Open Tender Notification for the procurement of "LED light-controlled Plant Growth Chambers" at the Indian Institute of Science, Bangalore

(Last date of submission of tenders: 22nd-May-2023)

(TENDER FROM DOMESTIC VENDORS)

Date: 28.04.2023

Dear Sir/Madam:

Please send your quotation valid for 120 days for the supply of equipment described below. Your quotation should clearly indicate the terms and conditions of the quotations, delivery, delivery schedule, entry tax, payment terms, warranty coverage etc. The tender should be submitted in two separate sealed envelopes – one containing the "Technical bid" and other containing the "Commercial bid", both of which should be duly signed and must reach the undersigned on or before 17:00 hours 22nd-May-2023.

The Chair
Department of Biochemistry
Division of Biological Sciences
Indian Institute of Science
Bangalore-560012
Karnataka, India

Number: One

S No.	Technical Specification chamber – LED light-controlled Plant Growth Chamber
1	LED LIght four tier properly spaced in horizontal shape for uniform light intensity over entire shelf (LED Tube not accepted). The LED light should be broad spectrum, energy saving LED spectra information should be on Website of Manufacturer/ OEM website link be provided for verification.
2	The Light Intensity should be programmable from 10 to 100% dimmable through only controller. The Light Intensity should be programmable up to 400 (no any additional device adds tor dimming) umoles /m^{-2} /s^{-1} or higher of each tier light measured @ 6" from lamps bank. Distribution of light intensity should be uniform over the entire shelf and for each 4 shelves.
3	Temperature 7 to 44°C lights ON or higher range with (±0.5°C or better temp stability at all temp ranges)
4	Temperature safety alarm, the controller should shut down the chamber and restart when the temp returns to normal. The system should restart automatically when the internal temp is normal.
5	Air circulation inside chamber is from a specifically designed, adjustable air diffuser conditioned air travels along the entire back wall, over the shelves and returns to the ceiling fans through an opening between the light fixtures and the doors.
6	One door with full access magnetic perimeter gasket and locking system with key of ~ 146x93 cm allowing full access to chamber interior.
7	Air-cooled condensing unit with hot gas bypass system for continuous compressor operation, Used for cooling and bypass-based heating. Solenoid valves, Ceiling mounted evaporator Growing coil with air circulation fans.
8	Growing area and height, A minimum work area 27-30 ft. Should have a minimum plant growth height of 26-30 cm or more between each tier, shelve and light canopy should be adjustable and removable as per research need without any tool. White epoxy coated steel wire shelving.
9	Outer dimension should not exceed W 105cm X D 86cm X H 198cm or compact to fit in lab space. Interior volume should be **~ 1100 liter ± 50 liters**
10	One or more access port/fresh air-port, Floor drain, casters assembly and adjustable leveling legs for easy movement in the lab.
11	Insulation should be of woodless construction using 2" thick foamed-in-place non-CFC Urethane insulation with 97% closed cell-structure density of approximately 2 lbs/ft3
12	ISO certified and Electrical Safety certificate UL-508A/CCE
13	Android Based Touch Screen for real time graphing. Redundant controller in case of touch screen failure to enable machine usage.
14	Programs can be configured to run Manual, real time or elapsed time. Continuous, Diurnal and multi-step program feature. Multiple programs storage with multistep| feature. Two calibrations offset to be provided, Light lifetime maintenance alarm audio & visible, graphic display actual and set value, view program steps and sequence time duration.
15	Dual experiment protection via integrated yet independent temp limit Trouble shooting with shutdown feature.
16	Trouble shooting with on board diagnostics.

17	Temperature low and high deviation alarm, Alarm (audio and visual), Ambient temperature monitoring.
18	Minimum four level protection for controller operation/ safety & security,
19	Minimum Two-year warranty and one year AMC.
20	All the specifications asked should be clearly highlighted in the product brochure, writing "yes (copy paste)" in the compliance/Catalog will not be considered as a valid argument which may lead to disqualification. Demo if required on technical specification verification round. Performance certificate from 5 users for > one year of usage for Arabidopsis application in national labs. Enclosed users list. Complete wiring and electrical diagram to be provided with machine.

Training and Warranty

1. The bidder is completely responsible for installing the plant chambers and making them functional once they arrive at IISC, Bangalore. The institute will provide appropriate water connection along with proper power point plugs.
2. Minimum 2 years complete system warranty. 1 years of AMC after completion of warranty period. Online service support for 2 years thereafter.

The above-mentioned technical specifications are highly desirable. However, lower technical specifications may be considered if the above-mentioned specifications are found to be unsuitable in financial terms. The Institute reserves the right to go for lower specifications taking into considerations its financial constraints and technical preferences.

Terms and Conditions

1. The quotations should be submitted in two bids system; i.e., Technical bid, and Commercial bid.

a) The technical bid must include all details of technical specifications of the instrument along with commercial terms and conditions masking only the price component. Bill of materials, brochures, technical datasheets, and any other document may be enclosed to help the evaluation of the technical bid. Please also include warranty terms and any other information on upgradation terms in the technical bid.

b) The commercial bid must include the price of the instrument in Indian currency indicating break up of:

   I. For goods and commercial terms.

      ii. Installation, commissioning and training charges, including any incidental expenses, if any

      iii. Agency commission charges, if any

      iv. Provide certificates for country origin of manufacturing for each line item

   II. Price of every line item in the commercial bid should be quoted along with the total quoted price for the instrument to be operational (fixed and ready to use) in our facility

c) Both the Technical and Commercial bid should be put in separate sealed envelopes and put together in another cover stating "LED light-controlled Plant Growth Chambers" and should reach us on or before 17:00 hours 22nd-May-2023.

2. The vendor should have a good track record of having previously supplied Arabidopsis Growth Chambers in IISC, Bangalore (please furnish details).

3. The vendor should have qualified technical service personnel based in Bangalore capable of servicing the equipment.

4. The payment will be through a letter of credit.

5. The lead time for the delivery of the equipment should not be more than ten months from the date of receipt of purchase order or nine to ten months from the date of receipt of Letter of Credit details (whichever is earlier).

6. The validity period of the quotation should be 120 days.

7. Import code of the items should be indicated.

8. If the goods are found to be defective, they have to be replaced or rectified at the cost of the supplier within 30 days from the date of receipt of written communication from us. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

9. The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time period to award of construct without thereby incurring any liability of the affected bidder or bidders.

10. All bidders are required to submit proper catalogue, technical literature of sensor being used for temp and RH, make of compressor. COPY paste of technical specification on catalogue will be rejected.

11. Vendors should be registered with PF, ESI, GST, MSME and other govt establishment as per Govt rules and regulation and Industrial workplace safety regulation. Copy of the same should be attached with tender.

Important:

1. The Bidder should belong to either Class-1 or Class-2 suppliers distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter. a) Class-1 supplier: Goods and services should have local content of equal to or more than 50%. b) Class-2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.

2. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.

3. The quotations should be on FOR-IISc Bangalore basis in INR only.

4. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.

5. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to the Class-1 supplier.

6. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.

The sealed tender documents should be addressed to The Chair, Department of Biochemistry, Indian Institute of Science, Bangalore 560 012. Last date for receiving queries is 22nd May 2023, 5pm IST from the date of tender notification.

Thank you,

Sincerely

The Chair
Department of Biochemistry,
Indian Institute of Science
Bangalore - 560 012.