



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)

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संख्या: 8/2016-17/रा.पा.जी.अनु.सं./एस एण्ड पी

दिनांक: 11/4/2017

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 of **01 no. of Plant Growth Chamber** for the laboratory of our Institute in two bid system, as per the specifications attached at Annexure – II.

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 ₹ 41,800/- (Rupees Forty One Thousand Eight Hundred 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 01 no. of Plant Growth Chamber**" so as to reach to the undersigned latest by **05/5/2017 (3:00 PM)**, the same shall be opened on same day at **3.30 PM**.

धन्यवाद,

(कय एवं भण्डार 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 from the date of issue of Award Letter. 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. In case the successful tenderer after award of acceptance of work fails to perform as per work order or violates any condition of tender, the security deposit/ performance security will be forfeited/encashed.
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. In two-bid system the tenders should be submitted containing (a) Technical Bid consisting of all technical details along with commercial terms and conditions and (b) Financial Bid indicating item wise price for the items mentioned in technical bid. The technical bid and financial bid should be sealed by the bidder in separate covers duly super scribed and both these covers must be put in a bigger cover which should also be sealed and duly super scribed. 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 letter of acceptance. Performance Security may be deposited in the form of Demand Draft or Bank Guarantee from State Bank of India Or any Scheduled bank which shall be valid till completion of the warranty period of quoted / ordered items. In case 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.

Technical Specifications

1. Internal volume of the chamber should be more than 1600 liters.
2. The cabinet must have three tiers with epoxy coated steel wire shelving which can be moved up and down in ½" increment.
3. It must have a growing area of at least 30 square feet in three tiers with a growing height of at least 27 cm in each tier.
4. Light source should provide light by PAR cool white fluorescent light and incandescent lamps. Light/lamps should be properly place to provide uniform light intensity over entire shelves.
5. Each tier must have a minimum of 250-300 µmoles/m²/s of light irradiance with three ON/OFF light events on each tier.
6. Holder used for tube light should be universal (compatible with different color lights, which also should be available for quoted machine).
7. Lights in each tier must be dimmable and controlled independently via a single programmable controller.
8. Controller should have following features:
 - a. It should control temperature, lighting and humidity.
 - b. Single-board electronic solid-state design.
 - c. Programs should be configurable to run in real time or elapsed time. It should have continuous, diurnal and multi-step program feature. Memory of minimum 50 or more programs storage with multistep feature.
 - d. The number of output channels used for control of lighting events, convenience outlets etc., minimum 23 channels.
 - e. Dual experiment protection via integrated yet independent temperature limit shutdown. Auto-restart when temperature inside is normal. Temperature low and high deviation alarm, (audio and visual) ambient temperature monitoring.
 - f. Auto restart in case of power failure with inbuilt battery to protect memory for 5-7 years. Two Calibration offsets per input channel. One for Lights ON and another for lights OFF. Power failure event logging.
 - g. Control unit should be located on the top to reduce foot print area.
9. The growth chamber should work in 10 - 44°C temperature conditions with temperature setting accuracy of 0.1°C and temperature uniformity at all temperature be ±0.5°C.
10. Cabinet construction: Interior should be made of 24-gauge (or better) galvanized electro-zinc plated steel; exterior should be made of 24-gauge galvanized exterior electro-zinc plated steel. Welded seams and joints on outer and inner shells. Inner shell should be supported by non-compressing/ non-thermal material locking inner liner in place without a metal-to-metal bond to outer case. Chamber should be completely self-contained. It should be painted with highly reflective coating for good light distribution. It should have foamed-in-place non-CFC insulation and over all wall thickness of at least 2 inches.
11. The cabinet should have two doors with magnetic gasket providing a tight seal. Chamber should contains casters assembly and adjustable leveling legs to compensate for floor unevenness and floor should be equipped with floor drain and hose assembly.
12. It should have high quality castor wheels (with locking option) for ease of mobility.
13. Refrigeration should be provided with a self-contained air-cooled condensing unit with hot gas bypass system for continuous compressor operation. It should have solenoid valve and evaporator coil integrating with air circulation fans. No heater should be used for heating.

14. Humidity: the cabinet should maintain relative humidity of up to 80% or more with the help of a inbuilt humidifier with electronic sensor and a dehumidifier.
15. The cabinet should have two power receptacle inside the chamber to connect any small equipment.
16. The cabinet should have general features like door lock with keys, 220 - 240 volts operation, password protection for controller operation, status LED in front to display mode of operation.
17. Attach catalogue for the model quoted highlighting the important features and including records for installments in Indian institutes.
18. The quoted instrument model should have all other standard feature for proper functioning.
19. The complete growth chamber should come with 2 years of warranty.
20. The cabinet should come standard 5KV servo voltage stabilizer.
21. Additional light: Besides lights integrated with the growth chamber, an additional complete set of lights/lamps (for all the tiers) should be supplied. Additionally, six pieces of compatible lights/lamps for each of blue, red, and far-red color radiance should be provided.