

#### **NOTICE INVITING TENDER (E-Procurement mode)**

# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान पुणे

#### INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH

An Autonomous Institution, Ministry of Human Resource Development, Govt. of India **Dr. Homi Bhabha Road,Pashan Pune – 411008**.

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Date: 23/08/2018

#### Tender No: IISER/PUR/0438/18

Indian Institute of Science Education and Research, Pune invites online bids (e-tender) in two bids systems, from OEM/Authorized distributers/Authorized dealer for the following.

#### **Brief Details of Tender:**

Item Description	Estimate Cost of Tender (Rs).	EMD (Rs).	Tender Fee (inclusive of all taxes) (Rs.)
Sputtering Cum Thermal Evaporation system	42 Lakh	84000/-	1000/-

The Tender Document can be downloaded from Central Public Procurement (CPP) Portal <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> or Institute website <a href="https://eprocure.ac.in">www.iiserpune.ac.in</a> and bid is to be submitted <a href="https://eprocure.gov.in/eprocure/app">only through the E-procurement portal up to the last date and time of submission of tender.

#### Critical Dates of Tender

Sr.No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	23/08/2018	17:00 Hrs
2	Pre-Bid Meeting	30/08/2018	<mark>11:00 Hrs</mark>
3	Bid Submission Start Date	<mark>05/09/2018</mark>	15: 00 Hrs
4	Bid Submission Close Date	12/09/2018	15:00 Hrs
	Closing date & time for Submission of original EMD & Tender		
5	Fee	12/09/2018	15:00 Hrs
6	Opening of Technical Bids	14/09/2018	16:00 Hrs

No manual bids will be accepted. All quotation (both Technical and Financial should be submitted in the E-procurement portal).

Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120-4200462, 0120-4001002, 91-8826246593.



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#### **Instructions for Online Bid Submission**

This tender document has been published on the Central Public Procurement Portal (<u>URL:https://eprocure.gov.in/eprocure/app</u>) & Institute website <u>www.iiserpune.ac.in</u>. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>.

#### **REGISTRATION**

- 1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (<a href="URL:http://eprocure.gov.in/eprocure/app">URL:http://eprocure.gov.in/eprocure/app</a>) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
- 7. The CPP Portal also has user manual with detailed guidelines on enrollment and participation in the online bidding process. Any queries related to process of online bids or queries related to CPP Portal may be directed to the 24x7 CPP Portal Helpdesk.
- 8. The Institute will not be responsible for any type of technical issue regarding uploading of Tender on website.

#### SEARCHING FOR TENDER DOCUMENTS

- 1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.



#### PREPARATION OF BIDS

- 1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### **SUBMISSION OF BIDS**

- 1. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3. Financial Bids can be submitted in PDF format (As per Chapter 5).
  - The bidder may add rows to include the prices of all components & warranties, installation etc. whichever applicable.
- 4. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 5. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 6. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 7. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

#### **ASSISTANCE TO BIDDERS**

- i. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender
- ii. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is **0120-4200462**, **0120-4001002**, **91-8826246593**.



# Chapter 1 INVITATION FOR Tender Offers Indian Institute of Science Education and Research (IISER), Pune invites e-Tender for SPUTTERING CUM THERMALEVAPORATION SYSTEM

- 1. The BIDDERs are requested to give detailed tender in two Bids i.e.
  - a. Part I: Technical Bid.
  - b. Part II: Commercial Bid.

2. A Pre-bid conference will be held at IISER Pune, Purchase Section, Dr. Homi Bhaba Road, Pashan, Pune – 411008 on 30/08/2018 from 11:00 PM to 11:30 PM (IST). All prospective bidders are requested to kindly submit their queries to the address indicated above or email at <a href="mailto:purchase@iiserpune.ac.in">purchase@iiserpune.ac.in</a> so as to reach latest <a href="mailto:by 29/08/201">by 29/08/201</a>8. During Pre-bid meeting the answers / clarifications to the queries will be made available and also uploaded on our website. No queries will be entertained after the Pre-bid meeting.

#### **TIME SCHEDULE**

Sr.No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	23/08/2018	17:00 Hrs
2	Pre-Bid Meeting	30/08/2018	<mark>11:00 Hrs</mark>
3	Bid Submission Start Date	05/09/2018	<mark>15: 00 Hrs</mark>
4	Bid Submission Close Date	12/09/2018	15:00 Hrs
5	Closing date & time for Submission of original EMD & Tender Fee	12/09/2018	15:00 Hrs
6	Opening of Technical Bids	14/09/2018	16:00 Hrs

Supply means: "Supply, Installation, Commissioning and satisfactory demonstration of the whole system and training". If any charges extra are payable for Installation, Commissioning and training, the same should be specified in the commercial offer.

#### 3. AVAILABILITY OF TENDER:

The tender document can be downloaded from <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> and be submitted only through the same website.

#### **Technical Bid:**

- 1. The online envelope clearly marked as "**Technical Bid Envelope No. 1**" shall contain the all scanned copies of originals documents in PDF Format.
  - a) Compliance statement/questionnaire of tender terms and conditions as per Annexure-'A'.
  - b) Compliance statement of specifications as per Annexure-'B'.
  - c) Bid Security/EMD as per Annexure- 'C'.
  - d) Manufacturer authorization as per Annexure 'D'.
  - e) Previous Supply Order List Format as per Annexure 'E'.
  - f) Bidder Information Form as per **Annexure –'F'**.
  - g) Blacklist Certificate as per Annexure -'G'.



- h) Solvency certificates (not older than twelve months) issued by Scheduled/Nationalized bank with which BIDDER holds the current account.
- i) Copy of GST/ PAN No. and TIN No. allotted by the concerned authorities. If registered with the National Small Industries Corporation, the registration number, purpose of registration and the validity period of registration and a copy of NISC/MSME registration wherever it is applicable should also be provided in Technical Bid.
- j) Technical literature/ leaflets and complete specifications of quoted model(s) along with commercial terms and conditions.
- k) Undertaking that the successful BIDDER agrees to give a security deposit amounting to 10% of the purchase order value by way of Demand Draft in favor of The Director, IISER Pune.
- I) In case of exemption from submission of Bid security, proof of registration with NSIC/MSME
- m) Details of supplies of similar equipments.
- n) Scanned copy of Tender Fee & EMD and it is required to submit the same in original in a sealed envelope at the following address

Assistant Registrar (stores & Purchase)

Indian Institute of Science Education and Research (IISER), Pune

Dr. Homi Bhabha Road, Pashan Pune-411008.

Tel: +91-020-25898017; Fax: +91-020-20251566

Website: www.iiserpune.ac.in

#### **TENDER FEE & EARNEST MONEY DEPOSIT DETAILS**

- a) **Tender Fee of Rs1000**/- (**Rupees One Thousand only**) in the form of Demand Draft from Nationalized/scheduled bank in favor of The Director, IISER Pune. The firm registered with /NSIC/MSME as manufacturer for the supply of the same category of item for which the party is submitting quotation will be exempted from submission of FEE.
- b) EMD of Rs. 84000/-(Rupees Eighty Four Thousand only) in the form of Bank guarantee (As per format enclosed as ANNEXURE- 'C') or Demand Draft of a scheduled bank in the name of Director, IISER, Pune valid for 180 days from the date of opening of the tender. The firm registered with /NSIC/MSME as manufacturer for the supply of the same category of item for which the party is submitting quotation will be exempted from submission of EMD. Intended parties will have to give proof of registration along with their quotation. EMD of the unsuccessful bidders shall be refunded without any interest at the earliest after finalization of the purchase of concerned item. The party must therefore, submit a pre-receipted Bill in triplicate along with the quotation (in case of EMD sent in form of Bank Draft) to enable us to refund their EMD.
  - i. The BIDDER who submits the tender on behalf of their principals should produce documentary evidence in support of their authority to quote or submit proforma invoice of their principals. In case the BIDDER is not represented by any Indian Agent the Bank Guarantee valuing US \$ 1200.00 (US Dollars only) should accompany the Technical Bid towards EMD.
  - ii. In case of bids in Foreign Currency, the Indian Representative / dealers can submit the EMD in INR to IISER, Pune without any relaxation.
  - iii. The Bank Guarantee is insisted due to steep fluctuations in foreign exchange hence the foreign DD's are not accepted towards EMD. Bids submitted without



EMD will stand rejected. EMD will not be accepted in the form of cash /cheque. No interest is payable on EMD.

- iv. The EMD will be returned to the BIDDERs(s) whose offer is not accepted by IISER, PUNE within one month from the date of the placing of the final order(s) on the selected BIDDER(s). In case of the BIDDER(s) whose offer is accepted the EMD will be returned on submission of Bank Guarantee as Security Deposit (SD). However, if the return of EMD is delayed for any reason, no interest / penalty shall be payable to the BIDDERs.
- v. The successful BIDDER, on award of contract / order, must send the contract / order acceptance in writing, within 15 days of award of contract / order failing which the EMD will be forfeited.
- vi. The EMD shall be forfeited: In case a successful BIDDER fails to furnish the Security Deposit.
- 4. The technical offer should not contain any price information.

#### 5. Specifications:

Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer and the specifications mentioned in the quotation must be reflected /supported by the printed technical leaflet/literature. Therefore the model quoted invariably be highlighted in the leaflet/literature enclosed with the quotation. Non-compliance of the above shall be treated as incomplete/ambiguous and the offer can be ignored without giving an opportunity for clarification/negotiation etc. to the quoting party.

#### 6. Compliance Statements:

- a) Bidders must furnish a Compliance Statement of each and every required Specification of our tender in the format at ANNEXURE-'B'. The deviations, if any, from the tendered specifications should be clearly brought out in the statement. Technical literature/leaflet showing the compliance of the specification may also be attached with the quotation.
- b) Similarly, the Compliance Statement/questionnaire for Terms & Conditions of the tender may be furnished, as per the enclosed format at Annexure –'A', along with quotation (with techno-commercial bid in case of two bid tender system).
- c) The firms are advised to submit both the compliance statements essentially along with their quotation failing which their offer may not be considered.

#### Envelope 2 : "Commercial Bid" shall contain:

- i. Cost of all the items should be mentioned clearly and individually in the Commercial Offer (Part-II) only.
- ii. The BIDDERs are requested to quote for Educational Institutional Price for Equipment and software, since we are eligible for the same.
- iii. The prices should be shown against each item for the purpose of Insurance claims / replacements if any.



- iv. List of deliverables / Bill of materials and services.
- v. In case of foreign quote, the address of Principal's / Manufacturer's and their Banker's details should be furnished.

#### Note:

- (i) No request for extension of due date will be considered under any circumstances.
- (ii) No sub-contracting is allowed with regard to installation, commissioning, training, warranty maintenance and after sales service. This is the sole responsibility of the Principals'/their authorized agents

7. IISER Pune may issue corrigendum to tender documents before due date of Submission of bid. The bidder is required to read the tender documents in conjunction with the corrigendum, if any, issued by IISER Pune. The bidder is not supposed to incorporate the amendment in the body of the tender document

#### 8. BID OPENING

- a) Technical Bids will be opened on 14-09-2018 at 16:00 Hrs.
- b) Financial Bids of the eligible bidders will be opened on a later date. The date and time for opening of Financial Bids will be announced later.
- c) Bids would be summarily rejected, if tender is submitted other than through online or **original EMD & tender fee are not submitted within stipulated date / time.** IISER Pune shall not be responsible for any postal delay, EMD & Tender Fee before Tender closing date.

#### 9. Terms of the Technical Committee

- (i) On the due date the Technical bids will be opened and referred to the Technical Committee which is duly constituted by the Director, IISER, Pune. The committee will go through the technical aspects of the tender and recommend short listed firms. The recommendation of the technical committee is the final and binding on all the parties.
- (ii) The technical evaluation will be an assessment of the Technical Bid. IISER, Pune representatives will proceed through a detailed evaluation of the Technical Bids as defined in <a href="Chapter IV">Chapter IV</a> (Schedule of requirements, specifications and allied technical details), in order to determine whether they are substantially responsive to the requirements set forth in the tender. In order to reach such a determination, IISER, Pune will examine the information supplied by the BIDDERs, and shall evaluate the same as per the specifications mentioned in this tender.
- (iii) The technical committee may formulate evaluation criteria in addition to the specifications and requirements indicated in the tender, in the interest of IISER, Pune and this criteria/recommendation will also form as a part of short-listing of the firms.
- (iv) The Technical Committee will examine all the Technical aspects of the bids received. Further, the Technical Committee may seek additional information from the existing users at IISER, Pune or from other Institutes and also call for Technical presentations from the BIDDERs if it is required so.
- (v) The information received and the bids already submitted together will be examined with reference to the tendered specifications and evaluation is made by the Technical Committee.



(vi) After the technical evaluation is completed and approved, IISER, Pune shall inform to the BIDDERs whose bids have been rejected technically with the reasons for rejection on e-Procurement Portal (https://eprocure.gov.in/eprocure/app).

The commercial offers of the vendors whose technical offers are found to be technically deficient or do not meet the qualification criteria as specified in this tender will be returned to them without opening along with their EMD.

- (vii) The successful BIDDERs will be informed regarding the date and time of Commercial bid opening.
- (Viii) The purpose of obtaining two bids (technical and commercial) is to evaluate all the firms on technical basis with reference to the tendered specifications, performance of similar Solutions/Applications elsewhere, obtaining users views with reference to the earlier supplies. This will enable the technical committee to arrive at a fair recommendation in the interest of the organization.
- (ix) In the event of seeking any clarification from various BIDDERs by IISER, Pune, the BIDDERs are required to furnish only technical clarifications that are asked for. No amendment to commercial bid will be entertained at that stage. In case if a BIDDER fails to quote for a particular item it amounts to non-compliance and hence such bid will not be considered for further evaluation. Further during this process if any BIDDER indicates the price during the clarification such bids also will not be considered for further evaluation.

#### 10. Bid Evaluation:

Based on results of the Technical evaluation IISER, Pune evaluates the Commercial Bid of those Bidders who qualify in the Technical evaluation.

- a) IISER Pune shall correct arithmetical errors on the following basis:
  - (i) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected.
  - (ii) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
  - (iii) If there is a discrepancy between words & figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.
- b) Selling exchange rate/equivalent to Indian currency will be as on the date of bid opening in the case of single bidding and the rate on the date of opening of the priced bids in the case of two-part bidding.
- c) The bids shall be evaluated on the basis of final landing cost as per format given in Price Schedule in case of import / indigenous items.
- d) The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and CIF/CIP basis respectively. However the CIF/CIP prices quoted by any foreign bidders shall be loaded further as under:
  - Towards customs duty and other statutory levies-as per applicable rates.



- Towards custom clearance, inland transportation etc. − 2% of the CIF/CIP value.
- e) Where the price quoted on FOB/FCA and CIF/CIP basis are the same, the Contract would be made on CIF/CIP basis only.
- f) The Vague terms like "packing, forwarding, transportation................. etc. extra" without mentioning the specific amount/percentage of these charges will not be accepted. Such offers shall be treated as incomplete and rejected.
- g) After arriving at final pricing of individual offers of all the short listed firms, the lowest firm will be awarded with Contract/Purchase Order.
- 11. The Director, IISER, PUNE reserves the right to accept the offer in full or in parts or reject summarily or partly.



#### **CHAPTER-2: INSTRUCTIONS TO BIDDERS**

#### 1. PREPARATION AND SUBMISSION OF OFFERS:

a) Quotation should be submitted directly by the original manufacturer/supplier or its sole authorized distributor/dealer/Indian Agent. In case of bid by authorized dealer/distributor/Indian Agent, the manufacturer authorization should be attached with the technical bid as per **Annexure-'D'**.

One Indian Agent can participate in a tender on behalf of one manufacturer only. No offer will be entertained if the same Indian Agent is representing another manufacturer for the same item.

b) In case a bidder is not doing business within India, it shall furnish the certificate to the effect that the bidder is or will be represented by an agent in India equipped and able to carry out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period or ensure a mechanism at place for carrying out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period.

- c) The bidder shall bear all costs associated with the preparation and submission of its bid irrespective of the conduct or outcome of the bidding process.
- d) The bidder should not indulge in any corrupt, fraudulent, collusive, coercive practices during the entire process of procurement and execution of contract/order.
- e) Before the deadline for submission of the bid, IISER PUNE reserves the right to modify the bidding document and to extend or not to extend the date of submission. Such amendment/modification will be hosted on e-Procurement portal (https://eprocure.gov.in/eprocure/app.) or on IISER PUNE website.
- f) Conditional tenders will be summarily rejected.

#### 2. Delivery Period / Timeliness:

The deliveries & installation must be completed within 90 days after placement of purchase order. The time is the essence of the contract. It is mandatory for the BIDDERs who respond to this bid to meet these expectations, as are tightly linked to IISER, PUNE's plans of completing the project within the time frame.

#### 3. Security Deposit:

- 3.1 Within ten (10) days of the award of contract, the vendor shall furnish a Security Deposit amounting to 10% of the purchase order value in the form of Demand Draft/Bank Guarantee (from scheduled Bank only) favoring the Director, Indian Institute of Science Education and Research, Pune.
- 3.2 The IISER will forfeit the 10% security deposit if vendor fails to execute the order as per the Purchase Order. This Security Deposit will be refunded to the vendor only on successful installation of the EQUIPMENT / SYSTEM.
- 3.3 The Security Deposit should be valid for a period of warranty period as we plan to extend the same as Performance Bank Guarantee.
- 3.4 Bank Guarantee wherever mentioned in this document may be read as "Bank Guarantee from any Scheduled Bank" only.



#### 4. Amalgamation/Acquisition etc.:

In the event the Manufacturer/Supplier proposes for amalgamation, acquisition or sale of its business to any firm during the contract period, the BUYER/Successor of the Principal Company are liable for execution of the contract and also fulfillment of contractual obligations i.e. supply, installation, commissioning, warranty, maintenance/replacement of spares accessories etc. while submitting your bid, you may confirm this condition.

#### 5. **Bid Validity Period:**

- 5.1. The prices must be valid at least for a period of **180 days** from the date of opening of the Tender. No changes in prices will be acceptable in any condition after opening of tender till the validity of the offer or execution of the order whichever is later
- 5.2. IISER, PUNE may ask for the BIDDER's consent to extend the period of validity. Such request and the response shall be made in writing only. The BIDDER is free not to accept such request without forfeiting the EMD. A BIDDER agreeing to the request for extension will not be permitted to modify his bid.
- 5.3 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

#### **6. AWARD OF CONTRACT:**

#### **Award Criteria**

- 6.1 IISER, PUNE shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated commercial bid.
- 6.2 If more than one BIDDER happens to quote the same lowest price, IISER, PUNE reserves the right to award the contract to more than one BIDDER or any BIDDER.

#### 7. IISER Pune Right to vary Quantities at the time of Award:

- 7.1.The IISER Pune reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the tender document without any change in unit price or other terms and conditions. Further, at the discretion of the IISER Pune, the quantities in the contract may be enhanced by 25% within the delivery period.
- 7.2. Firms which have already supplied similar equipment to IISER, PUNE and have not completed required installation/commissioning/after sales service/warranty replacements etc. such firms offers will not be considered for further evaluation and no enquiries thereafter will be entertained.

#### 8. Cargo Consolidation and Customs Clearance:

IISER, PUNE has appointed its own Freight Forwarder and Custom House Agent for all IISER, imports. Please note that all the consignments have to be routed through their associates only. The address and contact details will be provided at the time of placing the Purchase Order. While submitting your bid, you may confirm this condition.

#### 9. Fraud and Corruption:

The IISER Pune requires that bidders, suppliers, contractors and consultants, if any, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy,

(a) The terms set forth below are defined as follows:



- (i) "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or in directly, 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 or omission of facts in order to influence a procurement process or the execution of a contract;
- (iii) "Collusive practice" means a scheme or arrangement between two or more bidders, designed to establish bid prices at artificial, noncompetitive levels; and
- (iv) Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- (b) The IISER Pune will reject a proposal for award if it determines that Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent collusive or coercive practices in competing for the Contract in questio
- 10. Interpretation of the clauses in the Tender Document / Contract Document
  In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender
  Document, <u>Director, IISER, PUNE's interpretation of the clauses shall be final and binding</u>
  on all parties.



#### CHAPTER - 3 : CONDITIONS OF CONTRACT

#### 1. Prices:

Bid prices should be filled in the appropriate format as mentioned in Price Schedule.

ALL THE BIDDERS SHOULD QUOTE PRICES FOR EACH AND EVERY ITEM SEPERATELY ALONG WITH THE CONSOLIDATED PRICES APPLICABLE FOR BOTH INDIGENOUS AND IMPORTED ITEMS.

#### A. For Goods manufactured in India:

- (i) The price of goods quoted Ex-Works including taxes already paid.
- (ii) GST and other taxes like excise duty etc. which will be payable on the goods if the contract is awarded.
  - (a) The charges for inland transportation, insurance and other local service required for delivering the goods at the desired destination as specified in the price schedule form.
  - **(b)** The installation, commissioning and training charges including any incidental services, if any.
  - (iii) The rate of GST applicable to IISER Pune is 5% for the items procured for Research purpose as per Notification No. 45/2017-Central Tax (Rate) New Delhi, 14th November, 2017 and Notification No. 47/2017-Integrated Tax (Rate) New Delhi, 14th November, 2017

#### B. For Goods manufactured abroad:

- (i) The price of the goods, quoted on FCA (Named place of delivery abroad) or FOB (Named port of shipment), as specified in the schedule form.
- (ii) The charges for insurance and transportation of the goods to the port/place of destination.
- (iii) The agency commission charges, if any.
- (iv) The installation, commissioning and training charges including any incidental services, if any.
- C. We are exempted from payment of Customs Duty under notification No.51/96 dated 23.07.1996.
  Customs Duty, if any, should be shown separately. No other charges than those mentioned clearly in the quotation will be paid.
- D. BIDDERs may also bid for High Sea sales.

#### 2. Bank Charges:

All Bank charges inside India, including opening of LC, to IISER, PUNE Account and outside India to Beneficiary's Account only. In case the BIDDER seeks confirmation of LC such confirmation charges are to the Beneficiary's account. This may please be noted and confirmed.

#### 3. Agency Commission & Services:

- 3.1. The Indian Agency commission payable in Indian currency only after the receipt of consignment in good condition at our Stores and satisfactory installation and commissioning of the ordered equipment.
- 3.2. In case of foreign quote, the Principal supplier should clearly indicate the address of the Indian Agent and percentage (%) of Agency Commission and taxes if any payable to him. Such amounts will be paid in Indian Currency to the Indian Agent.



3.3. Details of services rendered by you as well as after-sales services offered by you are to be made clear in the tender.

#### 4. Performance Bank Guarantee:

The 10% Security Deposit which is mentioned above may be extended as Performance Bank Guarantee for a period of warranty period.

#### 5. **Performance Benchmarks:**

The technical evaluation committee needs to be provided with an evaluation system to carry out performance benchmarks.

#### 6. **Pre-installation**:

The BIDDER has to state in detail the Electrical Power/UPS requirements, floor Space, head room, foundation needed and also to state whether Air-conditioned environment is needed to house the system and to run the tests. i.e. pre-installation facilities required for installation may please be intimated in the technical bid. Subsequently, before the consignment lands in IISER, Pune the BIDDER shall confirm that the pre-installation requirements are sufficient for installation of the equipment. In other words the BIDDER should continuously monitor the pre-installation requirements and see that everything is ready before the consignment is taken to the site for installation.

#### 7. **INSTALLATION**:

- 7.1 BIDDER shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty and thereafter.
- 7.2. Installation demonstration to be arranged by the supplier free of cost and the same is to be done within 15 days of the arrival of the equipment at site.
- 7.3. After successful installation what will be the minimum down time of equipment/instrument in case of breakdown. If the identified firm or person fails to put the system into working condition what is the further alternative course of action suggested by you to adhere to minimum down time.

#### 8. **INSPECTION:**

- The inspection of the system will be done by our technical expert /Scientist in the presence of firm's representative.
- 8.2 In case of receipt of the material in short supply or damaged condition the supplier will have to arrange the supplies/ replacement of goods free of cost pending the settlement of the insurance case wherever applicable on FOR at the IISER. Or CIF basis till satisfactory installation of the system.
- 8.3 The supplier should arrange for physical Inspection of the items directly or through their authorized representative within seven days of arrival of the consignment failing which they will be responsible for the losses. After the shipment is effected, the supplier/its representative/Indian agents must remain in touch with the lab/instt. to ascertain the date of arrival of consignment.



#### 9. Training:

Wherever needed, Our Scientist/Technical persons should be trained by the supplier at the project site free of cost. In case the person is to be trained at supplier's site abroad or in India it should be mentioned in the quotation clearly. The supplier should bear all the expenses for such training including 'to & fro' fares and lodging & boarding charges.

#### 10. Warranty / Support:

- 10.1. The items covered by the schedule of requirement shall carry minimum 03 years of comprehensive warranty from the date of acceptance of the equipment by IISER, PUNE. Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should prolong for more than 24 hours. The comprehensive warranty includes onsite warranty with parts.
- 10.2. The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, octroi, local taxes if any should be borne by the beneficiary or his agent. A clear confirmation should be given for this item.
- 10.3. The warranty on the associated software should cover providing of upgraded version/s, if any, released during the warranty period free of cost.
- 10.4. The BIDDER shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of 10 years from the date of supply of equipment on payment on approved price list basis.
- 10.5. The equipment must be supported by a Service Centre in India manned by the principal vendor's technical support engineers. The support through this Centre must be available 24 hours in a day, seven days a week and 365 days a year. Also it should be possible to contact the Principal's vendor support Centre on a toll free number/web/mail.
- 10.6. An undertaking from the manufacturer is required in this regard stating that they would facilitate the BIDDER on regular basis with technology / product updates & extend support for the warranty as well.
- 10.7. The vendor will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.
- 10.8. The principal vendor must have a local logistics support by maintaining a local spares depot in the country of deployment of the equipment. This is to ensure immediate delivery of spares parts from Principal Vendor of equipment to its channel partner/system integrator.
- 10.9. Details of onsite warranty, agency who shall maintain during warranty and undertake Annual Maintenance Contract/Comprehensive Service Maintenance Contract beyond warranty shall be given in the offer. In case of foreign quote, the Indian Agent who shall maintain during warranty and AMC beyond warranty shall be given in the Technical Offer.

#### 10.10 **COMMENCEMENT OF WARRANTY PERIOD**:

The warranty period of an item shall commence after receipt of the items in good working condition and from the date of its satisfactory installation/commissioning/demonstration at



the project site in IISER,, Pune. The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.

#### 11. Reasonability of Prices:

11.1Please quote best minimum prices applicable for a premiere Educational and Research Institution,

11.2The party must give details of identical or similar equipment, if any, supplied to any IITS/IISERS/ CSIR lab/Education Research Institute during last three years along with the final price paid and Performance certificate from them.

#### 12. Annual Maintenance Contract:

- 12.1. The party must mention in the quotation, the rate/amount of annual maintenance charges, if we opt for maintenance contract after expiry of the warranty period. This is mandatory to mention, wherever applicable.
- 12.2. No sub-contracting will be allowed for installation or maintaining system/ equipment / instrument during or after warranty period.

#### 13. **Indemnity:**

The vendor shall indemnify, protect and save IISER, PUNE against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the equipments supplied by him.

#### 14. Freight & Insurance:

- 14.1. Imports: In case of imports the freight & insurance will be paid by IISER, PUNE, as the consignments are shipped through the IISER, PUNE nominated freight forwarder (applicable only cases of FCA/FOB shipments).
- 14.2. Indigenous: The equipments to be supplied will be insured by the vendor against all risks of loss or damage from the date of shipment till such time it is delivered at IISER, PUNE site in case of Rupee transaction.

#### 15. Payment: - No advance payments are allowed under any circumstances.

#### A) INDIGENIOUS

Payment will be made directly to the suppliers by RTGS/NEFT after receipt of the goods, tested /inspected and found satisfactory with regard to quality, quantity, and specifications ordered for and after satisfying that the terms and conditions of supply have been fulfilled.

#### B) IMPORT

Letter of Credit will be established for 100% order value excluding the Agency Commission due to the Indian Agents, 90% payment shall be made by a, against the presentation of original Shipping documents. Balance 10% will be released after completion of satisfactory installation, commissioning, demonstration of the whole system, after imparting training and upon receipt of Bank Guarantee for 10% of total Order value towards performance security to be valid for till warranty period from the date of installation.

OR



By Wire Transfer for 100% of the Purchase Order value on receipt of goods and completion of satisfactory installation, commissioning, demonstration of the whole system, after imparting training and on submission of 10% Security Deposit/PBG valid till warranty period.

The payment of local currency portion shall be payable in equivalent Indian Rupees, within 30 days after the receipt of the equipment in good condition and after satisfactory installation and commissioning and demonstration.

The Agency Commission to the Indian Agent will be paid in INR only after successful installation, commissioning and satisfactory demonstration and acceptance of the items ordered for by the end user.

#### 16. Penalty for delayed Services / LD:

- 16.1. As time is the essence of the contract, Delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the IISER will forfeit EMD/SD and also LD clause will be applicable /enforced.
- 16.2. If the supplier fails to Supply, Install and Commission the system as per specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of 1% of order value per every week of delay subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.
- 16.3. IISER, PUNE reserves the right to cancel the order in case the delay is more than 10 weeks. Penalties, if any, will be deducted from the Security Deposit.

#### 17. Jurisdiction:

The disputes, legal matters, court matters, if any, shall be subject to Pune Jurisdiction only.

#### 18. **Force Majeure**:

The Supplier shall not be liable for forfeiture of its performance bank guarantee, 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. 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 IISER Pune either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

If a Force Majeure situation arises, the Supplier shall promptly notify the IISER Pune in writing of such conditions and the cause thereof. Unless otherwise directed by the IISER Pune 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.

#### 19. **Dispute Settlement**:

IISER Pune and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.



If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the IISER Pune or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

- (a) In case of Dispute or difference arising between the IISER Pune 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 Director IISER Pune, if he is unable/ unwilling to act, to the sole arbitration of some other person appointed by his 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.
- (b) In the case of a dispute between the Purchase and a Foreign suppler, 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.

The venue of the arbitration shall be the place from where the purchase order or contract is issued.

Assistant Registrar (S&P)



# CHAPTER 4 SCHEDULE OF REQUIREMENTS, SPECIFICATIONS & ALLIED TECHNICAL DETAILS

## **Sputtering cum Thermal Evaporation System**

We are looking for a deposition system which has the capability of both sputtering and thermal evaporation in a single instrument. The system should have a common chamber for both sputtering and thermal evaporation, and a common vacuum system consisting of a Turbo Molecular pump and oil free dry backing pump, with appropriate system of valves and vacuum measuring hard wares. The deposition system should be semi-automatic. The detailed specifications are given below.

spec	ifications are given below.	
1	Materials to be deposited	
a	Through Sputtering	
	Metals like Platinum, Gold, Silver, Chromium, Aluminium, Copper etc. and	
	Semiconductors/Dielectrics like Silicon, Titanium dioxide (TiO <sub>2</sub> ), Silicon Dioxide	
	(SiO <sub>2</sub> ), Zinc Oxide (ZnO), Aluminium Oxide (Al <sub>2</sub> O <sub>3</sub> ), Lithium Fluoride (LiF) etc.	
b	Though Thermal Evaporator	
	Metals like Platinum, Gold, Silver, Chromium, Aluminium, Copper, Nickel etc.	
2	Substrates to be used	
a	The deposition system should be compatible with using substrates like Silicon, glass,	
	sapphire, kapton, Ge, GaAs etc. in the form of wafers and thick substrates.	
3	Deposition rate	
	Both Sputtering and Thermal evaporation system should be capable of depositing thin	
	film coatings with deposition rate of at least @ 0.1 Å/sec or better.	
4	Deposition thickness.	
	The deposition system should be capable of depositing 05 nm -300 nm thick films	
	under both sputtering and thermal evaporation mode of operation.	
5	Substrate holder	
a	Size: Approximately 10-15 cm in diameter.	
b	Substrate holder should have threaded holes to screw the samples.	
c	The temperature at the substrate holder should be < 40 °C during the deposition, under	
	normal sputtering and thermal evaporation.	
	Mr. L. (C.L.)	
6	Mode of deposition	
	We will be performing sequential deposition. Only one mode, either thermal	
	evaporation or sputtering, will be performed at one time. Provision should be there to	
	perform sequential sputtering and thermal deposition without breaking the vacuum.	
	Appropriate shielding (like a cover) should be provided to prevent contamination of	
	sputtering sources and targets, during thermal evaporation.	



7	Vacuum Chamber
a	A Vacuum Chamber fabricated out of non-magnetic stainless steel, SS 304 or
	equivalent, with a large observation window/viewport. The chamber dimension should
	be as small as possible (approximate dimensions of 400 mm (L) x 400(W) x 500mm (H)
	or less) and should incorporate all the required accessories.
b	The chamber also should have necessary ports for electrodes, substrate holder, substrate
	heater, Vent valve and a few blank ports with dummies.
c	Suitable channels for water cooling on the chamber to be provided.
d	The box chamber should be of front loading type.
e	The ultimate vacuum during evaporation should be at least 10 <sup>-7</sup> mbar or better.
f	Magnetic shutter lock is required.
g	Door should open fully for full access of internal gadgetries.
8	Vacuum pumps, lines and valves
	One Turbo-molecular pump of pumping speed of 400 Litres/sec or more, and one Oil
	free dry backing pump with a minimum displacement capacity of 15 m <sup>3</sup> /hr are required.
	All the vacuum lines and valves should ensure the safe operation of the system.
	Adequate vacuum measuring system should be incorporated to measure the exact
	vacuum inside the chamber.
9	Thermal sources
a	Three Evaporation source holders are required which should be compatible to hold
	standard boats of Tungsten, molybdenum etc. of different shapes (flat, boat shape, coil
b	etc.).  One normal or regulated DC power supply with necessary electrical feed through
U	should be provided. The DC power supply should support the deposition of metals in
	desired thickness rate and resolution as described above.
С	
	Shutters: Automatic magnetic shutters should be provided over the evaporation sources
	to avoid contamination. The shutters should open automatically when the desired
d	parameters for evaporation is achieved.
	Evaporation sources should be isolated by cross contamination shields.
e	Distance between evaporation targets and Sample holder should be <i>adjustable</i> in the range of 10-25 cm.
f	25 Nos. of Tungsten wire basket should be provided.
1	25 Nos. of Tungsten whe basket should be provided.
10	Magnetron Source Assembly
a	Two numbers of water cooled, 2 inch diameter, flexible magnetron sputtering sources
	to be positioned in the base plate for upward sputtering.
b	Water flow switch to be provided for the magnetron units to disable the sputter power
	supply if there is insufficient cooling water flow for safe operation.
c	Changing of target should be convenient and in an easy way.
d	The sources should be capable of holding targets of dimensions 2 inch in diameter and
	0.125 inch in thickness.
e	Distance between target and Sample holder should be <i>adjustable</i> in the range of 10-15



	cm.
f	Target design for maximum use of target materials should be provided.
11	Power Supply
a	One separate DC power supply with high current is required for thermal evaporation. One separate DC & One RF power supplies with high voltage is required for sputtering.
b	One separate DC power supply of 2 KW or more with following specifications is required for thermal evaporation.
	• Input Voltage: 230 V +/- 15%, 50 Hz, Single Phase AC
	Output Current: 0 to 200 Amps or more, Max. Variable
С	One separate DC power supply of following specifications is required for sputtering.
	• Input Voltage: 230 V +/- 15%, 50 Hz, Single Phase AC
	Output Voltage: 50V DC to 1000V DC.
d	One RF power supply (300 watts and 13.56 MHz) with automatic impedance matching
	network and RF output cables (Auto tuning to minimize RF reflection).
e	Appropriate switching systems should be provided which is capable of switching power
	supplies between both magnetrons as well as to switch the power from RF to DC
	(thermal evaporator) or DC (thermal evaporator) to RF. RF/DC power to all magnetrons
	to be delivered by PC controlled power supply in it and magnetron selection for RF/DC
	bias sputtering.
f	The power supply should have digital display for forward and reflected power.
g	The automatic matching network should have a separate controller to show the tuning information and to provide manual control if required.
	information and to provide mandar control if required.
12	Thickness Monitor
a	The system should have multi film program storage feature (24 layers)
b	Thickness monitor resolution capability of 0.01 Å/sec or better
c	Measurement range up to 10 μm
d	Compatible for in-situ monitoring under both RF/DC sputtering and thermal
	evaporation modes of deposition.
e	Interfaced with PC for automation of process.
13	Thickness sensor
a	20 numbers of suitable thickness sensors for thermal evaporation and sputtering should
	be provided.
14	Mass Flow Control System
a	Mass flow controls (MFC) for Ar (2-100 sccm) and N <sub>2</sub> (2-10 sccm) should be provided.
b	Digital display to monitor flow of two gases with proper controller (manual and
	software controlled) should be provided.
15	General specifications
a a	Water chiller with suitable capacity (~ 25 Litres), circulation pump, valves, Piping etc.



	should be quoted.
b	Hard copy of the manual should be included
c	Supplier must have an active support in Pune. In the bid, supplier should clearly
	mention how instrument service and repair time will be minimized. A qualified factory-
	trained engineer shall conduct on-site installation, commissioning and training.
d	The manufacturer should be capable of supplying the spare parts for the deposition
	system like O-rings, boats, pirani gauge head, penning gauge head, thickness sensor
	crystals etc.
e	At least 3 years comprehensive warranty for the entire system should be quoted.
f	The vendor should provide a copy of site-preparation checklist; IISER will provide
	empty space with electricity and AC connections. It will be vendor's responsibility to install the equipment as well as the accessories as well as the infrastructure or essential
	facility to run the instrument. It may include but not restricted to plumbing, wiring, Ar
	and N <sub>2</sub> cylinders, gas cylinder regulators, gas purifiers, gas pipe paneling, tubings, nuts,
	ferrules and computer hardware and software installations, extra electrical wiring,
	switches etc. to bring the instrument to PQ level.
g	All the instruments should be provided with necessary toolkits.
h	Delivery period should be within 12-16 weeks from the date of release of purchase
	order
i	The vendor should provide on-site training at least twice for 3 users on the system start-
	up, usage, maintenance, quality control, trouble shooting, etc. including comprehensive
	classroom training, if required.
16	Optional Items
a	Sample heating during sputtering and thermal evaporation in the temperature range of
	40-300 °C with proper heaters.
b	Sample rotation during sputtering and thermal evaporation (with variable speed of 5 –
	20 rpm).
c	User adjustable title angle (± 45 0) with respect to the substrate holder for sputtering
	system.
d	Set of 'O' ring/ gaskets, set of electrical isolators for thermal sources.



# Technical evaluation for Sputtering cum Thermal Evaporation System shall comprise of:

Tecl	nnical evaluation criteria with marks	
Sr. No	Technical requirement	Marks
	Basic requirements	
1	The deposition system must have the capability of both sputtering and thermal evaporation in a single instrument.	2
2	All the main parts of the system must be manufactured (or procured), sold and installed by a single vendor to provide a seamless integration, operation and service.	2
	Materials to be deposited through Sputtering	
	Metals like Platinum, Gold, Silver, Chromium, Aluminium, Copper etc.	
3	and Semiconductors/Dielectrics like Silicon, Titanium dioxide (TiO2),	5
	Silicon Dioxide (SiO2), Zinc Oxide (ZnO), Aluminium Oxide (Al2O3),	
	Lithium Fluoride (LiF) etc.	
	Materials to be deposited through Thermal Evaporator	
4	Metals like Platinum, Gold, Silver, Chromium, Aluminium, Copper,	2
	Nickel etc.	
5	Substrates to be used The deposition system should be compatible with using substrates like Silicon, glass, sapphire, kapton, Ge, GaAs etc. in the form of wafers and	1
	thick substrates.	
6	<u>Deposition rate</u> Both Sputtering and Thermal evaporation system should be capable of depositing thin film coatings with deposition rate of at least @ 0.1 Å/sec	3
	or better.	
	Deposition thickness.	
7	The deposition system should be capable of depositing 05 nm -300 nm thick films under both sputtering and thermal evaporation mode of operation.	2
	Water chiller with suitable capacity (~ 25 Litres), circulation pump,	
8	valves, Piping etc. must be required.	1
	Substrate holder	
9	Size: Approximately 10-15 cm in diameter.	1
10	The temperature at the substrate holder should be < 40 °C during the deposition, under normal sputtering and thermal evaporation.	1



We will be performing sequential deposition. Only one mode, either thermal evaporation or sputtering, will be performed at one time. Provision should be there to perform sequential sputtering and thermal deposition without breaking the vacuum.  Appropriate shielding (like a cover) should be provided to prevent contamination of sputtering sources and targets, during thermal evaporation.  Vacuum Chamber  A Vacuum Chamber fabricated out of non-magnetic stainless steel, SS 304 or equivalent, with a large observation window/viewport. The chamber dimension should be as small as possible (approximate dimensions of 400 mm (L) × 400(W) × 500mm (H) or less) and should incorporate all the required accessories.  The chamber also should have necessary ports for electrodes, substrate holder, substrate heater, Vent valve and a few blank ports with dummies.  15 Suitable channels for water cooling on the chamber to be provided.  16 The box chamber should be of front loading type.  17 The ultimate vacuum during evaporation should be at least 10 <sup>-7</sup> mbar or better.  18 Magnetic shutter lock is required.  3 Yacuum pumps, lines and valves  One Turbo-molecular pump of pumping speed of 400 Litres/sec or more, and one Oil free dry backing pump with a minimum displacement capacity of 15 m³/hr are required. All the vacuum lines and valves should ensure the safe operation of the system. Adequate vacuum measuring system should be incorporated to measure the exact vacuum inside the chamber.  Thermal sources  Three Evaporation source holders are required which should be compatible to hold standard boats of Tungsten, molybdenum etc. of different shapes (flat, boat shape, coil etc.).  Shutters: Automatic magnetic shutters should be provided over the evaporation sources to avoid contamination. The shutters should open		Mode of deposition	
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21			
21		Shutters: Automatic magnetic shutters should be provided over the	
	21		2



	automatically when the desired parameters for evaporation is achieved.	
22	Evaporation sources should be isolated by cross contamination shields.	2
23	Distance between evaporation targets and Sample holder should be	4
	adjustable in the range of 10-25 cm.	4
	Magnetron Source Assembly	
24	Two numbers of water cooled, 2 inch diameter, flexible magnetron sputtering sources to be positioned in the base plate for upward	2
	sputtering.	
25	Water flow switch to be provided for the magnetron units to disable the sputter power supply if there is insufficient cooling water flow for safe operation.	1
26	Distance between target and Sample holder should be adjustable in the range of 10-15 cm.	2
	Power Supply	
	One separate DC power supply (with high current) of 2 KW or more with	
27	following specifications is required for thermal evaporation.	_
27	• Input Voltage: 230 V +/- 15%, 50 Hz, Single Phase AC	3
	• Output Current: 0 to 200 Amps or more, Max. Variable	
	One separate DC power supply (with high voltage) of following	
20	specifications is required for sputtering.	,
28	• Input Voltage: 230 V +/- 15%, 50 Hz, Single Phase AC	3
	Output Voltage: 50V DC to 1000V DC.	
	One RF power supply (300 watts and 13.56 MHz) with automatic	
29	impedance matching network and RF output cables (Auto tuning to	3
	minimize RF reflection).	
	Appropriate switching systems should be provided which is capable of switching power supplies between both magnetrons as well as to switch the power from RF to DC (thermal evaporator) or DC (thermal	
30	evaporator) to RF. RF/DC power to all magnetrons to be delivered by PC	3
	controlled power supply in it and magnetron selection for RF/DC bias	
	sputtering.	
31	The power supply should have digital display for forward and reflected power.	2
	Thickness Monitor	



32	The system should have multi film program storage feature (24 layers)	1
33	Thickness monitor resolution capability of 0.01 Å/sec or better	3
34	Measurement range up to 10 μm	1
35	Compatible for in-situ monitoring under both RF/DC sputtering and	1
33	thermal evaporation modes of deposition.	'
36	Interfaced with PC for automation of process.	1
	Mass Flow Control System	
37	Mass flow controls (MFC) for Ar (2-100 sccm) and $N_2$ (2-10 sccm) should	3
	be provided.	
38	Digital display to monitor flow of two gases with proper controller (manual and software controlled) should be provided.	2
	Other requirements	
	The vendor should provide a copy of site-preparation checklist; IISER	
	will provide empty space with electricity and AC connections. It will be	
	vendor's responsibility to install the equipment as well as the	
	accessories as well as the infrastructure or essential facility to run the	
39	instrument. It may include but not restricted to plumbing, wiring, Ar	2
	and N <sub>2</sub> cylinders, gas cylinder regulators, gas purifiers, gas pipe paneling, tubings, nuts, ferrules and computer hardware and software	
	installations, extra electrical wiring, switches etc. to bring the	
	instrument to PQ level.	
40	The vendor must highlight the desired specifications in their technical brochure sheets, give their website reference for all specifications and	
40	mention compliance with proposed specifications.	2
	At least 3 years comprehensive warranty for the entire system should be	_
41	quoted.	3
	Supplier must have an active support in Pune. In the bid, supplier	
42	should clearly mention how instrument service and repair time will be	2
12	minimized. A qualified factory-trained engineer shall conduct on-site	
	installation, commissioning and training.	
	The vendor should provide on-site training at least twice for 3 users on	
44	the system start-up, usage, maintenance, quality control, trouble	1
	shooting, etc. including comprehensive classroom training, if required.	
45	All the instruments should be provided with necessary toolkits.	1
	Total	100



Technical evaluation will be carried out and Vendors who score  $\geq$  85% will qualify for Price Bid opening. Thereafter, Financial proposal shall be evaluated. The Commercially LOWEST BIDDER shall be first preferred Vendor for the award of Order.



#### **CHAPTER-5 PRICE SCHEDULE**

The Bill of materials must be included in the technical offer as well as commercial offer. However the Technical offer should not contain any price information.

## ALL THE BIDDERS SHOULD QUOTE THEIR OFFER IN FOLLOWING FORMAT FOR UNIFORMITY

#### PRICE SCHEDULE FOR GOODS - FOREIGN CURRENCY

il lo	Item Description	HSN Code	4 Unit	5 Qty	6 Unit Price		7 Total price (5x6)		Charges Insuranc transpor port/ place destinati	e & tation to ce of	Total Price (7+8)
					FOB (named port of shipment)	FCA (named place of delivery)	FOB (named port of shipment)	FCA (named place of delivery)	Ocean	Air	CIF
1											
2											
3											



#### **Business Address**:

#### Note:

The Bidder may add rows as per requirement to include the prices of all Components/Parts, Warranties, Installation etc. whichever applicable.

- (a) Indian agents name & address \_\_\_\_\_
- (b) Installation, commissioning & training charges, if any\_\_\_\_\_
- (c) Cost of Spares \_\_\_\_\_
- (d) The Indian agent's commission shall paid in Indian Rupees only based on the Exchange Rate prevailing on the date of negotiation of documents.
- **(e)** The cost of optional items shall be indicated separately.



(b)Warranty if being charged include in BoQ

#### PRICE SCHEDULE FOR GOODS -INR

Name of the Bidder	Tender No	

1	2	3	4	5	6	7	8	9	10	11	12
SI. No.	Item Descriptio n	Countr y of Origin	Qty	Unit	Ex-Works. Ex- Warehouse, Ex-show room off the shelf price (inclusive of tax already paid)	Total price  Ex-Works. Ex-Warehouse, Ex-show room off the shelf price (inclusive of tax already paid) 4x6	GST payable, if contract is awarded	Packing & forwarding up to station of dispatch, if any	Charges of inland transportatio n, insurance up to Institute	Installation, Commissionin g & training charges, If any.	Gross Total(FOR)
1											
2					_				_		
3											

in words.

	Signature of Bidder	· .
	Name	
Note: The cost of optional items shall be indicated separately.	Nume	•
The bidder may add rows to include the prices of all components & warrar	nties, installation etc. w	hichever applicable.
(a)Cost of spares		

Total Bid price in foreign Currency \_\_\_\_\_\_



Annexure<sub>-</sub>'A'

#### FORMAT/QUESTIONNAIR FOR COMPLIANCE OF TERMS AND CONDITIONS

Tender No.: Due Date
----------------------

#### NOTE:

- 1. Quotation will not be considered without submission of this format.
- 2. If a particular question is not at all applicable please write NA in compliance part in Col. No. 4 below.
- 3. Kindly see the relevant terms & conditions of the tender document in each question before replying to the questions mentioned in Col. 2 below).

SNo	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' (preferably use different colour ink for 'No')	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for	
1	2	3	4	
	a.) Whether quotation is direct from Principal supplier/manufacturer or their own office in India (Please specify)			
1	b) Whether quotation is being submitted by Indian Agent/authorized distributor/ dealer			
	c) Whether the agent is registered with NSIC/MSME			



SNo	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' (preferably use different colour ink for 'No')	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
2	Whether techno-commercial Bid contains EMD, technical literature/leaflets, detailed specifications & commercial terms & conditions etc. as applicable.		
3	Whether the required Scanned copy of Tender     Fee & EMD is being submitted with the quotation		
	b) Please specify the form of EMD whether in the form of DD/bank guarantee or TDR/FDR (Please mention No., date & amount of EMD documents.) or Bid Security Format at Annexure –'C'		
	c) Pre-receipted bill for refund of EMD is enclosed (for bank drafts only)		
4	a. If the prices are on Ex-Works basis or FOB (names port of shipment ) or FCA (named place of delivery abroad)		
	b. Whether specific amounts or percentage of expenses like packing, forwarding, handling, freight, insurance, documentation etc. have been mentioned in quotation separately in clear terms.		



SNo	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' (preferably use different colour ink for 'No')	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
5	a) Whether prevailing rates of sales tax, excise duty & other govt. levies (for indigenous supplies) have been given in quotation		
6	Have you mentioned the validity period of the quotation as per our requirements		
7	a) Whether the Price reasonability Certificate is submitted with quotation		
	b) Whether copies of last two supply orders of the same item from other customers have been attached with the quotation		
8	Whether rates/amount of AMC after the warranty period is over has been mentioned		
9	Have you gone through the specification Clause & complied with the same		
10	Whether the Make/Brand, Model number and name of manufacturer has been mentioned in the quotation and Printed technical literature/leaflets of quoted items have been submitted		



SNo	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' (preferably use different colour ink for 'No')	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
11	Whether compliance statement of specifications has been attached with the quotation.		
12	a) Whether the delivery period for supply of the items has been mentioned		
	b) Whether mode of delivery & tentative size & weight of the consignment has also been indicated		
13	Do you agree to the submission of Performance Bank Guarantee and have you mentioned in your quotation about this.		
14	a) Do you agree with the payment terms for indigenous supplies?		No designing required
	b) Do you agree with the payment terms for imports supplies?		No deviation permitted
15	Do you agree about the date of commencement of warranty period & its extension is necessary.		
16	a) Who will install/commission and demonstrate the equipment at IISER Pune, FREE OF COST.		
	b) Will you be able to do it within a month		
17	Have you mentioned the guarantee/warranty period in your quotation and do you agree with guarantee clause?		



SNo	Terms & condition of Tender document	Whether acceptable (say 'Yes' or 'No' (preferably use different colour ink for 'No')	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for
18	Spare parts		
19	After Sales service		
20	a) Do you agree that on receipt of material in damaged condition or short supply you will replace the same on CIF basis, free of cost pending the settlement of the insurance claim?		
	b) Do you agree with the clause of physical inspection?		
21	Whether list of specific user's for the same item & model as quoted along-with performance certificates from the users is submitted with offer		
22	Whether you agree to the penalty clause for late delivery & installation?		
23	Whether training to our scientist/technical person will be given free of cost. If yes, have you specified in quotation whether it will be in our lab? Or at supplier's site in India or abroad.		
24	a) Whether all the pages have been page numbered?		
	b) Whether quotation has been signed and designation & name of signatory mentioned.		



SNo	Terms & condition of Tender document	I WITELITE ACCEDIANTE (SAV. LES UT INU	Deviation from tender terms, if any, with reasons for noncompliance or alternative condition quoted for





# FORMAT OF COMPLIANCE STATEMENT OF SPECIFICATIONS

S. N.	Name of specifications/ part / Accessories of tender enquiry	Specifications Model/ Item	Compliance Whether "YES" Or "NO"	Deviation, if any, to be indicated in unambiguous terms	Whether the compliance / deviation is clearly mentioned in technical leaflet/ literature
1	2	3	4	5	6





#### **BID SECURITY FORM**

Whereas (Hereinafter called "the tenderer")
has submitted their offer datedfor the supply of
(Hereinafter called "the tender") against the purchaser's tender enquiry No.
<del></del>
KNOW ALL MEN by these presents that WE(Name of
bank) of (Name of country), having our registered office at
called the "Bank"), are bound unto (Name of
purchaser) (Hereinafter called "the purchaser") in the sum of for which payment will
and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these
presents. Sealed with the Common Seal of the said Bank this day of 20
THE CONDITIONS OF THESE OBLIGATIONS ARE:
<ol> <li>If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.</li> </ol>
<ol><li>If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity.</li></ol>
<ul><li>If the tenderer fails to furnish the Performance Security for the due Performance of the contract.</li><li>Fails or refuses to accept/execute the contract.</li></ul>
WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchase will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.
The guarantee shall remain in force up to and including forty five (45) days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.
(Signature of the authorized officer of the Bank

Name and Designation of the Officer Seal, Name & Address of the Bank and address of the branch





# MANUFACTURER'S AUTHORIZATION FORM

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated.

This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that re binding on the Manufacturer]	а
Date: [Insert date (as Day, month and year) of Bid submission]	
Tender No.: [Insert number from Invitation for Bids]	
To: [Insert complete name and address of Purchaser]	
WHEREAS	
We [insert completer name of Manufacturer], who are official manufacturers of [Insert type of good manufactured] having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the contract.	e s,
We hereby extend our full guarantee and warranty in accordance with the Terms and Conditions of Contract with respect to the Goods offered by the above firm.	of
$Signed: [insert\ signature(s)\ of\ authorized\ representative(s)\ of\ the\ Manufacturer]$	
Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]	
Title: [insert title]	
Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]	
Dated on day of [insert date of signing]	





### PREVIOUS SUPPLY ORDERS FORMAT

Name of the Firm								
Order placed by {Full address of Purchaserj	Order No. and Date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery as per contract	Date of actual completion of delivery	Remarks indicating reasons for late delivery, if any and justification for price difference of their supply order & those quoted to us.	Has the equipment been installed satisfactorily?	Contact Person along with Telephone no., Fax no. and e- mail address.
Signature and Seal of the Manufacturer/ bidder								
Place: Date:								



# Annexure-'F'

### **BIDDER INFORMATION FORM**

Company Name :	
Registration Number :	
Registered Address :	
Name of Partners /Director :	
 City :	
Postal Code :	
Company's Nature of Business :	
Company's Legal Status	1) Limited Company
(tick on appropriate option )	2) Undertaking
(uon en appropriate opiien)	3) Joint Venture
	4) Partnership
	5) Others
	3) Others
Company Category	1) Micro Unit as per MSME
- · · · · · · · · · · · · · · · · · · ·	2) Small Unit as per MSME
	3) Medium Unit as per MSME
	4) Ancillary Unit
	5) SSI
	6) Others
CONTACT DETAILS	o) Others
Contact Name :	
Empil Id	
D	
.()	<del></del>
Mobile No :	
BANK DETAILS	
Name of Beneficiary :	
A/c. No. CC/CD/SB/OD:	
Name of Bank :	
IFSC NO. (Bank) :	
Propob Address and Propob Code	
Dianon Address and Dianon Code: _	
Other Details	
Vendor's PAN No	
Vendor's GST No:	Y
VOLIGIOUS COLLING.	





# CERTIFICATE (to be provided on letter head of the firm)

I hereby certify that the above firm neither blacklisted by any Central/State Government/Public Undertaking/Institute nor is any criminal case registered / pending against the firm or its owner / partners anywhere in India.

I also certify that the above information is true and correct in any every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date:	Authorized Signatory
	Name:
Place:	Designation:
	Contact No.:



### **Checklist for BIDDERs**

BIDDERS to indicate whether the following are enclosed/mentioned by striking out the non-relevant option

		Envelope-1(Technical-Bid)			
	(Following				
SI. No.	Documents	Content	File Types	Document Attached	
1	Technical Bid	Scan copies of both Tender Fee of Rs1000/- and EMD of Rs.84000/-	.PDF	(Yes /No)	
2		Format/Questionnaire for compliance as per Annexure- 'A'	.PDF	(Yes /No)	
3		Format of compliance statement of specification as per Annexure-'B'	.PDF	(Yes/No)	
4		Bid security Form as per Annexure-'C'(as applicable)	.PDF	(Yes/No)	
5		Manufacturer's Authorization Form as per Annexure-'D'	.PDF	(Yes/No)	
6		Previous Supply Order Format as per Annexure-'E'	.PDF	(Yes/No)	
7		Bidder Information form as per Annexure-'F'	.PDF	(Yes/No)	
8		Blacklist certificate as per Annexure-'G'	.PDF	(Yes/No)	
9		A copy of the Un-priced Commercial bid	.PDF	(Yes/No)	
10		List of deliverables as per Chapter- 4	.PDF	(Yes/No)	
11		Solvency certificate for Rs 16.80 lakhs (not older than twelve months) issued by scheduled/nationalized bank with which BIDDER holds the current account	.PDF	(Yes /No)	
12		Undertaking that the successful BIDDER agrees to give a 10 % security deposit and Performance Bank Guarantee	.PDF	(Yes/No)	
13		Self-Attested copy of GST Number (as applicable)	.PDF	(Yes/No)	
14		Tender Terms & Conditions Acceptance signed with official seal is attached	.PDF	(Yes /No)	
Envelope-2(Financial-Bid)					
SI. No.	Documents	Content	File Types	Document Attached	
1	Financial Bid	Price bid should be submitted in PDF Format	.PDF	(Yes/No)	



#### **IMPORTANT NOTICE**

TENDERERS RESPONDING TO THIS ENQUIRY SHALL BE DEEMED TO BE AGREEABLE TO THE TERMS AND CONDITIONS HEREIN CONTAINED. THESE TERMS AND CONDITIONS SHALL BE BINDING ON THE SUCCESSFUL TENDERER.CONDITIONAL TENDERS ARE LIABLE TO BE REJECTED. IISER PUNE WILL PROCESS THE TENDER AS PER IISER PUNE STANDARD PROCEDURES. THE DIRECTOR OF THE INSTITUTE RESERVES THE RIGHT TO REJECT ANY OR ALL OR PART OF TENDER WITHOUT ASSIGNING ANY REASON AND SHALL ALSO NOT BE BOUND TO ACCEPT THE LOWEST TENDER. IISER PUNE WOULD NOT BE UNDER ANY OBLIGATION TO GIVE ANY CLARIFICATIONS TO THE AGENCIES WHOSE BIDS ARE REJECTED.

I agree to all terms and conditions mentioned in the tender document of the Institute

Signature of the Tenderer