



# राष्ट्रीय पादप जीनोम अनुसंधान संस्थान

(जैव प्रौद्योगिकी विभाग, विज्ञान एवं प्रौद्योगिकी मंत्रालय, भारत सरकार का स्वायत्त अनुसंधान संस्थान)

## NATIONAL INSTITUTE OF PLANT GENOME RESEARCH

(An Autonomous Institution of the Department of Biotechnology, Ministry of Science and Technology, Government of India)

अरुणा आसफ अली मार्ग, पो. बाक्स नं. 10531, नई दिल्ली-110067  
Aruna Asaf Ali Marg, Post Box Number 10531, New Delhi-110067

संख्या :8201/5-16/रा.पा.जी.अनु.सं./एस एण्ड पी

दिनांक: 18/6/2015

विषय / Subject: मुहरबंद कोटेशन का निमंत्रण / Invitation of Sealed Quotations

Sealed Tenders are invited on behalf of Director, NIPGR from the Original Equipment Manufacturer or their authorized dealers for the purchase **01 no. of Plant Growth Chamber** for the laboratory of our Institute, as per the following specifications:.

### Technical Specifications

1. Minimum volume of 270 litre or more
2. Two-tier growth area each to have minimum 350-400 umole light
3. Each tier of shelves lighted by properly placed Fluorescent lamps to have uniform light distribution over entire shelf.
4. Light intensity programmable minimum of 350-400  $\mu\text{moles}/\text{m}^2/\text{s}$  of light irradiance measured @ 6" from lamps on 2 on/off light events.
5. Programming and control of the lighting should be done via single controller.
6. Controller should control temperature and lighting,
7. Temperature range: 10°-44°C ( $\pm 0.5^\circ\text{C}$ ) lights on and 2°-44°C ( $\pm 0.5^\circ\text{C}$ ) lights off.
8. The temperature setting accuracy 0.1°C.
9. Single-board electronic solid-state design. Industrial keypad with VFD display and LED indicator.
10. Programs can be configured to run in real time or elapsed time. Continuous, Diurnal and multi-step program feature. Memory of minimum 30 or more programs storage with multistep feature.
11. Ramping and non-ramping program methods.
12. Multiple programs can be linked creating complex sequence to simulate natural conditions.
13. Trouble shooting with on board diagnostics.
14. Dual experiment protection via integrated yet independent temp limit shutdown. Auto-restart when temp inside is normal.
15. Temp low and high deviation alarm.
16. Ambient temp monitoring.
17. Power failure event logging.
18. Auto restart in case of power failure with inbuilt battery to protect memory for more than 5 years.
19. Minimum plant growth height of 9 inches in each tier/shelf.
20. Work area of 6 to 7  $\text{ft}^2$  provided on two tiers.
21. Interior and exterior constructed with minimum 22-gauge and 18-gauge electroplated steels, respectively and welded seams and joints on outer and inner shells.
22. Interior and exterior to be painted with highly reflective high-temperature-baked white powder coating for good light distribution.
23. Door fitted with magnetic gasket providing a tight seal to door frame
24. Inner wall should be insulated by non-compressing/non-thermal conducting material without metal-to-metal contact with outer wall. Woodless construction using CFC free insulation.
25. Shelves should slide in and out easily on stainless steel rail assemblies and can be moved up and down in  $\frac{1}{2}$  increment.
26. Self-contained air-cooled condensing unit with hot gas bypass system for continuous compressor operation, extended life and close temperature control to be used for cooling and heating. No heater to be used.

Cont. 2



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27. Solenoid valves should have an extended stem for quiet and long-life operation.
28. Rear chamber wall mounted evaporator coil should incorporate an air circulation fan for uniform air distribution inside the chamber.
29. Chamber must be completely self-contained, suitable for stacking one above the other.
30. Two power receptacle to be provided inside the chamber to connect any small equipment. Door lock with key, Delay timer to delay the start of the unit in case of power failure to be provided. Must have floor drain at the bottom. 210/230 volts operation, Service wiring diagram and spare parts list to be provided for the unit, Four level password protection for controller operation/ safety & security, Status LED in front to display mode of operation (Heat/Cool and other options), Light life time alarm, User List of similar models for Arabidopsis application to be provided. Performance certificate with customer phone no and email ID, we may visit for Demo. Indian agent to be ISO certified. Minimum Two years warranty.
31. The chamber must be with a regular catalogue number and mentioned in the brochure. Similar models must have installations in Indian R&D laboratories.

You are therefore requested to please send your offer in **two bid system** indicating the maximum discount offered, installation charges along with a copy of authorization certificate, issued by the Principals/OEM. The quotations must accompany a Demand Draft amounting to ₹ 12,000/- (Rupees Twelve Thousand only), being the EMD in the name of Director, NIPGR, New Delhi and must be sent in a **Sealed Envelope** duly super-scribed on top of envelope as "**Quotation for Plant Growth Chamber**" so as to reach to the undersigned latest by **08/7/2015 (3:00 PM)**, the same shall be opened on same day at **3.30 PM**.

धन्यवाद,

(कय एवं मण्डार अधिकारी)

Encl: Terms & Conditions (Annex – I)

नियम और शर्तें:

1. Every tender shall be accompanied with the tender cost of ₹ 500/- (Rupees Five Hundred only) in the form of Demand Draft drawn in favor of “**Director, NIPGR**” payable at New Delhi in separate sealed envelope along with the tender. In case the tender cost is not submitted, the tender will not be considered.
2. Every tender shall be accompanied with the required Earnest Money Deposit in the form of Demand Draft drawn in favour of the “**Director, NIPGR**” payable at New Delhi. Any tender not accompanied by such earnest money will be rejected straight away.
3. The rates quoted in the tender shall remain valid for a period **180** days. No tenderer can withdraw/or modify his tender or revoke the same within the said period. If a tenderer on his own withdraws or revokes the tender or revises or alters or modifies the tender for any item or condition within the period mentioned in the tender notice, his earnest money deposit shall stand forfeited. Notwithstanding foregoing, the Institute reserves the right to take other actions as deemed appropriate.
4. NIPGR does not bind itself to accept the lowest or any tender and reserves the right to reject any or all tenders without assigning any reason.
5. NIPGR will not pay any expense, whatsoever incurred by tenderer for the preparation and submission of tenders.
6. The notice inviting tender, will form part of the contract agreement to be executed by the successful tenderer with the NIPGR.
7. All the correspondence on the tender shall be addressed to the Director, NIPGR, Aruna Asaf Ali Marg, New Delhi and any communication addressed to anyone else shall not in any manner to be binding upon the NIPGR, Aruna Asaf Ali Marg, New Delhi.
8. The tenderer shall submit a copy of PAN/TIN numbers allotted to them.
9. NIPGR reserves the right to change the quantities of the units while issuing the letter of award of work.
10. The successful tenderer shall be required to deposit an amount equal to 10% of the Tender value as Performance Security after adjusting the Earnest Money Deposit within 10 days from the date of issue of award letter. Performance Security may be deposited in the form of Demand Draft or Bank Guarantee from State Bank of India Or any Scheduled bank. Incase of violation of any condition of Tender, the Security Deposit / BG will be forfeited / revoked.
11. The rates shall be inclusive of Transportation, loading, unloading, taxes etc., nothing extra will be paid.
12. The supplier should be responsible for any damage and site clearance and nothing extra shall be paid.

(कय एवं भण्डार अधिकारी)