

INDIAN INSTITUTE OF SCIENCE EDUCATION AND
RESEARCH-THIRUVANANTHAPURAM
[IISER-TVM]

PH: 0471-2597454
FAX: 0471-2597427

1ST FLOOR, DEPT: OF COMPUTER SCIENCE & ENGG,
CET CAMPUS, ENGINEERING COLLEGE. P.O
THIRUVANANTHAPURAM 695016,
KERALA, INDIA.

IISER/PUR/PT/17/10

Date: 25th November 2010

INVITATION TO TENDER

Dear Sirs,

SUB: PLANT GROWTH CHAMBER

We invite Sealed Tenders for Equipments as per 'Schedule' attached.

Please quote your lowest rate and shortest delivery period. "Instructions to Tenderers" [Imports & Indigenous] attached are to be followed strictly.

YOUR OFFER IN SEALED COVER SUPERSCRIBING TENDER NUMBER AND DUE DATE SHALL REACH US ON OR BEFORE 20TH DECEMBER 2010 (3 PM). LATE AND DELAYED OFFERS WILL NOT BE CONSIDERED UNDER ANY CIRCUMSTANCES.

Thanking You,

Yours Faithfully


CONSULTANT
(PURCHASE & STORES)

IISER-TVM
PUBLIC TENDER NO. IISER/PUR/PT/17/10
SCHEDULE

I. TENDER No. IISER/PUR/947/10

PLANT GROWTH CHAMBER

A mobile growth chamber should be specifically designed to grow Arabidopsis plant. It should provide sufficient space for growing the plant to maturity (till seeds dry) under controlled temperature, humidity and light conditions.

Construction:

The exterior cabinet should be insulated with CFC free polystyrene. The interior surface should be reflective to enhance light distribution. The chamber should accompany with proper water drainage system. Air-handling systems should ensure consistent horizontal airflow into the chamber. The three growing levels within the chamber provide maximum growing space within the smallest foot print possible. Growth chamber will be dismantled and reinstalled in new campus. Such option should be provided. Growth chamber should have following feature.

- ⇒ INTELLUS® Ultra Control System for temperature and photoperiod.
- Single board solid state design
- 10 key membrane keypad with LED indicators and vacuum fluorescent display
- Real time or circadian (countdown) programming
- Programs can be run in ramping or non-ramping modes
- Multiple programs may be linked to simulate natural conditions
- ⇒ 22 gauge electro-zinc plated steel exterior and interior, all seams and joints welded
- ⇒ Painted with powder coat tough highly reflective white baked enamel
- ⇒ Three tiers with a work area of 60 ft.²
- ⇒ Two 1 1/4" Access Ports.
- ⇒ Electrical requirement: Standard chamber is 120-208 VAC /3 phase / 60 Hz.
- ⇒ Foam in place panel construction with high density urethane insulation.
- ⇒ Cam lock panel construction for easy assemble and installation at any location without size limitations of elevators, doors and hallways.

H9 Spray Nozzle with Some Dehumidifier via Reheat Heaters should be provided.

Lighting

The growth chamber should have a 24hours photo-period provided by 10,000 lux globe (Son-T). Option should be available to control the photoperiod. Lamps are separated by a barrier to remove waste heat before it enters into the growth volume. This in combination with lamp configurations and barriered lamp canopies should be designed to maximize light dispersion and minimize the temperature gradient across the shelf.

Shelving

Adjustable six shelves in three tiers should be vertically adjustable. These shelves should not have any perforation. Heat generated from lamps should not influence the temperature of subsequent shelf. Growing heights in each shelf should be approximately 55 cm and width of each shelf should be approximately 130 cm. Lower most rack should have option to accommodate small shaker.

Temperature range and safety control

Temperature range should be + 10 to +40. Adjustable high and low temperature controls, audible alarms and visual indicators should be provided. **Chamber should be suitable to maintain as close as possible to 22°C (18-28°C)**. The controller should shut down all the power to the chamber, and activates alarms. When the temperature returns to the normal range the system should automatically reset the temperature.

Humidity control

Based on an empty chamber with the following ambient condition of 21 °C with 50% relative humidity. Humidity range-20% to 80% is preferred.


CONSULTANT
[PURCHASE & STORES]

IISER-TVM
INSTRUCTION TO TENDERERS [IMPORTS]:

1. **PRICE:** The price quoted shall be firm. The terms of FOB/EXW/FCA/CIF/CIP etc shall be clearly mentioned.
2. **AGENT & AGENCY COMMISSION:** In case Tenderer is represented by any agent in India, their name and address shall be furnished. The amount of commission included in the price shall be clearly shown in the offer; which will be paid directly to the Indian Agents by purchaser in equivalent Indian Rupees. In case Indian agents existing and their agency commission is not shown in the Tender, reasons for the same shall be clearly mentioned in Tender. Details of Indian agent's statutory registration shall be stated. If Agency Commission is paid by Principals in foreign currency, the reasons for the same and exemption from Enforcement Directorate in India shall also be provided.
3. **LEAFLET/CATALOGUE:** Tenderer should furnish all necessary leaflet/catalogue etc., of the stores offered by him to enable the Purchaser to evaluate his offer correctly.
4. **MODE OF DESPATCH:** Tenderer shall indicate the mode of dispatch (*i.e.*, Sea/Air-freight/Parcel Post, etc.) depending upon the normal mode of dispatch adopted by him for the type of stores offered for consideration of the Purchaser.
5. **COUNTRY OF ORIGIN:** Tenderer shall indicate in his offer the country of origin of goods offered and the name and address of the manufacture.
6. **INSURANCE:** If insurance of the goods is felt necessary, the same shall be advised by the Tenderer in the offer.
7. **DELIVERY/SHIPMENT:** The time for and date of delivery quoted shall be reasonable/realistic and shall strictly be adhered to in case of placing order on the Tenderer.
8. **MODE AND TERMS OF PAYMENT:** Payment in full (excluding the amount of Agency Commission included in the price payable directly by the Purchaser to the Indian Agents in Indian Rupees) will be made immediately on presentation of the prescribed documents against SIGHT DRAFT or LETTER OF CREDIT.
9. **WARRANTY:** Period of warranty and conditions shall be clearly mentioned in the Tender.
10. **GENERAL:** The Tenderer shall also be complied with the following:
 - a. Mention your Banker's name and address.
 - b. Show approximate net and gross weight and dimensions of packages/cases.
 - c. Furnish list of recommended spares for satisfactory operation for a minimum period of one year if the quote is for Plant & Machinery, Equipments etc.
 - d. Details of any technical service, if required for erection assembly, commissioning and demonstration.
 - e. Conform that the prices quoted are inclusive of all taxes, levies, duties arising in the tenderer's country.
 - f. The offer is valid for a minimum period of 90 days from the due date of opening of the tender.
 - g. Samples, if called for, will be sent free of all charges.
 - h. Late tenders and Delayed will not be considered.
 - i. Offers made by Indian Agents on behalf of their Principals, should be supported by the Proforma Invoice of their Principals.
 - j. The authority of person signing the tender, if called for, shall be produced.
 - k. The purchaser reserves the right to accept or reject the lowest or any other offer in whole or in part without assigning any reason.

IISER – TVM
INSTRUCTIONS TO TENDERERS [INDIGENOUS].

1. Tenders should be sent in sealed envelopes superscribing the relevant tender no. and the due date of opening. Only one tender should be sent in each envelope.
2. Late tender and Delayed Tenders will not be considered under any circumstances.
3. Sales Tax and /or other duties/levies where legally levies and intended to be claimed should be distinctly shown separately in the tender.
4. (a). Your quotation should be valid for a minimum period of 60 days from the date of opening of the Tender. Quotation with firm prices will be preferred.
(b). Prices are required to be quoted according to the units indicated in the Invitation to Tender. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.
5. (a) Preference will be given to those tenders offering supplies from ready stocks and on the basis of delivery at IISER site.
(b) Preference will also be given to those who agree our payment terms of within 30 days of receipt and acceptance of the item at our site.
6. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.
(b) Samples, if called for, should be submitted free of all charges by the tenderer and the IISER shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of non-acceptance of tender, the tenderer will have to take back the samples at his own expense.
(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.
(d) **Specifications:** Stores offered should strictly conform to our specifications. Deviations, if any should be clearly indicated by the tenderer in their quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary along with the quotations. Test Certificates wherever necessary should be forwarded along with supplies. Whenever specifically mentioned by us the tenderer could suggest changes to specifications with appropriate reasons for the same.
7. IISER shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portion of the quantity offered and the tenderers shall supply the same at the rates quoted.
8. Corrections, if any, in the Quotation must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amounts quoted in words and figures, amount quoted in words shall prevail.
9. The tenderer should mention the name of his bankers, Sales Tax Registration, PAN number etc in the tender.
10. The authority of the person signing the tender, if called for, should be produced.
11. The purchaser reserve the right to accept or reject the lowest or any other offer in whole or in part without assigning any reason.
12. IISER being a Govt of India Educational and Research Institute, is exempted from payment of Excise Duty and Customs Duty under Notification No. 51/96- Customs dated 23rd July 2009. Also, we can issue Form16 as per VAT Rules.
13. There is no EMD or Tender Cost.


CONSULTANT
(PURCHASE & STORES)