



**Central Electronics Engineering Research Institute
Pilani (Rajasthan)-333 031**

Fax : 01596 - 242135

Phone : 01596 - 242135

Gram : "ELECTRONIC" Pilani

Ref / Tender No. 511/NWP-25/ODG/10-Pur/2008/T-147

Date 17.11.2008

TENDER DOCUMENTS FOR OPEN/GLOBAL TENDER NOTICE

M/s. _____

Sub: Supply of E-Beam and Thermal Evaporation System.

Dear Sirs,

The Director, Central Electronics Engineering Research Institute (CEERI), Pilani – 333 031, invites you to quote for the stores as per the **SCHEDULE OF REQUIREMENT ANNEXURE-I ON FIXED PRICE BASIS**. Sealed quotation must be submitted on the specified date & time. **THE QUOTATIONS RECEIVED THROUGH FAX/E-MAIL/TELEGRAM/TELEX in open condition will not be considered.**

2. Quotation duly completed in all respects must reach **THE STORES & PURCHASE OFFICER, CEERI, PILANI NOT LATER THAN 2.30 P.M. ON 07.01.2009 AND THE SAME WILL BE OPENED ON 07.01.2009 AT 3.30 PM.** The Due Date & Time and Opening Date & Time will not be extended at all.

YOU ARE ADVISED TO GO THROUGH THIS DOCUMENT CAREFULLY TO COMPLY WITH ALL THE REQUIREMENTS OF THIS DOCUMENT.

3. **SUBMITTING OF TENDERS:**

Your offer must be split in TWO parts and must be put in separate envelopes and be embossed clearly as follows:

- (a) TECHNO COMMERCIAL BID
- (b) PRICE BID

4. A pictorial representation of the embossment is as follows:

ENVELOPE – I

TECHNO COMMERCIAL BID

Sub.: Supply of E-Beam and Thermal Evaporation System.

CEERI Tender No. 511/NWP-25/ODG/10-Pur/2008/T-147
 Last date & Time for receipt of Tenders 07.01.09 at 2.30 PM

Date of opening 07.01.09 at 3.30PM
 To
 The Director
 CEERI, Pilani

ENVELOPE – II

PRICE BID

Sub.: Supply of E-Beam and Thermal Evaporation System.

CEERI Tender No 511/NWP-25/ODG/10-Pur/2008/T-147

Last date & Time for receipt of tenders 07.01.2009 at 2.30 PM
 To
 The Director
 CEERI, Pilani.

5. Envelope – I and Envelope – II are then to be put together in another envelope as outer cover. The outer cover should be addressed to THE STORES & PURCHASE OFFICER, CEERI, PILANI – 3333031 (RAJASTHAN) mentioning the details given below.

TECHNO ECONOMIC BID
 ENVELOPE - I

PRICE BID
 ENVELOPE - II

Tender No.511/NWP-25/ODG/10-Pur/2008/T-147
 Last date & Time for receipt of Tenders: 07.01.2009 at 2.30 PM
 Date of Opening 07.01.09 at 3.30PM
 THE STORES & PURCHASE OFFICER,
 C.E.E.R.I.,
 PIALNI – 333 031

O
 U
 T
 E
 R
 C
 O
 V
 E
 R

NOTE: BOTH TEHNO COMMERCIAL AND PRICE BID SHALL BE CLOSED WITH SEALED WAX.

6. Director, CEERI reserves the right to ignore any tender which fails to comply with the above instructions. One cover should contain only one quotation.

7. The time, date and place of opening of Price bid will be intimated to the quoters in advance and all quoters or their authorized representative are at liberty to be present during opening of the tenders.

TO SUMMARISE THE CONTENTS OF ENVELOPE-I AND ENVELOPE-II WOULD BE AS FOLLOWS:

Envelope – I (Techno Commercial Bid) must contain Techno Commercial bid. It must contain the following:

1. **Tender document cost Nil in case the Tender document is downloaded from CEERI website, otherwise Rs. 300/- if it is obtained from CEERI.**
2. The technical details and specifications of the items must be indicated clearly point by point conforming to the description of the item/specifications enclosed to this tender Annexure - I along with Commercial terms & conditions such as payment terms, delivery date, applicable packing, Forwarding, Freight, Insurance, taxes and duties, installation and commissioning. As per Annexure – III. **WHERE THERE IS NO MENTION OF THE ABOVE TERMS & CONDITIONS SUCH QUOTATIONS SHALL BE REJECTED AS INCOMPLETE.**
3. A letter on your letter head confirming your capacity to supply the stores as per our tender specifications/drawings and technical requirement
4. Our tender specifications/drawings and technical documents duly stamped and signed by your authorized signatory on all pages in token of acceptance of our tender specifications/ technical requirement and terms & conditions.
5. Comparative statement of technical offers drawing a comparison between your offered specifications and our tender specifications bringing-out clearly the deviations, if any.
6. **Commercial terms and conditions without any indication of price .**
7. EMD in the form of Bank Guarantee for **Rs. 3,00,000=00 OR equivalent in respective Foreign Currency** in favour of Director, CEERI valid up to 6 months + 45 days from the date of opening of tenders. The proforma for Bank Guarantee is enclosed Annexure-V.
8. Document in support of previous orders executed and list of valuable customers.
9. Satisfactory performance report from users, for (8) above.
10. Financial status of the bidder certified by bidder's bank for previous 5 years.
11. Technical Catalogue & Literature.

Envelope – II (Price Bid) must contain

- a) Quotation letter as per Annexure - II
- b) Complete quotation both TECHNO COMMERCIAL AND PRICE with commercial terms & conditions along with charges of Packing, forwarding, Freight, Insurance, Taxes/duties and installation and commissioning and payment terms, delivery date etc. As per Annexure – IV. **WHERE THERE IS NO MENTION OF THESE TERMS AND CONDITIONS SUCH QUOTATIONS SHALL BE REJECTED AS INCOMPLETE.**
- c) The quotes must signify the capacity in which the quotation has been signed, i.e. whether as a Sole proprietor, authorized Partner or as authorized signatory of a company.

TERMS AND CONDITIONS

1. **PRICE (A) In case of Import of goods :- The price must be quoted on FOB/FCA value up to under mentioned international Shipping Airport of the Exporting country showing ex-works prices, packing, forwarding, documentation, Bank charges outside India inland freight charges separately.** The Vague terms mentioned in the quotation like “packing, forwarding charges etc. extra” without mentioning the amounts of these charges will not be accepted. The airfreight and insurance shall be arranged and paid directly by us in Indian Rupee at our end.

Desired Port of shipments :- U.S.A. – New York, Los Angeles, Chicago, Boston, San Francisco, Dallas, Atlanta, U.K. – Heathrow, Germany – Frankfurt, Japan – Tokyo, Netherland – Amsterdam, France – Paris, Canada – Montera, Singapore – Singapore, Switzerland – Zurich, Italy – Milan, Hong Kong – Hong Kong, Swedan – Stockholm, Australia – Melbourn, Austria- Vienna, Belgium – Brussels, Denmark – Copenhegan, Taiwan – Taipai, Malaysia Kulwalmpur, Korea – Seoul, Russia – Moscow, China – Beijing.

(B) In case of Indigenous Supplies :- For Indigenous supplies, the prices should be FOR CEERI inclusive of packing, forwarding, installation and commissioning, freight and insurance charges. In case of Ex-Works Prices, The Packing, Forwarding, Freight, Insurance, Installation/Commissioning charges must be clearly quoted in your quotation. No other charges than those mentioned in the quotation will be paid.

(C) Excise Duty :- We are exempted from the payment of Excise Duty under notification number 10/97. Hence E.D. if any, should be shown separately for which excise exemption certificate will be issued.

(D) Custom Duty :- We are registered with Department of Scientific and Industrial Research (DSIR) vide TU/VIRG-CDE(39)/2001 dated September 25, 2001 for availing customs duty exemptions under Government Notification No. 51/96 Custom dated 23 July, 1996. We shall pay only 5% custom duty and Educational sess.

(E) Sales Tax :- The percentage of Sales tax as applicable should also be specified clearly in the quotation. However concessional Sales Tax is allowed by states to R&D units against concessional / Sales Tax Certificate which will be issued along with order. We are not eligible to issue Form ‘C’ or ‘D’.

WHERE THERE IS NO MENTION OF THE ABOVE TERMS & CONDITIONS SUCH QUOTATIONS SHALL BE REJECTED AS INCOMPLETE.

2. **PACKING :-** The goods must be packed by standard packing material and standard export / import packing material in case of import failing which supplier will only be responsible for any damages / discrepancies to the consignment due to poor packing of goods.
3. **PERIOD OF DELIVERY :-** The goods must be delivered within 90 days from the date of firm order positively. However if this delivery period is not acceptable to you, please quote your fixed date of delivery.

- (A) Mode of Delivery :-** The mode of delivery may be specifically be quoted in your quotation which will be adopted by you for the supply of goods. Tentative size and weight of consignment may please be indicated in the quotation.
4. **VALIDITY OF OFFER :-** The prices must be valid for a period of **six months** from the date of opening of the quotation. No upward changes in prices will be acceptable in any condition after opening of tender.
 5. **PRE INSTALLATION REQUIREMENTS –** Pre installation requirements like Space, Power Supply, Water Line or any other essential requirements which are to be kept ready / completed by CEERI before supply of equipment, must be quoted by the bidder clearly in their quotation to avoid the delay in Installation & Commissioning of equipment.
 6. **INSTALLATION/COMMISSIONING:-**The equipment must be installed/ commissioned and demonstrated by the supplier at CEERI within 30 days after delivery of goods at CEERI and the same will be put under operation to the satisfaction of our technical expert/scientist who will test the performance of the equipment. No separate charges for installation etc. will be paid to the party beyond the quoted prices.
 7. **GUARANTEE :-** The equipment must be guaranteed / warranted for a period of Two year from the date of its satisfactory installation/commissioning against all manufacturing defects. If the equipment is found defective during this period the whole equipment or part thereof will have to be repaired/replaced by the supplier free of cost at CEERI. However, if the items are guaranteed/warranted for a period of more than Two year, it may be specifically mentioned in the quotation. In case the firm fails to rectify the defects and equipment is not put to proper function to our satisfaction, the whole equipment will be returned to the supplier at their cost. Either the supplier will replace the whole equipment to our satisfaction or whole money paid CIF/FOR CEERI on the account of purchase of the equipment will be refunded by supplier to CEERI.
 8. **SPARE PARTS :-** The availability of spare parts must be guaranteed for a period of 10 years. In case of discontinuation of the equipment, you have to intimate us in advance.
 9. **AFTER SALE SERVICE :** It must be clearly indicated in the quotation whether the after sales service would be provided. by supplier himself or by their authorized agent after satisfactory installation/commissioning of equipment and expiry of guarantee / warranty period.
 10. **INDIAN AGENTS :-**

- (a) **Authorized Agent Certificate of his principal must be submitted by Indian Agent along with his quotation.**
- (b) **The Indian Agents Commission must be declared by the Foreign Supplier / Indian Agent in the quotation which will be paid in Indian Currency after satisfactory installation & commissioning / functioning of the equipment.**
11. **FOREIGN SUPPLIER :- Foreign supplier / manufacturer are required to submit their quotation directly to C.E.E.R.I. with in due date and time. In case foreign supplier / manufacturer are willing to submit their quotation through his authorized agent in India, The Indian Agent can submit his quotation along with Foreign Supplier authorization Certificate.**
12. **PAYMENTS :- A. FOR IMPORTS :**
- Through Letter of Credit :-** L/C will be opened for 100% FOB value after receipt of acceptance of order from the successful tenderer along with performance bank guarantee for 10% amount of order value valid up to expiry of warranty period plus 2 months. The 90% amount of L/C shall be released on presentation of complete shipping documents. Balance 10% of order value shall be released after satisfactory installation and commissioning of the equipment.
- BANK CHARGES:** The bank charges out side India will be to the account of supplier.
- B. FOR INDIGENEOUS :** The payment will be made against bill only after supply of goods in good working conditions and satisfactory installation/commissioning and performance of the equipment at CEERI and after acceptance certification by our technical expert/scientist. However, supplier will be required to submit performance bank guarantee for 10% amount of the total value of order along with acceptance of our order valid up to expiry of warranty period. In case of non fulfilling the commitments the Bank Guarantee will be forfeited.
- C. No advance payment will be made to any supplier.**
13. **TRAINING :-** CEERI Scientist/Technical person will be trained by the supplier at CEERI free of cost after completion of Installation for a period of one weeks.
14. **PRE-DISPATCH INSPECTION AT FIRMS SITE:-** The pre-dispatch inspection of the goods will be carried out by the two CEERI technical/scientific person at suppliers site the same should be provided free of cost including to & fro Air fare & lodging boarding charges.

15. **INSPECTION :-** The consignment shall be opened in the presence of firm's representative and inspection of the system will be done by our technical expert/scientist in the presence of firms representative at CEERI. In case firms representative is not available, the inspection will be done by CEERI. The discrepancies will be intimated to supplier accordingly. All short supplies will be arranged by supplier on FOR/CIF CEERI basis. In case of receipt of the material in, damaged or defective condition the supplier will have to arrange the replacement of goods free of cost pending the settlement of the insurance case wherever applicable.
16. **USERS LIST :-** The list of users of the quoted item and model/make along with the name, address & contact numbers of the user organization/persons may be submitted with the quotation. If the identical or similar equipment have been supplied to other CSIR Laboratory/Institute, the details of such supplies for the preceding three years must be given together with the prices eventually or finally paid.
17. **EMD :- EMD OF RS. 3,00,000=00 OR equivalent in respective Foreign Currency TOWARDS EARNEST MONEY ONLY IN THE FORM OF BANK GUARANTEE valid for SIX MONTHS + 45 DAYS from the date of opening of the tender must be submitted along with the quotation (techno-commercial quotation in case of two bid system), otherwise quotation will not be considered. The firms, if registered with DGS&D/NSIC for supply of the same item for which the party is submitting the quotation, will be exempted from submission of EMD. These parties will have to submit registration certificate along with their quotations. EMD of the un-successful bidders shall be refunded at the earliest after finalizing the purchase of the concerned item. The parties must, therefore, submit a pre-receipted Receipt along with the quotation to enable us to refund their EMD. In case the tenderer is failed to accept our order or failed to execute our order the EMD will be forfeited. BID(s) NOT ACCOMPANIED WITH AN EMD IS/ARE LIABLE TO BE REJECTED.**
18. **PENALTY :-** In case the delivery of goods is not made on or before the prescribed date of delivery or the installation & commissioning is not completed within stipulated period by the supplier a penalty @ 0.5% per day of order value will be charged to a maximum of 5% from the successful tenderer.
19. **PERFORMANCE SECURITY :-** An unconditional performance bank guarantee from scheduled bank for 10% amount of order value has to be furnished by successful tenderer along with acceptance of our order towards the performance security within 21 days of the placement of order failing which the order shall be deemed as terminated. The bank guarantee must be valid up to the delivery period and installation & commissioning period warranty period plus 2 months. In case of any breach of contract the bank guarantee will be forfeited.
20. **DELETION OF NAMES OF DEFAULTING PARTIES :-** Names of parties backing out/defaulting after opening of tenders will be recommended for deletion from the list of suppliers in addition to forfeiture of EMD submitted by the party. Those firms have already been Black listed by CSIR / Govt. of India, need not apply / quote.

21. **UNSOLICITED QUOTATION/LATE QUOTATION :-** Unsolicited quotation / incomplete quotations / late or delayed tenders shall not be considered at all. Post tender revisions/corrections shall also render their tender liable for rejection. It is the responsibility of the bidder to ensure that the bid complete in all respect is received in CEERI before the last date of receipt of tenders. CEERI will not be responsible for the loss/delay in transit of any bid.
22. **COMPLIANCE STATEMENT :-** Tenderers are required to furnish a compliance statement of each and every specification of our tender supported by the technical literature/leaflet in the following format, preferably giving the price of each of the specification or part/accessories of the equipment required to be quoted. The deviations, if any from the tendered specifications should be clearly brought out in the statement. Similarly, the compliance of each of the required terms and conditions of the tender may also be stated in the form of a separate compliance statement along with quotation (with techno commercial bid in case of two bid system). Deviations may be given in separate column. The firms are advised to submit both the compliance statements essentially along with their quotation failing which their offer will be treated incomplete and can be ignored. It must be certified that the quoted equipment is of latest technology.

FORMAT OF COMPLIANCE STATEMENT OF SPECIFICATIONS

Sl. No.	Name of specifications/part/ Accessories of tender enquiry	Specifications of quoted Model/Item	Compliance Whether “YES” OR “NOT”	Deviation, if any to be indicated in unambiguous terms
1	2	3	4	5

FORMAT OF COMPLIANCE STATEMENT OF TERMS & CONDITIONS

Tender Terms & condition	Whether acceptable or not	Deviation from Tender Terms, If any.
1	2	3

23. FORCE MAJEURE

Neither of the Parties hereto shall be liable for damage or have the right cancel for any delay or default in performing it’s control including but not limited to Fire. Storm, Floods, Earthquakes, acts of God, government restrictions, continuing domestic or international problems (such as wars, rebellion, insurrections, strikes, riots, work stoppages, labour dispute) or delay as to ancillary materials, which affect the dates of fulfillment of any obligations as per the Purchase Order. Such dates will be respectively postponed for the period of continuance of such force majeure circumstances and the other party can suspend the performance of it’s obligations correlated to the postponed obligation of the affected party.

The obligation thus postponed shall be resumed after the force majeure circumstances have ceased. At the beginning, during and at the pre-visible end of the force majeure circumstances the parties shall promptly consult with each other about appropriate counter measures to be taken.

If the performance of obligations of any party should be delayed more than six (06) months by reasons of force majeure circumstances mentioned above, the parties shall mutually consult about subsequent performance of obligations.

24. CANCELLATION OF ORDER

In the event of vendor's failure to execute the order as per terms and conditions mentioned therein, CEERI reserves the right to cancel the Purchase Order without any obligation. The Bidder may also specify obligations if CEERI decides to cancel the Purchase Order for reasons attributable to CEERI.

25. EVALUATION OF TENDERS

The evaluation of quotations will be done in a scientific and logical manner according to our schedule of requirement and specifications. The tenderers can also be called for discussions and also can be allowed to modify their technical bids to suit the CEERI requirement to arrive at threshold level of acceptability and to treat all the bidders at par. In case technical specifications of the bidder do not reach the threshold level of acceptability, the quotation shall be rejected as technically un-suitable. The bidders who finally emerge as technically acceptable shall be allowed to with-draw their price bids and send again a revised bid in a sealed envelop or to adhere to the original price bid. These price bids will be opened & evaluated keeping in view the terms and conditions of our tender documents.

26. **ARBITRATION :-** All disputes or differences arising under and out of, or in connection with the contract, if concluded, shall be referred to the sole arbitration by an arbitrator appointed under the provisions of Indian Arbitration Act.1940 by CSIR/CEERI. The same shall be binding on both the parties.

27. **ACCEPTANCE OF OFFER :-** The Director, CEERI reserves the right to accept or reject any quotation / tender in part or full without assigning any reason thereof. No interim inquiries will be attended to.

28. **FALL CLAUSE :** The supplier shall certify that if the prices go downwards before execution of our order than the quoted prices, the benefit in this situation shall be allowed to CEERI/CSIR by the supplier. The supplier shall certify that the equipment/ material shall not be supplied to anyone less than the contract price during the period of execution of CEERI/CSIR order.

. STORES & PURCHASE OFFICER.

SCHEDULE OF REQUIREMENT

Tender No. 511/NWP-25/ODG/10-Pur/2008/T-147

Date : 17.11.2008

Last Date & Time for receipt of Tenders 07.01.2009 at 2.30 PM

Date & Time of Opening 07.01.2009 at 3.30 PM

Sl. No.	Description of Stores	Qty.
1.	E-Beam and Thermal Evaporation System (Detailed specifications are as per attached sheet)	One

STORES & PURCHASE OFFICER

Specifications for E-beam and Thermal Evaporation System

Specifications:

1. Purpose:

- 1.1 Electron Beam Evaporation System for Materials: Aluminium, Gold, Titanium, Nickel, Chromium, Platinum, Palladium etc.
- 1.2 Thermal Evaporation for Material: Au-Ge
- 1.3 Application: III-V Compound Semiconductor Devices and GaN Devices using Lift-off process with photoresist.

2. Main System Frame for the evaporation system

Specify typical dimensions/foot print of the system for housing the chamber, vacuum pump system, power supply etc. in clean rooms.

3. Vacuum chamber

- 3.1 Stainless steel chamber with front door
- 3.2 Min. Height: 500 mm
- 3.3 Min Width and Depth: 350 mm
- 3.4 Front door with observation window of about 100 mm diameter
- 3.5 Viton gaskets for vacuum sealing. Metal gaskets (OFHC Copper) for vacuum sealing (Optional). Quote separately
- 3.6 Superior quality stainless steel substrate holders
 - 3.6.1 Wafer Materials: GaAs, GaN on sapphire, Silicon etc.
 - 3.6.2 Wafer Holders with Sizes and Quantity: 4" wafers – Quantity: 2
or 2" wafers – Quantity: 4
 - 3.6.3 Wafer holders for keeping 18 mm x 18 mm and 22 mm x 22 mm glass covers:
Inside slots of the rectangular substrate holder: (i) 18 mm x 140 mm
and (ii) 22 mm x 140 mm
- 3.7 Shutter for Electron Beam / Thermal Evaporation
- 3.8 Set of stainless steel liners, for protection of the inner chamber walls against deposition and should be easily removable for cleaning: 1 set.
- 3.9 Appropriate isolation valve and leak valve for chamber
- 3.10 Periscope viewing accessory to be quoted separately
- 3.11 Water cooling for chamber walls has to be provided.
- 3.12 System leak rate in the order of 1×10^{-9} mbar l/s

Rev: 10-A

4. Turbo molecular pump, water cooled

- 4.1 Nominal pumping speed for N₂: 1500 l/s
- 4.2 Specify pump down time in min. for achieving 1×10^{-6} mbar
- 4.3 Ultimate Vacuum in the chamber, typical orders of $< 5 \times 10^{-7}$ mbar
- 4.4 All the flanges, piping, connection cable, filters & any accessories required should be quoted.
- 4.5 Make of TMP : Leybold / Alcatel / Varian /Edwards / Pfeiffer
- 4.6 Provide the details of availability of service of TMP in India

5 Roughing Pump

- 5.1 Dual stage dry pump suitable for the above turbo molecular pump.
- 5.2 All the flanges, piping, connection cable, filters & any other accessories required for should be quoted.
- 5.3 Minimum pumping speed: 30 m³/h
- 5.4 Vendor should furnish the details of the vacuum pumps, their make, pump down time etc. at the time of quotation. The preferred make may be Leybold /Alcatel /Varian /Edwards /Pfeiffer

6 Vacuum Gauges for measuring low and high vacuum

- 6.1 Pirani and Penning Gauges or suitable gauge – 5 Nos./each to be quoted separately
- 6.2 One set of gauges have to be pre-fitted into the system

7 Electron Beam Evaporation Source

- 7.1 6 KW Electron Beam evaporator and crucible with water cooled
- 7.2 6 to 8 pocket crucible with motorized selection. The crucible pocket size is about
7 cc.
- 7.3 EB Power Supply max. output power 6 KW (with Gun), with emission current control.
- 7.4 Beam deflection 270°
- 7.5 Suitable liner to be provided for each metal (Qty:10) and to be quoted separately.
- 7.6 Vendor to ensure that there is no particle splattering during any metal evaporation.
- 7.7 Adjustable X /Y Beam position and Beam size.
- 7.8 Electro-pneumatic/manually operated source shutter.
- 7.9 Essential spares kit and accessories have to be provided by the vendor.
- 7.10 Filaments for EB Gun – Qty: 50 Nos.
- 7.11 Electron Beam Evaporator should be of reputed make (Make: Temescal /Ferrotec/ Thermionics/Telemark)
- 7.12 Provide the availability of service of EB evaporator in India

8 Thermal Evaporation

- 8.1 Single thermal evaporator with shutter: 2 KW
- 8.2 Molybdenum Evaporation boats – 30 Nos.
- 8.3 Tungsten Evaporating Boats – 20 Nos.

10-11 -

10-B

15. Process Demonstration:

15.1 The following evaporation materials have to be demonstrated after installation, commission, and training at CEERI, Pilani.

15.2 Titanium (20 nm); Aluminium (100 nm); Nickel (20 nm); and Gold (100 nm) by Electron beam evaporation

15.3 Gold-Germanium (50 nm) by Thermal Evaporation and Nickel (20 nm); Titanium (20 nm); Platinum (10 nm); and Gold (200 nm) by Electron Beam Evaporation

15.4 The samples with photoresist patterns will be supplied by CEERI, Pilani

16. General Conditions:

16.1 Any other utilities like chilled water, compressed air supply etc. which will be required at the time of installation should be specified clearly in the quotation.

16.2 Installation/operation manual, maintenance /troubleshooting manual with circuit diagrams, parts list catalogue etc. has to be provided by the vendor.

16.3 Two year warranty at user's site should be provided after successful installation of the system.

16.4 Provide the details of availability of service in India of major system and sub-components separately.

16.5 Vendor has to quote for single service call separately after the warranty period.

16.6 Pre-inspection of the equipment being shipped will be done by two people (Technical/scientific) from CEERI at firm's site and firm's cost.

16.7 Training for at least one week by the firm's engineer at user's site after completing the installation and commissioning of the system by the vendor.

16.8 Process demonstration at CEERI on the system supplied.

16.9 Vendor should quote essential spares including O-rings and gaskets for maintaining the system for three years (Quote separately).

16.10 Essential tool kits should be supplied by the vendor.

16.11 List of customers with their correspondence addresses (with email ID & phone and fax Nos.) has to be provided by the vendor, where similar systems (with model No.) were installed worldwide and within India.

16.12 Compliance statement has to be submitted by the vendor for all the points given above, along with the quotation to CEERI, Pilani.

10-C

8.4 Size of the boat: 2 to 4 cc.

8.5 Power supply cables for thermal evaporator

8.6 Power supply unit for the control of a single thermal evaporator

9 Film Thickness Monitor

9.1 Quartz crystal digital thickness monitor for the measurement of max. 10 programmable layers, with RS-232 interface

9.2 Gold coated quartz crystals at 6 MHz to be quoted separately: 100

9.3 Standard single Sensor head with water cooled

9.4 Dual crystal sensor head (optional) to be quoted separately

9.5 Additional quartz crystal heads – Qty. two, to be quoted separately

9.6 Quartz crystal Oscillator

9.7 Appropriate feed through and adapter flanges for fitting the thickness monitor in the coating system

9.8 Provide the make (like Sigma/Telemark/Maxtek etc.) and availability of service in India for Thickness Monitor

10 Glow discharge

10.1 Glow discharge unit with HV feed through and connection cable

10.2 Min. 2KVA power supply.

11 System Control

11.1 PLC based Control System

11.2 Safety interlocks

11.3 Manual override option

12 Substrate cooling facility (Optional Item)

12.1 Cooling to 10-30°C, controllable about 3 % of the set point, programmable TC/PID controller and mounted on appropriate flange. This item should be quoted separately.

13. Liquid Nitrogen trap (Optional Item):

13.1 Liquid nitrogen trap has to be quoted separately for achieving better base vacuum.

14. Power Supply: 415 V, 3 Phase, 50 Hz as per Indian standards (220 V, 50 Hz for Single Phase).

LETTER OF QUOTATION

Quotation No. .

Quotation For:-

To

The Director
CEERI
Pilani (Raj.) 333 031

Sir,

I/We the undersigned hereby offer to supply “ _____ ”
at the rates stated in the attached Schedule (Annexure-I). I/We have carefully gone through and have understood the instructions as contained in the invitation to quote and instructions to Contractors and the Specifications/Drawings enclosed therewith and agree to be bound by the provisions contained therein.

2. I/We agree to hold this offer open up to _____ and not to withdraw, amend or modify the same during the said period. I/We shall be bound by a communication of acceptance dispatched within the prescribed time. The Earnest Money in the form of Bank Guarantee for Rs. _____ in favour of Director, CEERI is enclosed herewith. I/We have understood that the quotation documents have been issued to me/us and I/We am/are permitted to quote in consideration of the stipulation on my/or our part after submitting the quotation. I/We will not resite from this offer or modify the terms and conditions thereof till _____; In case I/We fail to observe to comply with the foregoing stipulation, the Earnest Money shall be forfeited to the CEERI.

3. I/We agree that in the event of failure on my/our part to commence the work under the contract, if awarded, within 15 days from the date of receipt of contract, the Earnest Money shall be forfeited to the Government without prejudice to either rights of the Government under the Contract.

4. The copy of the Specifications/Drawings and all other related documents received alongwith the invitation to quote and Instructions to Contractors are returned herewith duly signed and stamped as a token of acceptance.

Thanking you,

Yours sincerely

Signature of the tenderer and the
capacity in which he signs i.e. sole
proprietor etc.

Date:

Address: _____

Telegraphic Address _____

(TECHNO-COMMERCIAL BID)

1. Schedule to Tender No. :
2. Name of the Tenderer :
3. Time & Date of Receipt of Tender :
4. Opening of the Techno Commercial Bid. :
5. The tender shall remain valid for acceptance for 120 days from the date of opening of the tender

S. No.	Description of stores	Qty.	Place & Date by which delivery is to be made

TERMS & CONDITIONS :

1	EMD in the form of Bank Guarantee for Rs _____ in favour of Director, CEERI, Pilani (Raj.)	
2.	Packing	
3.	Forwarding	
4.	Sales Tax	
5.	Excise Duty	
6.	Installation & Commissioning	
7.	Freight	
8.	Insurance	
9.	Validity of quotation	
10.	Delivery Period	
11.	Mode of Delivery/Shipment	
12.	Guarantee/Warranty	
13.	Spare Parts	
14.	After Sale Service	
15.	Indian Agent's Commission	
16.	Payment	
17.	Inspection	
18.	Training	
19.	Penalty	
20.	Performance Security	
21.	Compliance Statement	
22.	User's List.	

STATION:

DATE:

(Signature of the Supplier with Office Stamp).

Address:
Tel. Address

PRICE BID

**PRICE BID MUST BE SUBMITTED IN THE FOLLOWING MANNER.
ADHERING TO THE FORMAT GIVEN BELOW IS A PRE-REQUISITE
FOR CONSIDERING YOUR QUOTATION.**

1. Schedule to Tender No. :
2. Name of the Tenderer :
3. Time & Date of Receipt of Tender :
4. Opening of the Techno :
Commercial Bid.
5. The tender shall remain valid for acceptance for 120 days from the date of opening of the tender.

Sl. No.		Qty.	Rate	Total cost
1.	Description of the items			
2.	EMD in the form of Bank Guarantee for Rs. _____ in favour of Director, CEERI is enclosed.			
3.	Packing			
4.	Forwarding			
5.	Sales Tax			
6.	Excise Duty			
7.	Installation & Commissioning			
8.	Freight			
9.	Insurance			
10.	Validity of quotation			
11.	Delivery Period			
12.	Mode of Delivery/Shipment			
13.	Guarantee/Warranty			
14.	Spare Parts			
15.	After Sale Service			
16.	Indian Agent's Commission			
17.	Payment			
18.	Inspection			
19.	Training			
20.	Penalty			
21.	Performance Security			
22.	Compliance Statement			
23.	User's List			

STATION:

DATE:

(Signature of the Supplier with
Office Stamp).

Address:
Tel. Address

BID SECURITY FORM

Whereas (hereinafter called "the Bidder") has submitted its bid dated (date of submission of bid) for the supply of (name and/or description of the goods) (hereinafter called "the Bid")

KNOW ALL PEOPLE by these presents that WE (name of bank) of(name of country), having our registered office at(address of bank) (hereinafter called "the Bank"), are bound unto(name of Purchaser) (hereinafter called "the Purchaser") in the sum of for which payment well 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 of20

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form, or
2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of bid validity :
 - (a) fails or refuses to execute the Contract Form if required; or
 - (b) fails or refuses to furnish the performance security, in accordance with the instruction to bidders.

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 Purchaser 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.

This 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 Bank)

Name of Bidder