

# InInstitute of Nano Science and Technology

Habitat Centre, Sector 64, Phase X, Mohali -160062, Punjab, India Ph: +91-172-2210073/75; Fax: +91-172-2211074; E-mail ID: <a href="mailto:purchase@inst.ac.in">purchase@inst.ac.in</a>

#### **NOTICE INVITING TENDER**

INST invites tender from the reputed manufacturers or their authorized dealers so as to reach this office on or before scheduled date and time for the instrument, as per specifications given in the Annexure attached to the Tender form. All offers should be made in English and should be written in both figures and words. Tender forms can be downloaded from the website (www.inst.ac.in) of the Institute.

The bidders are requested to read the tender document carefully and ensure compliance with all specifications/instructions herein. Non-compliance with specifications/instructions in this document may disqualify the bidders from the tender exercise. The Director, INST reserves the right to select the item (in single or multiple units) or to reject any quotation wholly or partly without assigning any reason. Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored and rejected.

# **EQUIPMENT DETAILS**

S. No.	Ref. No.	Item Description	Qty	Tender Fee (Nonrefundable)	EMD
1	INST/12(269)/2019-Pur	Thermal Evaporation and Sputtering System with Accessories	01 No.	Rs. 590/-	Rs. 80,000/-

IMPORT ANT NOTE, DATES & TIME			
Date and Time of Pre-bid Meeting	15 <sup>th</sup> June, 2020 (1100 HRS) "Quires entertain only through email"		
Last Date & Time For Submission	15 <sup>th</sup> July, 2020 (1400 HRS)		
Date / Time of Opening of Bids	15 <sup>th</sup> July, 2020 (1500 HRS)		
Venue of Bid Opening at INST	INST, Habitat Centre, Phase 10, SAS Nagar, Sector 64, Mohali		
Tenders to be submitted at	INST, Habitat Centre, Phase 10, SAS Nagar, Sector 64, Mohali		

Interested bidders may purchase the tender document directly from the office of INST by paying Rs.590/- or download the tender documents directly from the website and deposit Rs. 590/- (Five Hundred Ninety only) in favour of Director, INST towards tender fees in INST account mentioned at s.no. 8 of the terms of tender. Both the bids i.e. the Technical & Price bids must be submitted on or before 15<sup>th</sup> July, 2020 upto 2.00PM along with EMD.

#### **Pre-Bid Meeting (PBM)**

- The objective of PBM is to provide a platform for clarifying issues and clearing doubts, if any, about the specifications and other allied technical/commercial details of the bid document. Bidders are requested to submit their bids only after the PBM so as to take care of the changes made in the bidding document, if any.
- The prospective participants should inform their intention to participate and send written queries at the email: <a href="mailto:purchase@inst.ac.in">purchase@inst.ac.in</a> positively up to 10<sup>th</sup> June, 2020 to enable us to keep the response ready. Queries after 10<sup>th</sup> June, 2020 upto 4.00PM will not be entertained.
- Pre-bid quires will be entertained only through email due to COVID-19 we are unable to conduct meeting at INST Mohali.



• Change in the technical specifications and terms & conditions if any, for the above item after prebid deliberations, will be uploaded on the INST website & CPPP Website. All vendors are requested to quote accordingly.

#### **IMPORTANT NOTE:**

- PLEASE STRICTLY ADHERE TO THE DATES / TIMES MENTIONED IN TENDER DOCUMENT
- The bids (Technical Bids) will be opened in the presence of representatives of tenderers, if any. If any unscheduled holiday occurs on the date of submission/opening, then next working day shall be the prescribed date of submission/opening. Requests for postponement will not be entertained. Fax/email bids may not be accepted. The Institute shall not be responsible for any postal delay about non-receipt / non delivery of the bids or due to any reason. Late/Delayed tenders shall not be considered/entertained.

The Director, INST reserves the right to accept/reject any offer in part or full without assigning any reason.

#### TERMS AND CONDITIONS

Important Conditions of the tender to be abide by the tenderer

- 1. **Due date**: The tender has to be submitted before the due date. The offers received after the due date and time will not be considered.
- 2. **Preparation Bids**: The offer/bid should be submitted in two bid systems (i.e.) Technical bid and financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid. The Technical bid and the financial bid should be put in separate covers and sealed. Both the sealed covers should be put into a bigger cover along with letter of EMD and to be sealed. The tender number and details should be superscripted on the left side of the outer cover. The Quotations should be valid for 180 days from the date of opening of tender. The Quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to "The Director, Institute of Nano Science and Technology, Habitat Centre, Sector 64, Phase —X, Mohali, 160062, Punjab, India" so as to reach on or before the due date.
- 3. **Delivery of the tender**: The tender shall be sent to the below mentioned addressee either by post or by courier so as to reach our office before the due date specified in our Schedule. The offer/bid can also be dropped in the tender box on or before the due date specified in the schedule. The tender box is kept in Foyer area of INST.
- 4. **Tender Preparation Expenses:** The tenderer shall solely bear all the costs associated with the preparation and submission of the bid. The Institute shall in no case be responsible or liable for such costs, regardless of the conduct or outcome of the tender process. In no case, such costs shall be reimbursed by the Institute.
- 5. **Opening of the tender**: The offer/bid will be opened by a committee duly constituted for this purpose. The technical bid will be opened first and it will be examined by a technical committee which will decide the suitability as per our specification and requirement. The financial offer/bid will be opened only for the offer/bid which technically meets all our requirements as per the specification. The bidders if interested may participate on the tender opening Date and Time. The bidder should produce authorization letter from their company to participate in the tender opening. Only one representative will be allowed to participate in the tender opening.
- 6. **Acceptance/Rejection of bids:** The Committee reserves the right to reject any or all offers without assigning any reason.



#### 7. **Pre-qualification criteria:**

- (i) Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) on the same and specific to the tender should be enclosed.
- (ii) An undertaking from the OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend support for the warranty as well.
- (iii) OEM should be internationally reputed Branded Company.
- (iv) Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between bidder specification and supporting documents etc. may lead to rejection of the bid.
- 8. **Tender Fee/EMD**: Tender fee/EMD is to be obtained from the bidders except those who are registered with the Central Purchase Organisation, National Small Industries Corporation (NSIC) or the concerned Ministry or Department. The tenderer should submit Tender Fee/EMD amount as per tender ref. no. through NEFT/RTGS in INST Account. Account Details are as follows: **a.** Name of Beneficiary: Institute of Nano Science and Technology (INST)
  - **b.** Account No. 2452201001102
  - c. Name of Bank: Canara Bank, Sector 34, Chandigarh
  - d. IFS Code: <u>CNRB0002452</u>e. MICR Code: <u>160015003</u>
  - f. Swift Code: CNRBINBBFFC

The details of transaction for Tender Fee/EMD viz. Name of bidder firm, Tender Description, Transaction ID/No. of Transfer, Transaction date, Amount of Transaction, Name of Bank, Address of Bank shall be furnished by the tenderer on their letterhead separately along with their tender.

9. **Refund of EMD**: The EMD will be returned to unsuccessful Tenderer only after the Tenders are finalized. In case of successful Tenderer, it will be retained till the successful and complete installation of the equipment.

#### 10. **REASOINSTLITY OF PRICES:**

Please quote best minimum prices applicable for a premier Research Institution, <u>leaving no scope for any further negotiations on prices</u>. The quoting party should give a certificate to the effect that the quoted prices are the minimum and they have <u>not quoted</u> the same item on lesser rates than those being offered to INST to any other customer nor they will do so till the validity of offer or execution of the purchase order, whichever is later. We request you to fill the price reasonability certificate format in the enclosed file (Annexure "1")

The party must give details of identical or similar equipment, if any, supplied to any CSIR labs/DBT/DST Institutes during last three years along with the final price paid and Performance certificate from them.

- 11. **Performance Security**: The supplier shall require to submit the performance security in the form of irrevocable bank guarantee issued by any Indian Nationalized Bank for an amount which is equal to the 10% of Purchase Order value within 15 days after the final installation cum acceptance of the equipment at INST and Performance Security should be valid for a period of 60 days beyond the date of completion of warranty period of the equipment.
- 12. **Force Majeure:** The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.



- i) For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
  - ii) If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 13. **Risk Purchase Clause**: In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause.

## 14. **Integrity Pact**

- a. As per the directives of the Central Vigilance Commission all government departments / organisations / institutes have to adopt an Integrity Pact (IP) to ensure transparency, equity and competitiveness in major public procurement activities. The integrity pact envisages an agreement between the prospective bidders/vendors with the buyer committing the persons/officials of both the parties with the aim not to exercise any corrupt influence on any aspect of the contract. Only those bidders/vendors who are willing to enter in to such an integrity pact with the purchaser would be competent to participate in the bidding.
- b. Integrity Pact also envisages Panel of Independent External Monitors (IEMs) which shall be provided/recommended by INST/its labs and institutes with the approval of by CVC.
- c. The integrity pact would be effective from the date of invitation of bids till complete execution of the contract.
- d. The model format of integrity pact (IP) is at Annexure 3.
- 15. **Packing Instructions**: Each package will be marked on three sides with proper paint/indelible ink, the following:
  - i. Item Nomenclature
  - ii. Order/Contract No.
  - iii. Country of Origin of goods
  - iv. Supplier's Name and Address
  - v. Consignee details
  - vi. Packing list reference number

#### 16. **Delivery and Documents:**

Delivery of the goods should be made within a maximum of 12 weeks from the date of placement of purchase order and the opening of LC. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:

- i. 4 Copies of the Supplier invoice showing contract number, goods' description, quantity unit price, total amount;
- ii. Acknowledgment of receipt of goods from the consignee(s) by the transporter;
- iii. Insurance Certificate if applicable;



- iv. Manufacturer's/Supplier's warranty certificate;
- v. Inspection Certificate issued by the nominated inspection agency, if any, and the Supplier's factory inspection report; and
- vi. Certificate of Origin.
- vii. Two copies of the packing list identifying the contents of each package.
- viii. The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.
- 17. **Delayed delivery:** If the delivery is not made within the due date for any reason, the institute will have the right to impose penalty 0.5% per week and the maximum deduction is 10% of the contract value / price.
- 18. **Prices**: The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of taxes & duties shall be clearly indicated. The price should be quoted without custom duty and excise duty, since INST is exempted from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand.

In case of import supply the price should be quoted on FOB Basis. Also please indicate CIF charges separately upto New Delhi indicating the mode of shipment. INST will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.

- 19. **Notices:** For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.
  - i. *Purchaser:* The Director,

Institute of Nano Science and Technology,

Habitat Centre, Sector – 64, Phase X, Mohali – 160064.

11. Supplier:	(To be filled in by the supplier)

- 20. **Progress of Supply**: Wherever applicable, supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:
  - i. Quantity offered for inspection and date;
  - ii. Quantity accepted/rejected by inspecting agency and date;
  - iii. Quantity dispatched/delivered to consignees and date;
  - iv. Quantity where incidental services have been satisfactorily completed with date;
  - v. Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date;
  - vi. Date of completion of entire Contract including incidental services, if any; and
  - vii. Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified).
- 21. **Inspection and Tests:** Inspection and tests prior to shipment of Goods and at final acceptance are as follows:



- After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications attached to the purchase order. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser shall be present at the supplier's premises during such inspection and testing if need is felt. The location where the inspection is required to be conducted should be clearly indicated. The supplier shall inform the purchaser about the site preparation, if any, needed for installation of the goods at the purchaser's site at the time of submission of order acceptance.
- The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation and ascertaining conformity with the ordered specifications and quality. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified.
- In the event of the ordered item failing to pass the acceptance test, a period not exceeding one weeks will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser.
- Successful conduct and conclusion of the acceptance test for the installed goods and equipments shall also be the responsibility and at the cost of the Supplier.
- 22. **Resolution of Disputes**: The dispute resolution mechanism to be applied pursuant shall be as follows:
  - i. In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Executive Director, Institute of Nano Science and Technology (INST) Mohali and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
  - ii. In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.
  - iii. The venue of the arbitration shall be the place from where the order is issued.
- 23. **Applicable Law:** The place of jurisdiction would be Mohali (Punjab) INDIA.

#### 24. Right to Use Defective Goods

If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.



#### 25. Supplier Integrity

The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

#### 26. Training

The Supplier is required to train the designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment.

#### 27. Installation & Demonstration

The supplier is required to done the installation and demonstration of the equipment within one month of the arrival of materials at the INST site of installation, otherwise the penalty clause will be the same as per the supply of materials.

- 28. **Insurance:** For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. *In case of orders placed on FOB/FCA basis, the purchaser shall arrange Insurance.*
- 29. **Incidental services:** The incidental services also include:
  - Furnishing of 01 set of detailed operations & maintenance manual.
  - Arranging the shifting/moving of the item to their location of final installation within INST premises at the cost of Supplier through their Indian representatives.
- 30. **Warranty**: 1. Warranty period shall be at least 3 years from date of installation of Goods at the INST site of installation. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. **The warranty should be comprehensive on site.**

Note: If the OEM warranty is for 12 Months, additional extended warranty of 24 months should be quoted separately with or without price. Also. If a different period of warranty has been specified in the 'Technical Specifications of the equipment' then the period mentioned above shall stand modified to that extent.

2. The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall immediately within in 02 days arrange to repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 02 days. If the supplier having been notified fails to remedy the defects within 02 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.



- 31 **AMC:** Annual Maintenance Contract (AMC)/Comprehensive Maintenance Contract (CMC) up to next five years after warranty period is over, should be quoted separately.
  - 32 **Delivery Schedule**: The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.

#### 32. Governing Language

The contract shall be written in English language. English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.

#### 33. Applicable Law

The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction.

#### 34. Notices

Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party
in writing or by cable, telex, FAX or e mail and confirmed in writing to the other party's address.   A notice
shall be effective when delivered or on the notice's effective date, whichever is later.

#### 35. Taxes and Duties

Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, VAT in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order.

36. Agency Commission: Agency commission if any will be paid to the Indian agent in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in case of Nil commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent.

## 37. **Payment**:

- Payment will be made through irrevocable Letter of Credit (LC). Letter of Credit (LC) will be
  established in the favour of foreign Supplier after the submission of performance security. The
  letter of credit (LC) will be established on the exchange rates as applicable on the date of
  establishment.
- i. For Imports, LC will be opened for 100% FOB/CIF value. 80% of the LC amount shall be released on presentation of complete and clear shipping documents and 20% of the LC amount shall be released after the installation and demonstration of the equipment at the INST site of installation in faultless working condition for period of 60 days from the date of the satisfactory installation and subject to the production of unconditional performance bank guarantee as specified in Clause 9 of tender terms and conditions.
- ii. Indian Agency commission (IAC), if any shall be paid after satisfactory installation & commissioning of the goods at the destination at the exchange rate prevailing on the date of negotiation of LC documents, subject to DGS&D registration for restricted items.



- iii. All the bank charges within India will be borne by the Institute and outside India will be borne by the Supplier.
- For Indigenous supplies, 100% payment shall be made by the Purchaser after delivery, inspection, successful installation, commissioning and acceptance of the equipment at INST in good condition and to the entire satisfaction of the Purchaser and on production of unconditional performance bank guarantee as specified in Clause 11 of tender terms and conditions.

In case of indigenous supply the 100% payment will be made through bank transfer after receipt & installation of the equipment. The following bank details to be submitted along with tender:

i. Name of

#### Beneficiary:

- ii. Account No. iii. Name of Bank:
- iv. IFS Code:
- v. MICR Code:
- vi. Swift Code:
- 38. **User list:** Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided.

#### 39. Manuals and Drawings

- Before the goods and equipments are taken over by the Purchaser, the Supplier shall supply
  operation and maintenance manuals. These shall be in such details as will enable the Purchaser
  to operate, maintain, adjust and repair all parts of the works as stated in the specifications.
- The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract.
- Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.
- 40. **Application Specialist**: The Tenderer should mention in the *Techno-Commercial bid* the availability and *names* of *Application Specialist* and *Service Engineers* in the nearest regional office.
- 41. **Terms of Delivery**: The item should be supplied to our destination in case of local supply. In case of import supply, the item should be shipped upto New Delhi Airport. The Installation/Commissioning should be completed as specified.
- 42. **Site Preparation**: The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter.

The supplier shall visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other preinstallation requirements.



- 43. **Installation**: The equipment or machinery has to be installed or commissioned by the successful bidder within 30 days from the date of receipt of the item at INST. In case of any mishappening/damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. INST will not be liable to any type of losses in any form.
- 44. **Spare Parts:** The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:
  - i. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
  - ii. In the event of termination of production of the spare parts:
  - iii. Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
  - iv. Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

45. **Defective Equipment**: If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, unmerchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges.

#### 46. Termination for Default

The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

- i. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser; or
- ii. If the Supplier fails to perform any other obligation(s) under the Contract.
- iii. If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. 

  For the purpose of this Clause:
- i. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. ii. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;"

Ц	In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon
	such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered,
	and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services.
	However, the Supplier shall continue the performance of the Contract to the extent not terminated.



- 47. **Shifting**: After 1-2 years once our new building is ready, the supplier has to shift and reinstall the instrument free of cost.
- 48. **Downtime:** During the warranty period not more than 5% downtime will be permissible. For every day exceeding permissible downtime, penalty of 1/365 of the 5% FOB value will be imposed. Downtime will be counted from the date and time of the filing of complaint with in the business hours.
- 49. **Training of Personnel:** The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment for a minimum period of one week at the supplier's cost.
- 50. **Disputes and Jurisdiction**: Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within Mohali.
- 51. **Compliancy certificate**: This certificate must be provided indicating conformity to the technical specifications.
- 52. **Acknowledgement**: It is hereby acknowledged that we have gone through all the conditions mentioned above and we agree to abide by them.

SIGNATURE OF TENDERER
ALONG WITH SEAL OF THE COMPANY WITH DATE



## **BID PARTICULARS**

1.	Name of the Supplier:
2.	Address of the Supplier :
3.	Availability of demonstration of equipment: Yes / No
4.	Tender cost enclosed: : Yes/No if yes
5.	Online Tender Fee/EMD submission information enclosed: Yes / No if Yes
	Transaction ID/No. of Transfer
	Transaction date:
	Amount of Transaction
	Name of Bank
	Address of Bank
6.	Name and address of the Officer/contact person to whom all references shall be made regarding this
	tender enquiry Name:
	Address:
	Ph:
	Fax:
	Mobile:
	Email:
	Web:



# **Compliance statement for the tender specifications**

Tender Ref No.: <u>INST/12(269)/2019-Pur</u>

S.No.	. Check list of documents/Undertakings		Remarks (give explanation if the answer is No)
1.	Is EMD details attached? (if applicable)		
2.	Is the bidder original equipment manufacturer (OEM)/authorised dealer?		
3.	If authorised dealer, recent dated certificate to this effect from OEM, attached or not?		
4.	Undertaking from OEM regarding technical support & extended warranty period		
5.	Validity of 180 days or not?		
6.	Price Reasonability Certificate enclosed as per format??		
7.	Undertaking from bidder regarding acceptance of tender terms & conditions		
8.	Whether list of reputed users (along with telephone numbers of contact persons) for the past three years specific to the instrument attached?		
9.	Does the instrument comply with all the specifications detailed? Attach a separate sheet showing compliance with the specifications and explanations thereto if the equipment varies from the requested specifications.		
10.	Whether free Installation, Commissioning and Application Training offered?		
11.	Whether comprehensive onsite warranty offered?		
12.	Whether Annual maintenance after expiry of comprehensive onsite warranty quoted separately?		
13.	Whether free of cost shifting of instrument from transit campus to main campus offered?		



# Annexure - 1

# PRICE REASOINSTLITY CERTIFICATE (to be submitted in financial bid envelope)

This is to certify that we have offered the maximum possible discount to you in our Quotation No
dated for (Value Rs.)
We would like to certify that the quoted price are the minimum and we have not quoted the sam item on lesser rates than those being offered to INST to any other customer nor we will do so to the validity of offer or execution of purchase order, whichever is later.
Seal and Signature of the tenderer



# Format of the Integrity Pact INTEGRITY PACT

	Between
Institute of Nano Science and Techn	ology (INST) hereinafter referred to as "The Principal".
And	herein referred to as "The Bidder / Contractor."
for	under laid down organizational procedures, contract/sThe Principal values full compliance with all relevant laws of c use of resources and of fairness/ transparency in its relations s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

#### Section 1 - Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
- (a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- (b) The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- (c) The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary action.

#### Section 2 – Commitments of the Bidder(s)/Contractor(s)

The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

(a) The Bidder(s)/Contractor(s) will not, directly or through any other Person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.



- (b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, Certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- (c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the

Bidder(s)//Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s).

Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is annexed and marked as Annexure.

- (e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future Contracts If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". Copy of the "Guidelines on Banning of business dealings" is annexed and marked as Annex -"B".

### Section 4 – Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

#### Section 5 – Previous transgression

- (1) The Bidder declares that no previous transgressions occurred in the last 3 (three) years with any other Company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".



#### Section 6 - Equal treatment of all Bidders/Contractors/Sub-contractors

- (1) The Bidder(s)/Contractor(s) undertake(s) to demand from all Subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidders/Contractors/Sub contra--ctors (1) The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the THE DIRECTOR, INST. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality.
- (4) The principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notice, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit nonbinding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (6) The Monitor will submit a written report to the THE DIRECTOR, INST within 30 days from the date of reference or intimation to him by the Principal and should the occasion arise, submit proposals for correcting problematic situations.
- (7) Monitor shall be entitled to compensation on the same terms as being extended to/provided to Director, INST.
- (8) If the Monitor has reported to the THE DIRECTOR, INST, a substantiated suspicion of an offence under relevant IPC/PC Act, and the THE DIRECTOR, INST has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- (9) The word 'Monitor' would include both singular and plural.

#### Section 9 - Pact Duration

This Pact begins when both parties have legally singed it. It expires for the Contractor 10 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.



If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by THE DIRECTOR, INST.

# Section 10 - Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and Jurisdiction is the Registered Office of the Principal, i.e. Mohali, Punjab.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & On behalf of the Principal) (Office Seal)	(For & On behalf of Bidder/Contractor) (Office Seal)
Place	Place
Date	Date
Witness 1: (Name & Address):	
Witness 2: (Name & Address):	



# Technical Specification for Thermal evaporation and sputtering system for deposition of uniform thin films of magnetic-nonmagnetic materials.

Item		Specifications
	(a)	<b>Geometry:</b> D-shape chamber, spherical or rectangular chamber with appropriate dimension and having good access inside the chamber through door and easy loading of the samples, provision to connect and accessibility with load lock. Sputter up configuration.
	(b)	Material: Electro-polished non-magnetic, non-corrosive stainless steel
	(c)	<b>Vacuum rating:</b> The system should be able to achieve a vacuum of $5x10^{-7}$ torr or better with given pumps. The sputtering unit should be helium leak tested for leak rate better than $10^{-9}$ torr lit/sec (certificate needed).
amber	(d)	<b>Flanges/ports:</b> Sufficient number of flanges/ports for vacuum pump, gas inlet, substrate-cum-heater, sputtering guns, venting, Few extra CF40 and CF16 ports for future upgrade.
ig ch	(e)	<b>View port:</b> Two CF 63 view ports with toughened window.
Sputtering chamber	(f)	<b>Target configuration:</b> Confocal sputtering arrangements of guns. Sputter up.
$\mathbf{S}$	(g)	Targets: capability of mounting both 2" dia and 1" dia targets.
	(h)	<b>Substrate holder configuration:</b> On the confocal point to all three guns. The substrate holder should be of 6" dia or above. with rotational about the axis. Easy to load and remove the sample. Heating required to 400°C. It should have 25 mm in-situ movement in and out (bellow sealed) Inbuilt shutter with magnetic coupled or bellow sealed seals.
	(i)	Blank off: The blank off should be provided for unused ports at the time of installation
	(j)	<b>Load lock:</b> The load lock chamber backed by backing pump of main chamber. The load lock will be separated from the main chamber through a manual gate valve. The transfer of the sample under vacuum from load lock to the main chamber should be possible at ease externally.
Vacuum system (main chamber)		<b>Base pressure:</b> 5 x 10 <sup>-7</sup> torr. Preference will be given to lower base pressure configurations.
Vacuum system (main chamber)		High vacuum pump and gauge: Base pressure: 5X10 <sup>-7</sup> torr. Preference will be given to lower base pressure configurations. High vacuum pump: Turbo Pump ≥ 250 Liters/sec



	(Pfeiffer/Edwards/Leybold/Varian/Agilent) backed by suitable pump (at least 10 m3/hr) to meet above criterion.  Roughing pump: Rotary pump. Suitable configuration required so as to meet above criterion for high vacuum pump. (at least 10 m3/hr)
	(Pfeiffer/Edwards/Leybold/Varian/Agilent)  Process pressure: In the range 10 <sup>-2</sup> torr to 10 <sup>-4</sup> torr. Pumping
	capacity should maintain constant process pressure during entire deposition process of about 5-6 hours.
	Gate valve: Adjustable manual gate valve (VAT or equivalent). TO control process pressure
	Pressure gauge Low pressure: Ion Gauge/cold cathode gauge High Pressure: Pirani Gauge
	Quantity: Two RF guns. The sputtering gun should be compatible with magnetic materials in addition to conducting and non-conducting materials.
	Type: Water cooled magnetron cathodes  Meker Kurt I. Leeker (Mei WAC er egwiyelent
	Make: Kurt J. Lesker / Mei VAC or equivalent
Guns	Target size: 2" diameter with necessary option to mount 1" diameter target also
Sputtering	Target shape: Circular
Spu	Adjustability: The guns should have cross-contamination shield. Also, the possibility of mounting 1"and 2" target in the same gun assembly may be added advantage
	Substrate to target distance should be adjustable from about 5 to 10 cm $\pm$ 2 cm
	<b>Shutters:</b> Manually controlled shutters should be present for all sputter sources. The shutters should be controlled from outside and UHV compatible.
	Target replacement: Easy replacement of target will be preferred.



	Should be able to deposit 10 nm layer, with 5% uniformity tolerance.
Thermal evaporation	<b>Filament/Boat:</b> 2 number of thermal evaporation sources for metals/inorganic materials evaporation with one common power supply, 10 extra filaments/boats should be provided
	<b>High quality film thickness monitor</b> for independent rate verification.
	Cables and connectors: Suitable cables of appropriate length with connectors
	Adjustable shutter for alternate deposition
	Compatible for metal and inorganic material deposition with thickness uniformity at least $\pm$ 5% for film thickness varying from 10-400 nm in 3-inch wafer from centre to edge.
	Should be able to deposit 10 nm layer, with 5% uniformity tolerance.
RF power supply	Quantity: 1 (One)
	Make: Advanced Energy/Huttinger or equivalent
	Input power requirement: The complete system should operate with single phase 220V electrical line with 50Hz frequency.
	RF Power frequency: 13.56 MHz with automatic matching network
	<b>RF power output:</b> 0 - 300 W variable with automatic matching network.
	System cooling: Air cooled Auto matching network suitable for the above
	<b>Display:</b> Power display for all parameters
	Cables and connectors: Suitable cables of appropriate length with connectors
	Manual change over switch to connect 1 RF power supply to 2 guns
	or the substrate holder one by one with cables.



Substrate-cum-heater for the main chamber
Substrate-cum-heater for chamber: Size of substrate holder should be of 6" dia or above. The heating assembly should be able to deliver temperatures in the range RT - 400°C during and/or after deposition in presence of oxygen gas with a variable heating rate up to of about 10°C/s and temperature uniformity of < ±1% on 2"×2" area. The heater should be PID controlled. The maximum admissible limit of putting oxygen at 400°C in the chamber should be mentioned separately.  Substrate clamping: Mechanical (through clips) with minimum shadow region in both sample holder  Substrate rotation: Rotation speed should be adjustable up to 10 rpm.  Adjustability: Substrate to target distance should be easily adjustable in both sample holder  Shutter: Substrate shutter to avoid material deposition during burnin time should be provided. Both manual and pneumatic shutter is accepted.  Easy to use: Both substrate holders should be easily detachable &
It should be possible to RF bias the substrate holder such that the plasma cleaning of the substrate can be done prior to the deposition.
Mass flow controllers (MFC): Two, High quality MFCs (Make: Alicat or equivalent) and display units with ±1% accuracy of reading (or better) and high repeatability. Suitable for standard type of fitting. It will be used for gas Argon, Nitrogen and Oxygen. (standard gases preloaded)  Range: 0 to 200 sccm
Gas channels: 2  Isolation valves: Isolation valves for each gas line after MFC



	Gas connector fittings: Vendor should supply all gas connector fittings and non-corrosive stainless-steel tubing
	<b>Process gases:</b> Argon, O2, N2: MFC should be able to flow multiple gases with proper and quick calibration
	<b>Nitrogen purging:</b> Manual venting valve to be provided with N <sub>2</sub> purging arrangement.
Water	Water chiller: PID controlled, closed loop water chiller unit and compatible for above mentioned sputtering system for running entire sputtering unit for 12 hours continuously.
Associated Accessories and parts	<b>Cu gasket</b> : 1 set of spare oxygen free Cu gasket for all CF flanges should be provided with the system
	Vacuum grease: The good quality vacuum grease (Dow Corning or equivalent) should be provided with the system
	<b>Teflon tape:</b> Sufficient amount of Teflon tape should be provided with system for the use of 1 year
	Viton gaskets/O rings: 1 spare set of viton gaskets/O rings to be provided for each of the viton gasket fitted flanges
Safety	Proper safety interlocks with sound alarm or messages to be provided for all the equipment components (e.g., vacuum, door, water, compressed air, electrical requirements, etc.) if required.
Mountin g frame	A convenient frame with rack to mount all the above to make it a reasonably compact system. Frame should have adjustable height for levelling and castors with stop for easy movement.
Installation and training	Supplier has to integrate the system with all mentioned parts above at INST with gases and regulators provided by the institute. Supplier to show sputtering and train the personnel on the system for acceptance of the system. Targets and substrates will be provided by INST.
Site specific requireme nts	The supplier has to provide the site-specific requirement like power, space, gas, water or any other details at least two months before the shipment of the sputtering unit to avoid any delay during the installation.



75	At least 3 years.	
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# **Acceptance Criteria**

- 1) Company should have minimum 10 nos. of supply reference of Sputtering Unit in IIT/IISC/IISER/TIFR etc. Company should provide at least 10 satisfactory certificates from these institutions/organizations.
- 2) Company should provide Original Warranty certificate and Original Invoice with the system from OEM for all imported items. Company should submit copy of Air way Bill for all imported items.
- 3) Proper drawings to be submitted for approval in case P.O. is received and before manufacturing commences
- 4) Vacuum level and Multi layer thin film deposition must be demonstrated on the provided samples by Sputtering, in vendors facility before dispatch. Sputtering targets will be provided by user.
- 5) The company should relocate the system to the main campus in INST when it moves from Transit to the main campus at the free of cost. This involves only dismantling and assembling. All transport etc. will be taken care by INST.