

DEPARTMENT OF CHEMISTRY  
INDIAN INSTITUTE OF TECHNOLOGY - DELHI  
HAUZ KHAS, NEW DELHI - 110016

Dated: 04/07/2012

**NOTICE INVITING QUOTATIONS**

**Sub: Portable Tabletop Sputtering Unit with Multiple Targets**

Sealed quotations in separate envelopes of technical and commercial bid kept in a one sealed outer envelope are invited for purchase of a **Table Top Sputtering Unit with Multiple Targets** for microscopy samples as per specifications given below. Your sealed quotation should reach latest by 5 PM on 23/07/2012 to **Prof. A. K. Ganguli Department of Chemistry, Indian Institute of Technology – Delhi (IIT Delhi), Hauz Khas, New Delhi - 110016**. Your quotation should be superscribed “**Quotation for Portable Tabletop Sputtering Unit with Multiple Targets due on 23/07/2012**”.

**Specifications: Portable Tabletop Sputtering Unit with Multiple Targets**

**TECHNICAL SPECIFICATIONS**

Pumping characteristics: Atmosphere to  $4 \times 10^{-6}$  Torr in 15 - 30 minutes in a clean and dry system  
Substrate Holder: Circular diameter 1cm to 4 cm  
Two Sources: Gold and Silver by DC / Pulsed DC sputtering  
Sputtering Target: 2” diameter

**VACUUM SYSTEM**

Vacuum chamber: Approx. dia. 300 mm x 250 mm (ht) cylindrical with gaskets on both sides  
Vacuum Pumps: Turbo Molecular Pump, pumping speed 80 - 100 Lit/sec.  
Rotary Pump: Two stage direct driven vane type, Pumping Speed 100 - 200 lit/min (N<sub>2</sub> Pumping speed)  
Vacuum Gauge: Active Pirani Gauge Head / Active Cold Cathode Gauge Head & Vacuum Indication (Digital) on Front Panel and Control unit  
Chamber Vent Valve: 1 no., Solenoid operated & KF10 compatible  
Complete SS 304 Vacuum plumbing with KF 25 couplings with Viton O’rings and seals

**POWER SUPPLY**

Mains supply 220V, AC, 50 Hz,  $\pm 10\%$ , single phase  
Pulse DC power to the sputtering chamber: **at least 300 W**  
Continuous power control  
Active arc suppression circuit

**SYSTEM**

**Portable tabletop stand alone system with total dimensions 1000 cm X 800 cm (Length X Width) and 600 cm height**

**The company must have supplied same system in India to at least 5 institutes in the last 2 years**

**Gas Inlet**

Gas inlet for Ar, 1/4” Swagelok, fitting with Mass Flow Controller

### **Optional items**

Specification of Target: Ag and Au targets, 2" diameter 5 mm thick and 99.9% purity  
Quartz thickness Monitoring System  
Backing plates for mounting sputtering targets - 2 nos.  
All O'rings / gaskets - 1 set  
Set of essential tools - 1 set  
Rotary pump oil - 1 charge  
Fuses - 1 set

### **Terms & Conditions:**

1. The quotations must have validity of at least three months.
2. Quotation must include insurance and air-freight charges, delivery period of the items addresses to The Indian Institute of Technology, Delhi, India and the prices have to be given on both "FOB" as well as "CIF" (CIF, New Delhi).
3. The products will be used for educational purposes. Any applicable academic institution discounts should be stated clearly in the commercial bid.
4. Detailed brochures should accompany in the technical bid.
5. If the bidder is an authorized dealer then the authorized Indian dealership certificate from the principles should be enclosed.
6. IEC certificate from the Ministry of Commerce may be enclosed alongwith the quotation in favour of Indian agent.
7. Minimum three year warranty required (preference will be given if additional warranty period provided)
8. Payment will be through irrevocable letter of credit for foreign supplier. For Indian supplier payment will be done after installation.
9. In case the items are proprietary products of the company, a "Proprietary item certificate" stating the same must be provided with the technical bid.
10. Training and installation should be provided free of cost.
11. List of end users should be provided.
12. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.