



### 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 & installation of Thermal Evaporation system  (For detailed Technical specifications of items & quantity please refer to SBD)	01 Nos.	21800	45 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 <http://www.eprocure.gov.in/> and <http://www.nith.ac.in/>. 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	16.03.2021 at 6.00 PM
2	Document download start and end date	16.03.2021 to 30.03.2021 10.30 AM
3	Bid submission start and end date	16.03.2021 to 30.03.2021 10.30 AM
4	Physical submission of EMD, technical documents and cost of tender document etc.	On or before 05.30 PM on 30.03.2021
5	Date of opening of technical bid	31.03.2021 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 Sr. no.2 on tender opening dates & schedule, failing which the bids will be declared non-responsive. EMD in the form of DD/FDR must be attached with in favour of Director, NIT, Hamirpur (H.P) -177 005. The EMD should be remained 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. The above condition is applicable to all & no relaxation will be given.

4. BID OPENING DETAIL: - The bids shall be opened as per schedule specified in the key dates of Sr. no.2. 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 C/D 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](mailto: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).

FI (Purchase)

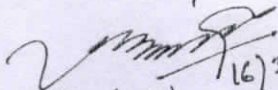


No: NIT/HMR/E&CED/ 2020/Project/GR/ 1499-1501

Dated: - 16/03/2021

Copy forwarded to the following for information please:-

1. The HOD, DoE&CE.
2. Dr. Gopal Rawat, Assistant Professor, DoE&CE.
3. ✓ The FI(CC), for getting the advertisement displayed in the Institute website for wider publicity under head: - **Supply and installation of Thermal Evaporation system for DoE&CE of NIT Hamirpur.**

  
FI(Purchase) 16/3/21



**Subject: - Supply and installation of Thermal Evaporation system for DoE&CE 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 & installation of Thermal Evaporation system	01 Nos.	21800	45 days

**Specification of Thermal Evaporation System**

**1. Vacuum system:**

(5501/s) TMP/DP (Edwards/Leybold/Pfeiffer) with 18M3/hrs vacuum pump (Edwards/Leybold/Pfeiffer/International supplier make), Ultimate vacuum  $5 \times 10^{-7}$  mbar or better, Pump down time Atmosphere to  $1 \times 10^{-5}$  mbar at around 15 minutes Atmosphere to  $1 \times 10^{-6}$  mbar at around 25 minutes.

Digital gauge with one number of inverted magnetron sensor monitor or better the pressure in the range of  $10^{-2}$  mbar to  $10^{-7}$  mbar.

Automatic electrically operated valves with middle stopper on high vacuum, Electrical operated B&R valves, Digital readout gauge to measure  $10^{-7}$  torr or better.

Stainless steel base plate with appropriate holes for fitting accessories. Unused holes are to blanked-off.

Comprehensive safety interlocks to prevent incorrect operation of the system with maximum operator safety. The valves are electrically interlocked to avoid accidental opening by operators.

**2. Vacuum/Box Chamber:**

Material of Construction: Nonmagnetic SS-304 stainless steel or better with front full open/close door. The chamber, all stainless steel components and sub-assemblies are electro-polished.

Approximately Size: 400 mm diameter with 500 mm height or more.

Substrate to source distance should be between 20 mm or greater.

Ports: View Ports with movable shutter.

The door Al material or better, removable chamber top Stainless steel/ Aluminum flange. Set of easily removable stainless steel chamber liners. Tripod to support baffle plate and other optional accessories. Supporting frame should be made of SS/clear room compactable material.

1 No. of Mass flow controller/valve for purging inert gas like Oxygen or Nitrogen during or after coating process with control.

Plasma base cleaning system for substrate.



- Substrate rotation mounted on the top chamber, water cooling in chamber, etc. Substrate rotation: 20 RPM or better. There should be control for varying rotation speed. 6" diameter or more rotary work holder should enable substrates to be rotated through 360°.

**3. Thermal sources:**

- 02 Nos or more to operate sequential or co-deposition. One number of 200 amps power supply capable of delivering 200 amps at 10 volts should be provided.
- Power supply 200 A or more which can hold filament/boat.
- Evaporation Source holder should accept Filament / Basket / Boat and etc.

**4. Source shutter:**

- Electrical source shutter to cover sources with rotary shaft, shutter arm, removable shutter pan. All parts made of stainless steel. Shutter control panel/operation in front of the system.

**5. Digital Thickness Monitoring:**

- Digital thickness monitor of international reputed make with one or two sensor for measuring. It is provided to measure the rate of deposition and Thickness.
- Rate Display: 3-digit auto ranging from 0.00 to 999 Å/sec. or better.
- Thickness Display: 4 digit LED auto ranging from 0.000 to 999.9 K Å or better.
- Update Rate: Automatic varied 4/5 updates/second or better.
- Minimum/ Static thickness resolution: 1 Å or better.
- Measurement range Typically 5000 µg/cm<sup>2</sup> till 20000 µg/cm<sup>2</sup> to max. limit or better.
- Tooling factor, density and acoustic impedance table to be supplied.

**6. Provision for later mounting of Substrate Heater:**

- 1 kW or better upto 250 °C or more with resolution of 1 °C or better with digital controllers. This should be programmable type within above specified range.

**7. Water Chiller:**

- Compact water chiller of 0.5 TR or better specification to be provided with re-circulating pumps, storage tank, valves gauges etc. for closed loop water cooling for cooling purpose of thermal evaporation system.
- Suitable compact water chiller, air compressor with required fitting to connect system will be part of supply.

8. The system should be semi auto with interlock.

9. Spares to be quote optional for 3 years trouble free operation.

10. HT/ Ion cleaning gadgetry should be provided.

11. Manufacture should have ISO or equivalent international standard certificate.

12. Original warranty certificate to submit along with supply. (TMP, Rotary pump, PLC, thickness monitor, valves.

13. Vendor must have supplied 05 similar equipment in India/abroad and order copy need to furnish.

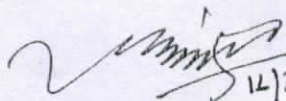
**Acceptance criteria:**

1. Installation and Commissioning to be done at NIT Hamirpur for fully functional operation.
2. Training should be provided to the USER on operation, maintenance and safe handling of the machine along with trouble shooting features during installation.



## TERMS AND CONDITIONS:-

1. **Validity:** Minimum validity of the quotation will be 03 months from the date of opening of the quotation/tenders.
2. **Time Limit:** - The firm/supplier has to supply and install the equipments within 45 days from the date of the award letter.
3. **Guarantee/warranty:** - The supplier has to provide equipment guarantee/warranty supplied for next 01 years from the date of successful installation of the equipment supplied. (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 90 day 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 expiry of warranty period.
6. **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 required to supply all the technically documents physically. NIT Hamirpur also reserves the right to seek clarification from any of the participating firm during technical evaluation.
7. **Destination:** F.O.R. destination i.e. NIT, Hamirpur (HP) and the rates must be quoted inclusive of all taxes and charges.
8. **Penalty:** 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
9. **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 per item price.
10. **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 C/D 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. **NIT/NIQ Opening:** Representative of the firm may be present at the time of opening of the Quotations, if it wishes.
12. **Payment:** 100% payment shall be made immediately after receipt of material in good condition and successful installation of the same. (Certificate of the same to be given by the indenter/inspection committee NIT, Hamirpur)
13. **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.
14. In case of any dispute the jurisdiction of Hamirpur (HP) Courts shall apply.

  
FI (Purchase)