

Re-Tender

for

**Supply & Installation of the  
Thermal Chemical Vapour Deposition System**

at

Indian Institute of Technology Jodhpur

NIT No. : IITJ/SPS/ICT/1/1(I)/2014-15/52  
NIT Issue Date : 28 October 2014  
Last Date of Submission : 07 November 2014 by 3:00 PM



॥ त्वं ज्ञानमयो विज्ञानमयोऽसि ॥

Indian Institute of Technology, Jodhpur  
Old Residency Road, Ratanada, Jodhpur – 342 011, Rajasthan  
Telefax: 0291- 2449011, email: sps@iitj.ac.in

## Notice Inviting Tender

Indian Institute of Technology (IIT), Jodhpur, Rajasthan (hereinafter referred to as the “Institute”) an Educational Institute of National Importance, invites sealed tenders from the authorized distributors/dealers for supply and installation of the following item at the Institute. You are requested to quote your best offer along with the complete details of specifications, terms & conditions. The tender document can be downloaded from the Institute website at URL Link: <http://www.iitj.ac.in> or from Central Public Procurement Portal link: <http://www.eprocure.gov.in>.

S. No.	Item Description	Quantity
1.	As per Annexure-I	As per Annexure-I

Quotation should be sealed and superscribed with tender number and due date of submission and address to:

“Officer-in-charge  
Stores & Purchase Section  
IIT Jodhpur  
Old Residency Road, Ratanada  
Jodhpur – 342 011, Rajasthan”

The sealed quotations should reach the Institute, latest by November 07, 2014 by 03:00 PM and it will be opened on same day at 04:30 PM in the Conference Room, Administrative Block of the Institute in the presence of the bidder(s) or their authorized representative(s), who will present at the scheduled date and time.

### Terms & Conditions:

1. **Earnest Money Deposit:** The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of Rs.10,000/- (Rupees Ten Thousand only) which is refundable and a non-refundable tender fee of Rs.200/- (Rupees Two Hundred only) by way of demand draft only. The demand drafts shall be drawn in favour of “Director, IIT Jodhpur” payable at Jodhpur.

The Earnest Money Deposit of the tenderer, whose tender has been accepted, will be returned on the submission of the performance security, and for unsuccessful bidder(s) it would be returned after award of the contract. Earnest money deposit of the successful tenderer shall be forfeited, if it refuses or neglects to execute the order or fails to furnish the required performance security within the time frame as specified by the Institute.

After the award of the contract to the successful tenderer, the earnest money deposit of the unsuccessful tenderer(s) will be refunded within 30 days.

Bid(s) received without demand drafts of EMD and tender fees shall be liable for rejection.

The firms who are registered with National Small Industries Corporation (NSIC) / or Small Scale Industrial (SSI) are exempted to furnishing the EMD and tender fee.

2. **Rates:** Rates should be quoted on FOR destination at IIT Jodhpur, Old Residency Road, Ratanada, Jodhpur – 342 011, Rajasthan on DOOR Delivery Basis, inclusive of all the charges, with breakups as:

- (i) Basic Cost.
- (ii) VAT / CST as applicable.
- (iii) Total Cost (F.O.R at IIT Jodhpur).

Note: Institute is registered with DSIR, Govt. of India (Custom Duty Notification No. 51/96- Custom dt: 23 July, 1996 and Central Excise Duty Notification No. 10/97- Central Excise dt: 1 March, 1997) and is therefore, exempted from Excise Duty and partial exempted from Custom Duty (CD applicable to IIT Jodhpur is 5.15%). Exemption certificate of the same shall be issued.

3. **Validity:** The quoted rates must be valid for period of 90 days from the date of closing of the tender. The overall offer for the assignment and bidder(s) quoted price shall remain unchanged during the period of validity. If the bidder quotes the validity shorter than the required period, the same will be treated as unresponsive and it may be rejected.

In case the tenderer withdraws, modifies or change his offer during the validity period, bid is liable to be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof. The tenderer should also be ready to extend the validity, if required, without changing any terms, conditions etc. of their original tender.

**4. Delivery period:** All the goods ordered shall be delivered within 04 weeks from the date of issue of the purchase order. All the aspects of safe delivery and commissioning shall be the exclusive responsibility of the supplier.

If the supplier fails to deliver and commissioning of the goods on or before the stipulated date, then a penalty at the rate of 1% per week of the total order value shall be levied subject to maximum of 10% of the total order value.

**5. Guarantee / Warranty:**

Tender must be quoted with the two (02) years comprehensive on-site Warranty / Guarantee and it will commence from the date of the satisfactory installation / commissioning of equipment against the defect of any manufacturing, workmanship and poor quality of components.

**6. Performance Security:**

After the award of work, the supplier shall be required to submit the performance security in the form of irrevocable bank guarantee in the prescribed format (Annexure-II) issued by any Nationalised Bank / or Fixed Deposit Receipt, for an amount equal to the 10% of order value and **it will be kept valid for a period of 60 days beyond the date of completion of warranty period. Warranty Period will be commenced from the date of the installation of the supplied item. Hence, be careful at the time of calculation of the validity date of Performance Bank Guarantee.**

**7. Payment Terms:** 90% payment against delivery and satisfactory installation, and balance 10% after the submission of Performance security. It is must to submit the Performance Security within one month after the delivery of the ordered material, otherwise the remaining 10% payment (equal to the amount of Performance Security) will be forfeited, due to noncompliance of tender Terms & Conditions.

8. Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature along with Bill of Material (BoM) mentioning all the terms & conditions clearly, must be enclosed with the bid.

9. Bidder shall submit a copy of the tender document and addenda thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as mentioned in the tender enquiry document.

**10. Applicable Law:**

- The contract shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings / processing.
- Any disputes are subject to exclusive jurisdiction of Competent Court and Forum in Jodhpur, Rajasthan, India only.
- The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Jodhpur. The decision of the Arbitrator shall be final and binding on both the parties.
- Force Majeure: Any delay due to Force Majeure will not be attributable to the supplier.

**11.** After due evaluation of the bid(s), the Institute will award the contract to the lowest evaluated responsive tenderer(s).

**12.** Conditional bid will be treated as unresponsive and it may be rejected.

**13.** The Institute reserves the right to accept in part or in full or reject any or more quotation(s) without assigning any reasons or cancel the tendering process and reject all quotations at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).

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## Annexure-I

### **Specification for Thermal Chemical Vapour Deposition system**

Thermal chemical vapor deposition (CVD) system with vacuum unit, Rotameters, power supply/ readout module, manuals and installation.

#### **Tubular Furnace structure**

1. Number of zone : Three
2. Heating temperature range : 400-1200 °C
3. Temperature accuracy :  $\pm 1^\circ\text{C}$
4. Furnace tube size : Minimum diameter= 60 mm and length= 1000 mm
5. Quartz tube with couplers : 1 numbers high purity fused quartz
6. Sample transfer rod : 1 no.
7. Heating rate : 5 °C per minute
8. Each zone isothermal length : Minimum 100 mm length and 60 mm dia
9. Construction : Horizontal
10. Insulation : Vacuum formed Zirconia fiber
11. Shell Construction : with proper stiffeners and neat powder coat painting.
12. Temperature control : (8x2=16 segment) PID programmer cum Digital Temperature controller cum Indicator X 3 numbers
13. Temperature sensor : 3 numbers
14. Power control : Through the phase angle controlled thyrister
15. Vacuum pump and gauge : Minimum  $10^{-2}$  mbar by using Rotary pump and also provide a gauge
16. Gas purging arrangement
  - (a) Pipe lines : SS 304
  - (b) pipe line fittings : 6mm dia
  - (c) Gas flow control : Through Rotometers (4 no.)
  - (d) Gas mixing chamber : One unit kept between the Rotameters and the furnace

17. Controlled panel box with a door coupled with furnace stand to height of 1 meter
18. Copper fitting should be provide with water cooling arrangement and Whiton “O” ring ( excluding Chiller or water pump).
19. At least one port for pulling and purging gases
20. suitable for following gases: (i) Methane (CH<sub>4</sub>); (ii) Hydrogen (H<sub>2</sub>), (iii) Nitrogen (N<sub>2</sub>) and(iv) Oxygen (O<sub>2</sub>)
21. Safety: Over current and short current protection, Thermocouple breakdown alarm, high temperature alarm.
22. Demonstration of nanostructures growth, training on CVD system and provide all manuals

**Consumable accessories:**

- |                                 |   |                                    |
|---------------------------------|---|------------------------------------|
| 23. Quartz tube with couplers   | : | 2 numbers high purity fused quartz |
| 24. Alumina boat and substrates | : | 10 no. each                        |

## Annexure – II

### BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

The Director  
Indian Institute of Technology Jodhpur,  
Jodhpur (India) 342011.

WHEREAS..... (Name and address of the Supplier) (hereinafter called “the Supplier”) has undertaken, in pursuance of contract no..... dated ..... (hereinafter called “the contract”) to supply .....

AND WHEREAS it has been stipulated by you in the said contract that the Supplier shall furnish you with a bank guarantee by a scheduled nationalized bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with and due performance of the contract;

AND WHEREAS we have agreed to give the Supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the Supplier, up to a total of .....(amount of the guarantee in words and figures), and we hereby irrevocably and absolutely undertake to pay you immediately, upon your first written demand declaring the Supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of(amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.



The Bank guarantee shall be interpreted in accordance with the laws of India. The Guarantor Bank represents that this Bank Guarantee has been established in such form and with such content that is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

The Bank Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank or the Supplier. The Bank further undertakes not to revoke this Guarantee during its currency except with the previous express consent of the Buyer in writing.

The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorized and has full power to execute this Guarantee for an on behalf of the Bank.

This guarantee shall be valid up to and including the ..... day of ....., 20.....

.....

(Signature with date of the authorised officer of the Bank)

.....

Name and designation of the officer

.....

Seal, name & address of the Bank and address of the Branch