



# Central Electronics Engineering Research Institute

केन्द्रीय इलेक्ट्रॉनिकी अभियान्त्रिकी अनुसंधान संस्थान

**Pilani (Rajasthan)-333 031**

पिलानी ( राजस्थान ) 333 031

Fax : 01596 – 242135, 242294

Phone : 01596 - 244710

Gram : “ELECTRONIC” Pilani

No. OPEN/GLOBAL TENDER/PUR/2010-11/5

Date :- 12.11.2010

## OPEN/GLOBAL TENDER NOTICE NO. CEERI/PUR/2010-11/5

Sealed tenders are invited on behalf of the Director, C.E.E.R.I., Pilani (Rajasthan) for the procurement of the following stores from Indian / Foreign Original Equipment Manufacturers or their Authorized distributors, dealers, system integrators under **Two Bid system**.

Tender No.	Brief Description of Stores	Qty.	Cost of Tender documents	EMD	Last date & time of Receipt of Tender	Tender Opening date & Time
542/GAP-6505/SNG/10-Pur/10/T-89	Sputter Deposition System for 6-inch Silicon Wafers	1 No.	NIL in case Tender document is downloaded from our website, otherwise Rs. 300/- if it is bought from CEERI	Rs. 3=00 Lakhs	22.12.2010 at 2.30 P.M.	22.12.2010 at 3.30 P.M.

### NOTE

The vendors may down load Tender documents containing detailed technical specifications and terms & conditions from **CEERI Website** [www.ceeri.res.in](http://www.ceeri.res.in) free of cost and submit the tender along with EMD. The tender documents can also be obtained from the office of Stores & Purchase Officer, C.E.E.R.I., Pilani – 333 031 on payment of Rs. 300=00 (NON-REFUNDABLE ) through Demand Draft in favour of Director CEERI, Pilani. The Director, CEERI reserves the right to accept or reject any quotation/tender in part or full without assigning any reason thereof.

Stores & Purchase Officer



केन्द्रीय इलेक्ट्रॉनिकी अभियान्त्रिकी अनुसंधान संस्थान  
Central Electronics Engineering Research Institute  
पिलानी ( राजस्थान ) 333 ०३१  
Pilani ( Rajasthan)-333 031,INDIA

Fax : 01596 – 242135,242294  
Phone : 01596 – 244710

Gram : "ELECTRONIC" Pilani

No. 542/GAP6505/SNG/10-Pur/2010/T-89

Dated: 12.11.2010

**OPEN/GLOBAL TENDER DOCUMENTS**

M/s. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Sub: Supply of Sputter Deposition System for 6-inch Silicon Wafers.

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 22.12.2010 AND THE SAME WILL BE OPENED ON 22.12.2010 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 AND 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 Sputter Deposition  
System  
CEERI Tender No.542/GAP-  
6504/SNG/10-Pur/2010/T-89  
Last date & Time for receipt of  
Tenders 22.12.2010 at 2.30 PM  
Date of opening 22.12.2010 at  
3.30PM  
To  
The Director  
CEERI, Pilani

**ENVELOPE – II**

**PRICE BID**  
Sub.: Supply of Sputter Deposition  
System  
CEERI Tender No.542/GAP-  
5604/SNG/10-Pur/2010/T-89  
Last date & Time for receipt of  
tenders 22.12.2010 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.542/GAP-6505/SNG/10-  
Pur/2010/T-89  
Last date & Time for receipt of  
Tenders 22.12.2010 at 2.30 PM  
Date of Opening 22.12.2010 at  
3.30PM  
THE STORES & PURCHASE  
OFFICER,  
C.E.E.R.I.,  
PILANI – 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 accept any or all tenders either in part or in full without assigning any reasons thereof.

7. One cover should contain only one Tender.

8. The time, date and place of opening of Price bid will be intimated to the bidders in advance and all bidders 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 :-

**INSTRUCTIONS :-**

1. Commercial Terms and Conditions without any indication of price.
2. The tender documents can either be downloaded from CEERI's website [www.ceeri.res.in](http://www.ceeri.res.in) free of cost or may be obtained from the office of Stores & Purchase Officer, CEERI, Pilani – 333 031 (Rajasthan) on payment of Rs. 300/- (NON REFUNDABLE) through a Demand Draft in favour of Director, CEERI, Pilani.
3. Quotation should be submitted directly by the manufacturer/supplier or its sole authorized distributor/dealer. In case of bid by authorized dealer/distributor, the manufacturer authorization should be attached with the technical bid as per Annexure –“G”.
4. 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 and post-warranty period.
5. 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.
6. The bidder should not indulge in any corrupt, fraudulent, collusive, coercive practices during the entire process of procurement and execution of contract/order.
7. Before the deadline for submission of the bid, CEERI reserves the right to modify the bidding document and to extend or not to extend the date of submission. Such amendment/modification will be notified to bidders receiving the bidding document in writing or by cable/fax/email and will also be hosted on CEERI website.
8. Conditional tender will be summarily rejected.
9. A bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice signed by the authorized signatory before the date of submission of the bid. Any re-submission or modification in the bid should be submitted before the date and time of submission of bid as originally conveyed in the invitation of bid.

- 10.No bid may be withdrawn, substituted or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form or any extension thereof.
- 11.First envelope marked “WITHDRAWAL” shall not be opened, but returned to the Bidder subject to submission of valid authorization to request the withdrawal. In case of substituted and modified bid, only the substituted bids and modified bids will be opened subject to production of authorization from the bidders.
- 12.The Bid shall be prepared by the bidder, as well as all correspondence and documents relating to the bid exchanged by the bidder and CEERI shall be written in English language only.
- 13.The vendor must be quoted on FOB/FCA value up-to shipping Airport of the exporting country showing Ex-works prices, packing, forwarding, documentation and inland freight etc.
- 14.The price quoted by the bidder shall remain un-changed during the contract period and shall not vary on any account.
- 15.The vendor must be quoted all lots and items listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Lots or items not listed in the Price Schedule shall be assumed to be not included in the bid.**
- 16.**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 custom duty exemptions under Government Notification No. 51/96 Custom dated 23 July, 1996. We shall pay concessional custom duty.
- 17.**Excise Duty** – We are exempted from the payment of Excise Duty under notification number 10/97. Hence Excise Duty if any, should be shown separately for which excise exemption certificate will be issued.
- 18.**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”.

19. **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.
20. **Bid Currencies** – The vendor shall be quoted prices in Indian Rupees for offers submitted for supply within India and in freely convertible foreign currency in case of the items offered of foreign countries.
21. 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 – I. **WHERE THERE IS NO MENTION OF THE ABOVE TERMS AND CONDITIONS SUCH QUOTATIONS SHALL BE REJECTED AS INCOMPLETE.**
22. Our tender specifications/drawings and technical documents duly stamped and signed by your authorized signatory on all pages in toke of acceptance of our tender specifications/technical requirement and terms and conditions.
23. Comparative statement of technical offers drawing a comparison between your offered specifications and our tender specifications bringing out clearly the deviations, if any.
24. **THE VENDOR MUST BE OFFERED THE VALIDITY OF QUOTATION AS MENTIONED IN TENDER DOCUMENT. IF THE BID VALIDITY IS SHORTER THAN THE REQUIRED PERIOD, SUCH QUOTATIONS SHALL BE REJECTED AS INCOMPLETE.**
25. **Deadline for Submission of Bids :- Bids must be received by the CEERI at the address specified in invitation for bids no later than the time and date specified therein. In the event of the specified date for the submission of Bids being declared a holiday for the CEERI, the Bids will be received up-to the appointed time on the next working day.**
26. **LATE BIDS :- Any bid received by the CEERI after the deadline for submission of bids prescribed by the CEERI will be rejected. Such tenders shall be marked as late and not considered for further, evaluation. They shall not be opened at all and be returned to the bidders in their original envelope without opening.**

**27. The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. All pages of the bid, except for un-amended printed literature, shall be initialed by the person or persons signing the bid.**

**Envelope – II (Price Bid) must contain**

1. Complete quotation both TECHNO COMMERCIAL AND PRICE with commercial terms and conditions along with charges of Packing, forwarding, freight, insurance, Taxes/duties and installation and commissioning and payment terms, delivery date and validity of quotation etc. As per enclosed format. **WHERE THERE IS NO MENTION OF THESE TERMS AND CONDITIONS SUCH QUOTATIONS SHALL BE REJECTED AS INCOMPLETE.**
2. 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. **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, Netherlands – Amsterdam, France – Paris, Canada – Montreal, Singapore – Singapore, Switzerland – Zurich, Italy – Milan, Hong Kong – Hong Kong, Sweden – Stockholm, Australia – Melbourne, Austria- Vienna, Belgium – Brussels, Denmark – Copenhagen, Taiwan – Taipei, Malaysia Kuala Lumpur, 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.

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 120 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.
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 one year (Un-conditional warranty) 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 one 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.



**10. INDIAN AGENTS :-**

- (a) Authorized Agent Certificate of his principal must be submitted by Indian Agent along with his quotation, failing which the quotation shall not be considered. (Format enclosed)**
- (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 :-** The supplier shall arrange extensive operation and maintenance training to two CEERI officials at their works for a period of one week before dispatch of the equipment. All cost including to and fro Air fare, lodging & boarding & local travel to be born by the supplier. The schedule of Training shall be intimated one month advance to complete the formalities in India by the visiting Scientist of CEERI. Further CEERI Scientist/Technical person will be trained by the supplier at CEERI free of cost at the time of Installation/Commissioning.

**14 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.

**15 EMD :-** EMD of Rs. 3,00,000/- OR equivalent in respective Foreign Currency TOWARDS EARNEST MONEY IN THE FORM OF BANK GUARANTEE /DEMAND DRAFT/ BANKERS CHEQUE valid for Six months plus 45 days from the date of opening of the tender must be submitted along with quotation (techno-commercial quotation in case of two bid system), otherwise quotation will not be considered. The firms, if registered with DGS&D, NSIC, Govt. Public Undertakings, Central Autonomous Bodies and with CSIR Labs. / Institutes as manufacturer 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 quotation to enable us to refund their EMD. In case the tender 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.

**16.PENALTY :-** In case the delivery of goods is not made on or before the prescribed date of delivery or the installation and 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 10% from the successful tenderer.

**17. 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 delivery period and installation & commissioning period warranty period plus 2 months. In case of any breach of contract the bank guarantee will be forfeited.

**18. 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.

**19. UNSOLICITED QUOTATION/LATE QUOTATION:-** Unsolicited quotation/incomplete quotations / late or delayed tenders shall not be considered at all. Post tender revision/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.

**20 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**

S. 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 un-ambiguous terms
1	2	3	4	5

**FORMAT OF COMPLIANCE STATEMENT OF TERMS & CONDITIONS**

Tender Terms and Conditions	Whether acceptable or not	Deviation from Tender Terms, if any
1	2	3

**21 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 restriction, 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 effected 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.

**22 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.

**23 VALUATION OF TENDER :-** Before submission of bid, the bidder is expected to examine all the instructions, forms, terms and specifications in the bidding document and should ensure that the following conditions are fulfilled :

- (a) The price schedule should be enclosed and must be signed.
- (b) The bid validity should not be shorter than required.
- (c) The manufacturer's authorization should be enclosed in case the bidder is authorized dealer/distributor.
- (d) The bidders should agree to provide the Performance Security
- (e) The quoted goods should be as per required specifications.
- (f) In case the bid is substantially responsive, the purchase may request that bidder may submit the necessary information, documentations, within a reasonable period of time, to rectify, non-material, non-conformities or omission in the bid related to documentation requirements. Failure of the bidders to comply with request may result in the rejection of its bids. But in case of the material deviation/reservation or omission which limits or is inconsistent with the bidding documents and the purchaser's rights or bidders obligations under the contract or which is rectified, would unfairly affect the other bidders, the bid will be rejected.

- (g) The purchaser shall correct arithmetical errors on the following basis
  - (i) If there is a discrepancy between the unit price and the line item total i.e. 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 subtotal shall prevail and the total shall be corrected, and
  - (iii) If there is discrepancy between words and 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.
- (h) Sealing 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 on the priced bids in the case of two parts bidding.
- (i) The bids shall be evaluated on the basis of final landing cost as per Annexure “E” in case of import and Annexure “F” in case of indigenous item.
- (j) 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.
  - (a) Towards customs duty and other statutory levies as per applicable.
  - (b) Towards custom clearance, inland transportation etc. – 2% of the CIF/CIP value.

(l)The Purchaser 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 purchaser, the quantities in the contract may be enhanced by 10% within the delivery period.

## **TECHNICAL EVALUATION OF TENDERS**

- (a) On the due date the Technical bids will be opened and referred to the Technical Committee which is duly constituted by the Director, CEERI.
- (b) 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.
- (c) After the technical evaluation is completed and approved, CEERI shall inform to the bidders whose tenders have been rejected technically with the reasons for rejection.

25. The successful bidders will be informed regarding the date and time of commercial bid opening.
- 26 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 user's 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.
27. **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.
28. **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.
- 29 **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. 542/GAP-6505/SNG/10-Pur/2010/T-89

Date : 12.11.2010

Last Date &amp; Time for receipt of Tenders 22.12.2010 at 2.30 PM

Date &amp; Time of Opening 22.12.2010 at 3.30 PM

<b>Sl. No.</b>	<b>Description of Stores</b>	<b>Qty.</b>
1.	Sputter Deposition System for 6-inch Silicon Wafers  Technical specifications as per attached sheet.	1 No.

STORES &amp; PURCHASE OFFICER

## Specifications for Sputter Deposition System

CEERI, Pilani has a requirement for **new** sputter system for the VOC Gas Sensor materials like pure metals of platinum, gold, aluminum, copper, silver, tungsten, titanium, chromium and zinc; plus oxides of zinc, tungsten, titanium and iron on substrates like silicon, alumina, and quartz. The system must have a sputtering chamber to include three 4-inch magnetron sputter sources two for confocal RF magnetron sputtering and one for DC sputtering and one 6-inch target assembly for powder target each with UHV shutter and **individual** gas injection **capability**. The substrate holder must be able to be heated up to 850°C in an oxygen environment and accommodate up to one 6-inch wafer. The deposition uniformity must be better than  $\pm 3\%$ , over a 6-inch diameter wafer. At least four mass flow controlled gas lines must be equipped with the **system**. The sputtering system **should** be semi-automatic i.e. computer-controlled and manually controlled both. The base vacuum must be at least  $5.0 \times 10^{-8}$  Torr. The magnetrons in the **system** must be a UHV design - no elastomers or polytetrafluoroethylene (PTFE), allowing baking to 200°C without disassembly UHV.

The magnetron sources must allow reconfiguration between balanced, unbalanced and magnetic materials mode depending on the application. The magnets for the magnetron sources must be located out of the cooling water. The magnets must be vacuum compatible to  $10^{-11}$  Torr.

The substrate heater must allow simultaneous heating, rotation, biasing, **z-motion** and deposition up to 850° C in a **pure** oxygen environment. Temperature stability must be at least  $\pm 1^\circ$  C. The **system must include (at a minimum)** the following major components which must meet or exceed the following minimum specifications:

### 1. Deposition Chamber:

The D-shape chamber whose size is approximately 24" x 24" with front opening door with thick stainless steel wall. Chamber should be designed as fittings for vacuum pumps, all target assemblies, gas **inputs**, **vent** line, **gauges** input, glass window, substrate holder assembly and some additional ports for further changes as **and** when required. The system should be compatible to clean room working environment.

### 2. Vacuum Pumping System:

(a) Rough Vacuum: Rotary Pump (Edwards/Pfeiffer/Varian) with moisture trapping assembly

(b) High Vacuum: Turbo Pump (Edwards/Pfeiffer/Leybold Heraeus/Varian)

The pumping system must be able to pump down to the working pressure within 30 min.

### 3. Magnetron Sputtering Target assembly:

Three 4-inch target assembly and one 6-inch target assembly for powder target. All target assemblies must be water cooled. As a spare, we require one 6-inch target assembly for bigger sample.

### 4. RF Generator: 1000 Watt RF generator with digital display of all electrode voltages.

### 5. DC Generator: 1 kW variable frequency pulse DC power supply

### 6. Matching Network: Automatic and manual tuning, **digital** display of **series** and shunt valve required. Distribution switch or power selection for one to four way



for RF power required

7. **Co-Sputtering:** Required **power distribution** for Co-sputtering
8. **Thickness Uniformity;**  $\pm 2\%$  for 4-inch wafer and  $\pm 3\%$  for 6-inch wafer
9. **Vacuum Measuring system:**
  - (a) **Rough Vacuum:** Gauge with digital display meter (Edward/Varian/Philips)
  - (b) **High Vacuum:** Ion **gauge** with digital display meter (Edward/Varian/Philips)
10. **Substrate holder:** Design for on-axis. There must be an optional **facility** for off-axis deposition also.
  - (a) Accommodates **substrates** up to 6-inch **diameter**.
  - (b) Mounts **to the centre** of chamber with adjusting angles.
  - (c) **Confocal** configuration on vertical center axis of chamber.
  - (d) Continuous motorized rotation (0-20 RPM) with **controller**
  - (e) **Radiant** heating from room temperature to a maximum of **850°C and water cooling**.
  - (f) Water **cooled** reflector **box**.
  - (g) Capable of **being** heated in an **Oxygen** environment.
  - (h) **RF/DC biasing capability** while **rotating / heating / depositing**.
  - (i) Substrate **gas** ring.
  - (j) **Pneumatically controlled** substrate shutter
  - (k) **Ultra High Vacuum** construction.
  - (l) **In-Situ heat treatment during** deposition required.
11. **Gas Handling:**
  - (i) Four **Mass flow controlled gas lines** 0 - 50 **scm (standard cubic centimeter per minute)** with pneumatic isolation valves and filter.
  - (ii) **One Argon gas line plumbed to one sputter source**.
  - (iii) **Three Reactive gas lines plumbed to the substrate gas ring**.
  - (iv) There **should be also provision of needle valve for all gases** for manual control.
12. **Pressure Control / Vacuum Valves:**

**Downstream pressure control.** Closed loop, automatic **pressure control/isolation gate valve**. The throttle **valve** must be full ranged with 1000 positions between the open and closed **valve and must interface** with the **gauge** via a PID controller. The controller must include pressure and position **presets and battery pack** which closes the valve within **3 seconds** in the event of a **power failure (8-inch CF size)**.

*There should be automatic pressure controlled throttle valve assembly for stable pressure during ongoing deposition cycle.*

Manual **vent** valve.
13. **Power-Distribution and Safety Controls:** System should be designed for **440 $\pm$ 10% VAC 50 Hz** supply with three phase one neutral and one ground. Provision should be made for **water and vacuum safety interlocks**.

14. Pneumatic Controls: Pneumatic controls for **shutter(s)** for magnetron sources, substrate holder, four gas lines *etc.*
15. Controls: Semi-automatic
16. **General Requirements:**
  - (a) Installation Site, Installation, and Training:

The Supplier shall deliver and install the UHV sputtering system to the CEERI, Pilani at the location specified by the authorized government representative. The supplier shall provide a pre-installation guide with its proposal submitted in response to the solicitation. The pre-installation guide shall indicate, in detail, all of the site requirements including, but not limited to: utility hook-ups (e.g. electrical, air, water, gas, etc.); required **space (e.g., doorway** passage, floor space, operating space, maintenance access space, *etc.*); required ambient environment (e.g. temperature, vibration, air flow, *etc.*); procedures for receiving the equipment and placing it in its laboratory location for use and communication hook-ups (e.g. Ethernet, portable media connections for data retrieval, *etc.*). The **sputtering system shall be ready** for immediate use following **installation/set-up** by the Supplier.
  - (b) Training: The supplier shall provide two weeks training for two people at company **site**.
  - (c) Warranty: One Year.
  - (d) Documentation:

Written documentation customarily provided to the public with a commercial item shall be provided. **This** shall include two sets of **user manual(s)** and service **manual(s)** or **equivalent** as well as copies of any **software**, and any manuals for the software included with the system, if customarily provided. This documentation must be received at CEERI, Pilani with the system hardware.
17. System Acceptance: The supplier must demonstrate the full system specification including film thickness uniformity on 6-inch wafer at CEERI Pilani.
18. Optional:
  1. Rotating Quartz Crystal Thickness Monitor

Single quartz crystal **sensor**, heat sink, controller, oscillator, cable, **feed-through**, an **70** crystals. **Also must** include rotary feed-through assembly to allow positioning of crystal in substrate position for deposition calibration.
  2. **Additional Spares (Other than Supplied with System);**
    - (i) All 'O' rings – each 10 nos.
    - (ii) Measuring gauges – **five each** Spares of RF generator
    - (iii) Targets and **other parts**.

# FORMAT/QUESTIONNAIR FOR COMPLIANCE OF TERMS AND CONDITIONS

Tender No. : .....

Date : .....

## NOTE

1. **Quotation will not be considered without submission of the format.**
2. If a particular question is not at all applicable please write NA in compliance part in Col. No. 3 below.
3. Kindly see the relevant terms & conditions of the tender document.

S. No.	Terms & conditions of Tender documents	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 conditions quoted for
	2	3	4
1.	a) Whether quotation is direct from Principal supplier/manufacturer or their own office in India (Please specify)		
	b) Whether quotation is being submitted by Indian Agent/authorized distributor/ dealer		
	c) Whether the agent is registered with DGS&D/NSIC/ Govt. Public Undertakings/ Central Autonomous Bodies and with CSIR Labs. / Institutes		
2.	a) Whether the Techno-commercial and price bids (for two bid tender system only) have been kept in separate envelopes duly marked with Techno-commercial Bid and Price Bids respectively.		
	b) Whether the tender Number, Due date and Opening dates have been written outside all the envelopes.		
3	Whether techno-commercial Bid contains EMD, technical literature/ leaflets, detailed specifications and commercial terms and conditions etc. as applicable.		
4.	a) Whether the required EMD is being submitted with the quotation		

	b) Please specify the form of EMD whether in the form of DD/Bank guarantee or Bankers cheque (Please mention No. date & amount of EMD documents) or Bid Security .		
5	a) If the price are on Ex-works basis or FOB/FCA (names port of shipment ) Whether specific amounts of expenses like packing forwarding, Inland handling documentation etc. have been mentioned in quotation separately in clear terms.		
6.	Whether prevailing rates of Sales Tax, Excise Duty and other Govt. levies (for indigenous supplies) have been given in quotation.		
7	Have you mentioned the validity period of the quotation as per our requirement.		
8	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 quotation as per Annexure “H” c) If there is any difference in price of last two orders & those quoted to us. If yes please give reasons for the same. d) Whether supplied in CSIR Labs.		
9.	Have you gone through the specification Clause and 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.		
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 and tentative size and weight of the consignment has also been indicated.		
13	Do you agree to the submission of Performance Bank Guarantee along with order acceptance and have you mentioned in your quotation about this.		

14	a) Do you agree with the payment terms for indigenous supplies?		
	b) Do you agree with the payment terms for imports supplies?		
15	Do you agree about the date of commencement of warranty period and its extension is necessary.		
16.	a) Who will install/commission and demonstrate the equipment at CEERI FREE OF COST.		
	b) Will you be able to do it within a month		
17.	Have you mentioned the guarantee/warrantee period in your quotation and do you agree with guarantee clause?		
18	Spare Parts		
19	After Sales services		
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 and 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 at your factory as well as at the time of Installation at CEERI, Pilani		
24.	a) Whether all the pages have been page numbered?		
	b) Whether quotation has been signed and designation & name of signatory mentioned.		
25	Do you agree to settle the issue through the sole arbitration of the DG, CSIR or his nominee?		

**Signatures of the authorized signatory**

**Name and designation of the signatory**

## (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 SCHEDULE FOR GOODS BEING OFFERED FROM ABROAD**

Name of Bidder \_\_\_\_\_

Tender No. \_\_\_\_\_

1	2	3	4	5	6		7		8		9
Sl. No.	Item Description	Country of origin	Unit	Qty.	Unit Price		Total Price ( 5 x 6 )		Charges for Insurance and Transportation to port/place of destination		Total Price (7+8)
					FOB Named port of shipment	FCA name place of delivery	FOB named port of shipment	FCA named place of delivery	Ocean	Air	CIF

Total Bid price in foreign Currency ----- in words.

Signature of Bidder

Name

Business Address

Note :

1. Indian agents name and address
2. Installation / commissioning & training charges if any
3. Cost of Spares
4. The Indian agent's commission shall paid in Indian Rupees only based on the Exchange Rate prevailing on the date of negotiation of documents
5. The cost of optional items shall be indicated separately

## PRICE SCHEDULE FOR GOODS BEING OFFERED FROM INDIA

Name of the Bidder \_\_\_\_\_

Tender No. \_\_\_\_\_

1.	2	3	4	5	6	7	8	9	10	11
Sl. No.	Item Description	Country of Origin	Unit	Qty.	Ex-works, Ex-warehouse, Ex-show room of the self price (inclusive of all taxes already paid	Total Price Ex-works, Ex-warehouse, Ex-show room of the self price (inclusive of all taxes already paid (5x6)	VAT & other Taxes like Excise duty payable, if contact is awarded	Packing & forwarding up-to station of dispatch if any	Charges of Inland Transportation Insurance up-to Institute	Installation commission Ing and training charges if any

Total Bid price in foreign currency \_\_\_\_\_ in words.

Signature of Bidder

Name

Business Address

Note

1. The cost of optional items shall be indicated separately.
2. Cost of spares



## 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 are binding on the Manufacturer.

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 complete name of Manufacturer), who are official manufacturers of (insert type of goods 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.

We hereby extend our full guarantee and warranty in accordance with warranty clause of the conditions of the contract with respect to the goods offered by the above firm.

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 purchaser )	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 and those quoted to us.	Has the equipment been installed satisfactorily? (Attached a certificate from the Purchaser / Consigner )	Contact Person along with Telephone Number, fax no. and E-mail address

Signature and Seal of the Manufacturer/bidder \_\_\_\_\_

Place \_\_\_\_\_

Date \_\_\_\_\_

**MODEL BANK GUARANTEE FORMAT FOR FURNISHING BID SECURITY EMD)**

Whereas .....(hereinafter called the “tenders”) has submitted their offer dated ..... for the supply of (hereinafter called the “tender”) against the Purchaser’s tender enquiry No. .... KNOW ALL MEN by these presents that WE .....of .....having our registered office at ..... are bound unto .....(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 THIS OBLIGATION ARE :**

- (1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
  
- (2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity :-
  - (a) If the tenderer fails to furnish the performance security for the due performance of the contract.
  - (b) (b) Fails or refuses to accept/execute the contract.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the purchaser (CSIR/CEERI) 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 the occurrence of one or both the two conditions, specifying the occurred condition or conditions. This guarantee will remain in force up-to and including 45 days after t he period of tender 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 and address of the Bank and address of the Branch.