turn around time & up time of the equipment should be clearly specified.
- 4. Service response time must be less than 72 hours.
- 5. Product support for period of minimum ten years after warranty period to be ensured by vendor/supplier.
- Relevant software and hardware information in case of updating of the model of the supplied system should be provided.

#### TERMS AND CONDITIONS:-

- 1. Validity: Minimum validity of the quotation will be 04 months from the date of opening of the quotation/tenders.
- 2. **Time Limit:** The firm/supplier has to the supply and install the equipments within 90 days from the date of the award letter.
- 3. Guarantee/warranty: The supplier has to provide three years warranty (not including the down time) on ALL the equipments and accessories to be supplied. Warranty would start

from date of successful installation of equipment in the DoMSE. (Certificate of the same to be given by the supplier)

- 4. Demonstration & Training:- The supplier will have to demonstrate and impart training to concerned users at NIT, Hamirpur after successful supply & installation. (Certificate of the same to be given by the concerned user/indenter).
- 5. EMD: EMD in the form of DD/FDR /Bank Guarantee must be attached in favour of Director, NIT, Hamirpur (H.P) -177 005. The EMD should be remained valid for a period of 120 days beyond the final bid validity period. EMD of unsuccessful bidders shall be returned after the expiry of the final bid validity or before the 30th day of the award of contract. The EMD of the successful bidder shall be released only after submission of 3 % Performance bank Gurantee which should exemption is permissible as per Govt. rules.
- 6. Make in India preference:- NIT Hamirpur shall compare all substantially responsive bids to determine the lowest evaluated bid. The Institute is following and abide with the revised Public Procurement (Preference to Make in India), Order No. P- 45021/2/2017 PP (BE-II) dated 16.09.20 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India & subsequent instructions of Ministry. Accordingly, preference will be given the make in India products while evaluating the bids. However, it is sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India along with respective documentary evidence in the technical bid itself.
- 7. Technical Evaluation:- Technical evaluation of the participating firms will be done strictly on the basis of catalogues/brochures/literature/technical details of the product to be supplied along with relevant experience & fully complying all the terms & conditions of the SBD & tender notice. It is mandatorily to physically submit the technical literature/catalogue of the product to be supplied along with make & model no. failing which the technical bid of the participating bidder will be straightforward rejected. NIT Hamirpur also reserves the right to seek clarification from any of the participating firm during technical evaluation. The participating bidder has to submit undertaking that they fully complies to our abovementioned technical specifications.
  - 8. **Destination**: F.O.R. destination i.e. NIT, Hamirpur (HP) and the rates must be quoted inclusive of all taxes and charges.
  - 9. **Penality**: In case the firm/vendor fails to supply the equipments within the stipulated period penalty without assigning any reasons @ 1/2% (half percent) of the total value of the item covered in order as penalty per day subject to a maximum of 5% (five percent) will be imposed unless extension is obtained in writing from the office on valid ground before expiry of delivery period
  - 10. Price/Rate: The price of equipment/items may be quoted as per BOQ clearly mentioning the Basic rate & GST in the specific columns of BOQ in Indian rupees. Tender will be awarded to the participating bidder who will be lowest in terms of total of all items
  - 11. GST: All the firms may invariably mention their GST/PAN numbers on quotation/tender failing which quotations may not be considered valid. Further, this Institution does not issue any Concessional form, so the GST applicable as per actual rates must be mentioned in the offer. In case GST is not mentioned, the rates shall be treated as inclusive of all taxes.
  - 12. **NIT/NIQ Opening**: Representative of the firm may be present at the time of opening of the Quotations, if it wishes.

- 13. Payment: 100% payment shall be made immediately after receipt of material in good condition and successful installation of the same and submission of performance bank Gurantee.(Certificate of successful installation & inspection report to be given by the indenter/inspection committee NIT, Hamirpur)
- 14. Right of Acceptance/Rejection: Right of acceptance and rejection of any tender/quotation in part or full without assigning any reason are reserved with the institution authorities. The number of items to be purchased could be increased or decreased depending on the requirement of end user.
- 15. The participating firms can inspect the defective old X-ray Diffraction Machine to be replaced for revival of X-ray diffraction Machine upgraded with phi scan and advance softwares in the Department of Material Science & Engineering NIT Hamirpur on any working day during office hours on or before 30-09-2022 before 05.00PM

16. In case of any dispute the jurisdiction of Hamirpur (HP) Courts shall apply.

FI (Purchase)

### Annexure I - Bidder's Information

(Bidder should duly fill and send with technical documents via post/courier)

1	Name of the Bidder	
	Address of the Bidder	
3	PAN No.	
4	GSTIN No.	
5	E-mail ID	
6	Contact Person's Name & Designation	
7	Mobile No.	
8	Email ID	

Annexure II -Questionnaire
(Bidder should duly fill and send with technical documents via post/courier)

Sr.No.	Questions	Response
1	Whether all the terms and conditions of the NIT document have been complied.  Compliance (Yes/No)	
2	Whether all the items specified in the technical specification has been compiled and have been quoted in the bidding engine. Compliance (Yes/No)	
3	Confirm that you have read all the instructions carefully and have complied with the instructions accordingly. Compliance (Yes/No)	
4	In case bidder does not manufacture goods offers to supply have submitted Manufacturer's Authorisation letter. Compliance(Yes/No)	
5	Mention Delivery period	
6	Mention Warranty of the material	
7	Mention HSN/SAC code of the material	
8	In case of import supplies whether you have mentioned nearest internationalport of shipment in the technical bid (if not applicable please mention 'NIL').	9

Signature and	Seal of the Manufacturer / Bidde
Place:	

#### ANNEXURE III - DECLARATION OF LOCAL CONTENT

(To be given on company letter head - For tender value below Rs.10 crores)
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 crores)
(Bidder should duly fill and send with technical documents via post/courier)

	Date:
To,	
The Faculty Incharge Purchase, National Institute of Technology, Hamirpur-177005 (HP)	
Sub: Declaration of Local content	
Tender Reference No:	
Name of Tender: -	
Country of Origin of Goods being offered:	
2. We hereby declare that items offered has	% local content.
3. Details of Location at which local value addition is made	de
"Local Content" means the amount of value added in Inditem being offered minus the value of the imported conteduties) as a proportion of thetotal value, in percent.	
The bidders cannot claim services such as transportation, training and after sales service support like AMC/CMC	
"*False declaration will be in breach of Code of Integrity Financial Rules for which a bidder or its successors can Rule 151 (iii) of the General Financial Rules along with s under law."	be debarred for up to two years as per
Yours faithfully, (Signature of the Bidder, with Official Seal)	