

**PONDICHERY UNIVERSITY, PUDUCHERRY – 605 014**  
**DEPARTMENT OF CHEMISTRY**

Ref: PU/CH/KT/Tenders/2011-2012/24

27<sup>th</sup> July 2011

Sealed quotations under two bid systems are invited for purchase of '**Rotary Evaporator along with vacuum pump and chiller**' and '**Oil Diffusion Pump**' under Pondicherry University start up grant projects. The quotations duly signed and sealed should be submitted to **Dr. K. Tharanikkarasu, Professor, Department of Chemistry, Pondicherry University, PUDUCHERRY – 605 014** and the quotations should be sent by Post (Normal / Speed / Registered / Courier) only. The price quoted should include all the costs such as delivery, installation, testing etc., and also inclusive of all taxes. Warranty terms should be explicitly specified in your quotation. **Last date for receiving quotations is August 11, 2011, 3.00 PM.** The technical specifications are given below.

**1) Rotary Evaporator along with vacuum pump and chiller:**

**(a) Rotary Evaporator:**

Rotation speed	: 20 – 270 rpm with digital display
Lifting mode of rotary unit	: Motorised
Vacuum controller	: Microprocessor controlled with digital display of vacuum
Evaporating flask sizes	: From 50 ml to 5 Lit.
Power consumption during heating	: 1300 W or above
Temperature range for heating bath	: 20 °C – 180 °C
Heating bath controller	: Microprocessor controlled
Volume of heating bath	: 4 Litre or above
Temperature accuracy	: ± 1 °C
Over heat protection	: Should be included
Temperature and RPM display	: Digital
Supply voltage	: 230 V / 50/60 Hz

**(b) Vacuum Pump:**

No. of stages	: Two-stage diaphragm pump
Suction capacity	: 0.75 m <sup>3</sup> /h or above
Ultimate vacuum	: 12 mbar
Power input	: 80 W

**(c)**

**Chiller:**

Temperature range	: -20° C to +100° C
Cooling capacity	: 100 W at -10° C
Temperature control accuracy	: +/- 0.2° C

## 2) Oil Diffusion Pump:

### (a) Diffusion Pump:

Pumping speed	: 100 l/s
Critical backing pressure	: 0.1 torr
Ultimate vacuum	: $1 \times 10^{-7}$ Torr
Oil capacity	: 200 ml
Pump fluid	: Silicon fluid
Heater capacity	: 250W or higher
Backing pump	: Rotary vacuum pump (see specification below).
Power supply	: 220V, 50 Hz.

### (b) Rotary Vacuum Pump:

Pumping speed	: 100 lpm
Ultimate vacuum	: $1 \times 10^{-3}$ Torr
Motor	: 0.5 hp, 1440 RPM or better
Oil capacity	: 1.5 lit
Pump fluid	: Distilled Mineral oil vacuum grade.
Power supply	: 220V, 50 Hz.

### (c) High Vacuum Isolation Valve:

Valve	: ISO63 butterfly valve
Leak rate	: better than $1 \times 10^{-7}$ mbar l/s

### (d) Backing/Roughing Valve:

Valve	: NW25 right angle valve, manual operated
Leak rate	: better than $1 \times 10^{-7}$ mbar l/s.

### (e) Vacuum Controller:

Measuring range	: 1000 torr to $1 \times 10^{-8}$ torr
Channel	: 1 penning and 2 Pirani gauge head
Penning gauge range	: $10^{-3}$ Torr to $10^{-8}$ Torr
Pirani gauge range	: 1000 Torr to $10^{-3}$ torr.

### (f) Liq. Nitrogen trap:

Capacity	: 1 lit.
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Complete unit (a to e) should be mounted on a trolley for easy moving of the unit.

## TERMS AND CONDITIONS

### I. General Information:

a) Last date and time of receipt of the Quotations: August 11, 2011, 3.00 PM

b) Date and Time of Opening of the Quotations: August 11, 2011, 4.30 PM

b) Quotation / Tender Document fee Rs. 500/-

c) EMD rates: 2.5% of the quoted price.

d) Two bid systems have to be strictly followed. One for Technical bid and another for commercial bid and each bid should be submitted in separate sealed covers.

e) However, the tender document fee and EMD as specified above should be remitted by each firm / bidder, collectively for all their bids advertised under this tender.

f) Quoting merely the lowest price does not confer any right to any bidder for award of supply order. The University's Purchase Committee, reserves the right to select the equipment any bid under the grounds of specification compliance, technologically advanced quality, proven performance track record, brand reputation, service backup support & training, offer of additional / special features, compatibility with the existing System, etc.

g) The Quotation / Tender Document Fee and EMD should be submitted along with your quotations.

h) The quotation must be submitted along with the stipulated quotation document fee and EMD in the sealed cover, super-scribing "**Rotary Evaporator along with vacuum pump and chiller and Oil Diffusion Pump– Department of Chemistry**". The name and address of the bidder should also be mentioned at the from address space.

i) The quotations should be addressed and posted to the following address by speed or registered post or by courier.

**Dr. K. Tharanikarasu, Professor, Department of Chemistry, Pondicherry University  
PUDUCHERRY – 605 014**

h) Quotations will not be accepted through fax / e-mail.

### II. Common Conditions (Import or Indigenous)

#### 1. Purchase of Quotation Document:

The Quotation / Tender document can be downloaded from the University website [www.pondiuni.edu.in](http://www.pondiuni.edu.in) or procured from the Pondicherry University on payment of fee as specified above, by means of a D.D, drawn in favor of **The Finance Officer, Pondicherry University, payable at Puducherry**. The downloaded application should be accompanied with the quotation document fee, in the form of a Demand Draft.

#### 2. Price Schedule

The rates should be quoted for a single unit and also for the total quantity required by the University. The price should include the delivery, installation, training charges, etc. at the respective Department, Pondicherry University. The prices quoted shall remain firm until the equipment is supplied to the respective Department, Pondicherry University.

#### 3. Quoting the Core price & Tax, Duties, Discount etc.

The taxes / duties / discounts, if applicable, are to be explicitly and separately shown in the bid.

#### 4. Eligibility:

The firm must have the requisite domain expertise with regard to supply, installation and post-sale service of the items they are quoting. The firm should have been in existence for at least six years as on the date of this quotation and must have executed at least three orders for this kind of equipment during the last three years.

#### 5. Duty Exemption

The University has been granted the benefit of exemption from the payment of the Central Excise Duty and Customs Duty by the Department of Scientific and Industrial Research (DSIR), India, vide their Notification No.10/97 dt. 01-03-1997 and 51/96 dated 23.07.96 respectively, in respect of

- a) Scientific and technical instruments, apparatus, equipment, Software including computers.
- b) Accessories and spare parts of goods specified in (a) above and consumables.
- c) Computer software, compact disks, CD ROM, Recording magnetic tapes, microfilms, microchips etc.
- d) Prototypes.

Customs duties at Indian port, if any, will be to the account of the University.

#### **6. Technical Specifications**

- i. **WARRANTY:** The equipments covered under the purchase order, when installed, shall be warranted for the quality, workmanship, trouble free operation and performance for a period of at least 36 months (**preferably 5 years**) from the date of putting the system into operation at the Department of Chemistry, Pondicherry University, or at least 42 months from the date of receipt of the last lot of the consignment in India.
- ii. If any item covered under warranty fails, the same shall be replaced free of cost including all the applicable charges including shipping cost both ways.
- iii. Complete technical specifications to be included in the Technical bid.
- iv. The necessary service support should be provided by Bidder during the agreement period.
- v. The training should be provided by the supplying companies for a minimum period of two days from the date of installation with an expert team.
- vi. Technical post sale support by email and telephone will be provided during the period.
- vii. Operating Manual should be provided in English.
- viii. A clear statement regarding availability of after-sales service and availability of spare-parts for next 3 to 6 years should be included.
- ix. A recent customer list (within last five years) with contact details including email address is to be submitted with technical bids / bids as the case may be.
- x. If the equipment is proprietary a product, a proprietary product certificate should be enclosed.
- xi. The information pertaining to infrastructural, power and any other requirement for satisfactory installation and commissioning of the whole system must be provided by the bidder, at least 30 days in advance of the installation to be commenced if purchase order is issued.
- xii. The equipment must operate at 230V / 50 Hz single phase and / or equivalent three phase electrical power.
- xiii. If the bidder is an authorized representative in India, they are requested to inform their technical ability to take care of the problems in the system, if developed later within the warranty and outside the warranty period. The responsibility of the Indian agent must be clearly specified.
- xiv. The bidder from abroad shall obtain, if required, export permission from the appropriate authorities in his country or the country of origin for items to be shipped to India in case of items to be imported. The University shall provide necessary information if required for this purpose.
- xv. The validity of the each quotation should be at least for THREE MONTHS from closing date.**
- xvi. The offers will not be considered if received after the bid closing date and time.
- xvii. The offers received through telex / telefax / e-mail will not be accepted by the University under any circumstances.
- xviii. The University shall not be responsible for any delay / loss or non-receipt of quotations by post / courier service.
- xix. No unsolicited correspondence shall be entertained after the submission of the offer.

- xx. If an order is placed with the firm, the purchase shall be governed by an agreement as per the University rules in force at the time.
- xxi. Additional terms and conditions will be incorporated in the purchase order, if needed, to safeguard the interests of the University.
- xxii. Quotation is not transferable.
- xxiii. In case of any dispute in respect of the quotation, all legal matters shall be instituted within the jurisdiction of the place where the purchaser ordinarily resides.

**7. Power to reject the offer:**

- i. Pondicherry University reserves the right to accept / reject any offer in full or in part or accept any offer other than the lowest offer without assigning any reason thereof. Any offer containing incorrect and incomplete information shall be liable for rejection.
- ii. No Agency commission will be paid to any authorized agent in India.
- iii. Liquidated damages: Timely supply of the ordered items, installation, commissioning (wherever is applicable) and training etc. is the essence of the contract. In case of failure to supply within the time specified in the Purchase order, a penalty / LD of 0.5% of the total value per week or a part thereof shall be levied subject to a maximum of 7.5% in respect of items which are not supplied. The decision of Pondicherry University shall be final in this regard.
- iv. Bidder(s) must be authorized business partners of Global / National service providers of the respective equipment.
- v. The Bidders must enclose authorization letter from the respective global / national service providers of the above equipments particularly mentioning an undertaking that in case of default by the Bidder, they (Global Service Provider) shall take over all the responsibilities of the Bidder.
- vi. The Bidder should not be involved in any Bankruptcy filing for protection from it.

**III. Specific Conditions for Imported Equipments**

**1. Payment of EMD:**

The Quotation must be accompanied by EMD as stated above, by means of a Demand Draft, drawn in favor of *The Finance Officer, Pondicherry University, payable at Puducherry. The Small Scale units are exempted from payment of EMD provided they enclose the proof of their exemption Certificate issued by the competent authority.*

**2. Payments terms:**

Normally a payment 90% will be released after the installation & training. However, 100% payment will be released **if the supplier provides Bank Guarantee** towards performance Security for the 10 % of the total cost of the equipment to cover the warranty period. Bank charges in India shall be borne by the purchaser and outside India shall be borne by the contractor / supplier. The offer must be in English. The rates should be indicated both in figures and words against item specified in the given table. It is preferable that the price be quoted in US Dollars or in major foreign currencies.

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