

## राष्ट्रीय पादप जीनोम अनुसंधान संस्थान

(जैय 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

संख्याः 8/2015-16/रा.पा.जी.अन्.सं./एस एण्ड पी

दिनांक: 03/12/2015

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 Biosafety Culture Cabinet, as per the specifications attached at Annex – II for the laboratory of our Institute.

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 ₹ 10,000/- (Rupees Ten 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 Biosafety Culture Cabinet" so as to reach to the undersigned latest by 23/12/2015 (3:00 PM), the same shall be opened on same day at 3.30 PM.

धन्यवाद,

(क्य एवं भंण्डार अधिकारी)

Encl: Terms & Conditions (Annex - I)

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## नियम और शर्तैं:

- 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.
- 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 / Letter of Acceptance of Tender. 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.
- 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.
- The notice inviting tender, will form part of the contract agreement to be executed by the successful tenderer with the NIPGR.
- 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.
- 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.
- 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.

Specification for Biosafety culture cabinet

| SI. | Description   |
|-----|---|
| No. |   |
| 2   | Volume:   |
|     | Minimum volume required is 270- 300 liters.   |
|     | <ul> <li>Each tier of shelve lighted by properly horizontally placed Fluorescent lamps and incandescent Lamp to have Balanced Light spectrum and uniform light distribution over entire shelf.</li> <li>Intensity programmable minimum 500-600 µmoles/m2/s of light irradiance measured @ 6" from lampson 3 on/off light events.</li> <li>Programming and control of the lighting is done via single controller.</li> </ul>   |
| 3   | Controller Feature :  |
|     | <ul> <li>Controls temperature, lighting, humidity (optional) and CO2 (optional)</li> </ul>  |
|     | <ul> <li>Single-board electronic solid-state design. 10 Key industrial Keypad with VFD display and LED indicator</li> </ul>   |
|     | <ul> <li>Programs can be configured to run in real time or elapsed time. Continuous, Diurnal and multi-step<br/>program feature. Memory of minimum 50 or more programs storage with multistep feature.</li> </ul>   |
|     | <ul> <li>Ramping and non-ramping program methods.</li> </ul>  |
|     | <ul> <li>Multiple programs can be linked creating complex sequence to simulate natural conditions.</li> </ul>   |
|     | <ul> <li>The number of output channels used for control of lighting events, convenience outletsetc., minimum<br/>23 channels.</li> </ul>  |
|     | <ul> <li>Trouble shooting with on board diagnostics</li> </ul>  |
|     | <ul> <li>Dual experiment protection via integrated yet independent temp limit shutdown. Auto-restart when<br/>temp inside is normal.</li> </ul>   |
|     | Temp low and high deviation alarm.  |
|     | Ambient temp monitoring.  |
|     | alarm (audio and visual)  |
|     | 24 hour chamber monitoring  |
|     | Power failure event logging.     Auto restart in case of power failure with inbuilt battery to protect memory for 5-7 years.  The Collination offset per input shapped One for Lights ON and another for lights OFF.  |
|     | Two Calibration offset per input channel. One for Lights ON and another for lights OFF  |
| 4   | Cabinet construction:   |
|     | <ul> <li>Interior constructed of 22-gauge electro-zinc plated steel</li> </ul>  |
|     | <ul> <li>Exterior constructed of 18-gauge exterior electro-zinc plated steel</li> </ul>   |
|     | <ul> <li>Welded seams and joints on outer and inner shells</li> </ul>   |
|     | <ul> <li>Inner shell supported by non-compressing/non-thermal conducting material locking inner liner in<br/>place without a metal-to-metal bond to outer case</li> </ul>   |
|     | <ul> <li>Chamber is completely self-contained, suitable for stacking one above the other</li> </ul>   |
|     | Overall wall thickness is 2" (5.1 cm).  |
|     | <ul> <li>Interior and exterior to be painted with highly reflective, high temp baked white powder coating for<br/>good light distribution.</li> </ul>   |
|     | Uniform Air flow thru Rear wall plenum  |
| 5   | Growing height:   |
|     | Should have a minimum plant growth height of 63cm   |
| 6   | Temperature:  |
|     | • 7°-44°C (±0.5°C) lights ON and 2°-44°C (±0.5°C) lights off  |
|     | The temperature setting accuracy 0.1°C      The temperature setting accuracy 0.1°C      The company of setting accuracy 0.1°C      The temperature se |
|     | <ul> <li>In case of safety alarm, the controller should shut down the chamber and restart when the tem returns to normal. The system should restart automatically when internal temp is normal.</li> </ul>  |
|     | Temp uniformity at all temp be ±0.5°C   |

| 7  | Insulation:  |
|----|--|
|    | <ul> <li>Woodless construction using CFC free insulation (overall wall thickness is 2" [5.1 cm], ample<br/>insulation for maintenance of stated temperature range)</li> </ul>  |
| 8  | Door:  |
|    | <ul> <li>One door opening 29.8" x 29.6" (67.9 cm x 75.2 cm)</li> </ul>   |
|    | <ul> <li>Provides full access to the chamber interior (magnetic gasket provides a tight seal to door frame</li> </ul>  |
| 9  | Work space:  |
|    | Work area of 3 to 4 ft2 provided on One tier   |
| 10 | Shelving:  |
|    | <ul> <li>One tier of white epoxy coated steel wire shelving (each shelf is 16.4"D x 26.5"W [41.6 cm x 67.3 cm])</li> <li>Shelves can be moved up and down in ½ increment.</li> </ul>   |
| 11 | Refrigeration:   |
|    | <ul> <li>Self-contained air-cooled condensing unit with hot gas bypass system for continuous<br/>compressor operation, extended life and close temperature control. Used for cooling and<br/>heating. NO Heater to be used for heating.</li> </ul>   |
|    | <ul> <li>Solenoid valves have an extended stem for quiet and long life operation</li> </ul>  |
|    | <ul> <li>Rear chamber wall mounted evaporator coil incorporates an air circulation fan for uniform air<br/>distribution inside the chamber.</li> </ul>   |
|    | <ul> <li>Heat rejection to ambient = 3700 BTU/hr. Basic unit</li> </ul>  |
| 12 | Two power receptacle 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. 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 for Plant (Rice or similar) application. Performance certificate with customer phone no and email ID, we may visit for Demo. Indian agent to be ISO certified. Minimum Two years warranty. |
| 13 | Option: Dimmable lighting, CO2 addition (Vaishala NDIR sensor), connection to external PC for control and monitoring, RH (50-90%), extended temp to 60C, Day light integral, suitable voltage stabilizer.  |
|    | International well established manufacturer with more than 20 years in this line and preferably from USA/Europe/ Japan.  |
|    | Application specific User list. Original catalog with all technical details as per our specs.  |