

**DR. S.S. BHATNAGAR UNIVERSITY INSTITUTE OF CHEMICAL ENGINEERING  
& TECHNOLOGY, PANJAB UNIVERSITY, CHANDIGARH**

No. SSBUI CET/

Date 27.9.2016

**Subject: Invitation for Bids for supply of “VACUUM OVEN WITH VACUUM PUMP” to be purchased under CSIR project**

Dear Sir/Madam,

You are invited to submit your most competitive bid for the items with detailed specifications as mentioned below:

**SPECIFICATIONS OF VACUUM OVEN**

**Specifications and Material of Construction :** Vacuum ovens should be 200×200×300mm of double walled convection heated units with outer body have thick PCRC sheet duly pre-treated with primers and rust proofing and painted with long lasting stove enamel or elegantly powder coated . The inner chamber should be constituted of heavy gauge stainless steel sheet of SS-304 grade. The gap between the walls filled with high grade mineral glass wool, which ensures maximum thermal efficiency in our vacuum oven. The unit should be mounted on a sturdy steel frame.

**Temperature range:** 50°C to 200°C

**Vacuum:** The unit is designed to provide/ hold vacuum of 700 mm Hg. Digital vacuum indicator cum controller with vacuum transducer

**Insulation:** The gap of 75 mm between the outer and the inner wall is filled with special grade glass wool to prevent thermal losses

**Shelves: Two**

**SPECIFICATIONS OF VACUUM PUMP**

**Vacuum Pump:** For dry, oil-free applications. Diaphragm pump that is highly resistant to chemicals as all parts that come into contact with gas be made of PTFE or PTFE compounds

**Technical Data**

Pump rate max. (50/60Hz) = 1.7 m<sup>3</sup>/h

Final pressure without gas ballast = 8 mbar

Final pressure with gas ballast = 15 mbar

There should be Two Suction levels

Input pressure min. = 7 mbar

Input pressure max. = 1050 mbar

Cylinder = 2

Speed dependent pressure control

Speed range = 1380 - 1680 rpm

Nominal speed = 1380 rpm

Noise at low pressure 65 dB (A)

Permissible relative humidity = 80%

**Protection class according to DIN EN**

**60529 IP 54**

RS 232 interface should be provided

Power input = 180 W

## **TERMS AND CONDITIONS:**

1. Kindly send the bid into two parts indicating Technical Bid and Financial Bid. The Technical and Financial bid should be sealed by the bidder in separate envelopes duly super-scribed and both these sealed envelopes are to be put in a bigger cover (envelope) which should also be sealed and duly super-scribed. The bid should be addressed to/in favour of **Prof. Anupama Sharma, PI, CSIR Research Project, Dr. SSBUI CET, Panjab University, Chandigarh-160014 and should reach in the office of this institute by October 7, 2016 till 4.00 p.m.** Kindly mention on the outer cover “BID FOR VACUUM OVEN WITH VACUUM PUMP” under CSIR project of Prof. Anupama Sharma.
2. The bids should be submitted along with an Earnest Money Deposit (EMD) of Rs. 12000/- in the form of an A/c payee Demand. The EMD should be in favour of The Registrar, Panjab University, Chandigarh, payable at Chandigarh. The EMD should be in a separate envelope duly super-scribed and should be put in the bigger cover (envelope). If EMD is not found in the bigger cover (envelope), the bidder will be disqualified completely and the technical bid will also not be opened.
3. The EMD would be returned to the bidder within 30 days of opening of the technical bid, in case it doesn't qualify technically.
4. The bidder who qualifies technically, only his financial bid will be opened.
5. The bidder who qualifies technically, the Earnest Money Deposit (EMD) by the bidder would be returned after 3 months of satisfactory installation and working of the equipment/instrument so supplied by the concerned bidder.
6. The bidder should quote all the prices (rates) in Indian Rupees (INR) only.
7. The items, if so ordered should be delivered F.O.R. this institute.
8. The relevant catalogue and/or leaflet, if any, should be sent along with the Technical Bid. The make/type detail specifications, salient features, etc. should be clearly mentioned.
9. The Government levies, viz- Sales tax/VAT, Excise Duty, etc., if any, so chargeable should be clearly mentioned in the bid.
10. All commercial terms and conditions viz- validity, delivery period, freight charges (if any), warranty, etc. should be clearly mentioned in the financial bid.
11. The bidder is required to quote for each item separately in terms of basic price and all other charges.
12. The payment would be made by the University from CSIR Project as per its norms and procedures.
13. The discount, if any, for academic institutions should also be mentioned.
14. Incomplete bids shall not be accepted and would be rejected.

Yours Sincerely,

Prof. Anupama Sharma  
PI, CSIR Major Research Project  
Dr. SSBUI CET, Panjab University  
Chandigarh-160014

Forwarded

Prof. Meenakshi Goyal  
Chairperson, Dr. SSBUI CET