

# **NATIONAL INSTITUTE OF TECHNOLOGY, BHOPAL**

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## **INVITATION FOR QUOTATIONS FOR SUPPLY OF LAB EQUIPMENT**

Enquiry No: MANIT/SP/ENQ/Chemical/ONGC/06

Date: 31/05/2017

**Due Date: 21/06/2017**

**Time : 3.00 P.M**

To

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Dear Sir,

**Sub : INVITATION FOR QUOTATIONS FOR SUPPLY OF PECVD cum PVD SYSTEM**

1. You are invited to submit your most competitive quotation for the following goods:-

S. No	Brief Description of the Goods	Specifications & drawing	Qty	Delivery Period	Place Of Delivery
.	PECVD cum PVD System	Enclosed	01	30 days	02 <sup>nd</sup> Floor, Department of Chemical Engineering, MANIT, Bhopal

The price should be valid for One year .

**Total Pages including this page: .....**

2. **Bid Price**

- a) The Quotation should be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
- b) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price. Price should be quoted for net FOB, MANIT, Bhopal. However the Excise/Custum Duties, sales Tax and other incidental charges must be mentioned separately. (In the Format Enclosed).There should not be any hidden cost.
- c) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be **subject to adjustment on any account**.
- d) Technical Compliance Statement must be submitted with the offer.
- e) The bidder should have valid TIN No and proof to be enclosed along with the offer

3. **Each bidder shall submit one quotation for the item in an envelop mentioning the Enquiry No & Due Date, otherwise bide will not be considered for opening**

4. **Validity of Quotation**

Quotation shall remain valid for a period not less than 90 days after the deadline date specified for submission.

5. **Eligibility criteria required for Vendor/Supplier/Manufacturer**

The following points to be considered for the Qualification /Eligibility Criteria of the Vendors

- i.) The compliance certificate must be submitted for the specification asked in this tender and any deviation from the required specification must be specified.
- ii.) The dealer should have a minimum turnover of Rs. 50 Lacs in last year. C.A. certificate in this regard is to be submitted.
- iii.)The Dealer should have TIN No.

Detailed Client list with address (preferably in reputed Institute/Organization) must be enclosed.

6. **Evaluation of Quotations**

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

- (a) are properly signed ;
- (b) confirm to the eligibility criteria of the vendor; and
- (c) confirm to the terms and conditions, and technical specifications.

7. **Award of contract**

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially technically and financially responsive and who has offered the lowest evaluated quotation price. The quantity floated for the items may vary during the award of contract.

7.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

7.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

7.3 Payment shall be made within 30 days of installation & acceptance of the Goods/Items.

8. The goods/Items should be warranted/ guaranteed for minimum One Year and a performance Bank Guarantee 10% of the basic value is required for the warranty period.
9. The tenderer should avoid the use of vague term such as “Extra as applicable”. Such offers shall be treated as non responsive.
10. The Institute reserves the right to accept /reject all or any offer without assigning any reason thereof.
11. In all matters of dispute the decision of the Director, MANIT Bhopal shall be final and binding on the tenderers.
12. Jurisdiction to Courts of Bhopal only.
13. You are requested to provide/submit your offer latest by **21<sup>th</sup> June, 2017 hours 3.00 PM at Central Store and Purchase MANIT Bhopal,**
14. The envelope of quotation shall be super scribe as **“Quotation No and Item quoted” with the Due date”**
15. We look forward to receiving your quotations and thank you for your interest in this project.

Yours faithfully

**For Director**

Maulana Azad National Institute of Technology, Bhopal

## Technical Specifications for PECVD cum PVD System

### 1. System Description

Supply, installation and performance demonstration of plasma enhanced chemical vapor deposition (PECVD) cum PVD system with necessary hardware at MANIT Bhopal. The thrust area using this system will be to CO<sub>2</sub> Plasma and to produce metallic coatings. The vendor must provide detailed specifications of the infrastructural requirement for the PECVD cum PVD system with a bid. Also the tender should provide the clear timeline by which the system will be built, inspected and installed. The system shall consist of following parts.

- (a) PECVD cum PVD Chamber
- (b) Vacuum system
- (c) Sputtering unit
- (d) DC power supply
- (e) Electrical
- (f) Vacuum components and spare parts

### 2. PECVD cum PVD Chamber

- 2.1 Circular chamber of suitable size made up of Fused galss/SS-304.
- 2.2 Proper arrangement for loading and unloading the substrate manually.
- 2.3 View ports (~2 inch Diameter) for viewing the plasma if made of SS.

### 3. Vacuum system

- 3.1 The ultimate vacuum that can be achieved in clean, cold, empty and dry degassed chamber is of the order of 10<sup>-6</sup> mbar or higher
- 3.2 Rotary pump of 100 liters/min or higher (Direct driven type).
- 3.3 Analog Gauges (Pirani Gauges ) with readout meter. Pirani Gauges with measuring range up to 10 to 10<sup>-3</sup> mbar for measuring low vacuum
- 3.4 Throttle and air admittance valve should be placed at suitable position in the vacuum system.
- 3.5 Vacuum lines made up of stainless steel, fitted with bellows adopter wherever necessary to arrest the vibrations.

#### *Vacuum line accessories*

- 3.6 Suitable roughing and backing valve for vacuum chamber.

### 4. Sputtering Unit

The Sputtering unit should be capable of adjustment in distance with respect to substrate holder.

- 4.1 Water cooled Magnetron Sputtering target (2 inch Diameter).
- 4.2 DC Power supply for Sputtering target holder assembly.

## **5. Electrical Connections**

- 5.1 All the electrical switch gears like Contactors, Relays and Fuses etc. are mounted on a plate and fitted vertically for the convenience of maintenance.
- 5.2 Provide a set of spare RF connectors and RF cables with N type connector.

## **6. Gas management System**

- 6.1 Necessary gas valves, needles valves should be provided.

## **7. Deliverable Documents, Tool-kits and Spare Parts**

- 7.1 All documents shall be in English language.
  - (a) System Operational manual in print and CD.
  - (a) A Set of spare O-rings, Tool-kits for maintenance of system, Gasket for every port, Diffusion Pump Lubricant