



# 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: 8/2015/रा.पा.जी.अनु.सं./एस एण्ड पी

दिनांक: 31/3/2015

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

Sir,

We are interested to purchase 01 no. of **Biosafety Cabinet** for the laboratory of our Institute, as per the following specifications:

### Technical Specifications

1. The Bio safety cabinet should be Type A2  
70% air circulation and 30% exhaust  
Capacity – 4 feet
2. In order to ensure consistent and reliable down flow velocity across the supply HEPA filter over the life of the cabinet, the cabinet must use a pressure sensor (rather than anemometer) to detect pressure drop across the supply filter, rather than in just one point across the down flow. The pressure sensor must be encased in order to protect the sensor from temperature, humidity and other environmental phenomena that can impact the sensor's performance.
3. The Bio Safety Cabinet must include two DC motors. High power consuming AC motors should not be used.
4. The motor must automatically adjust the airflow speed without the use of a damper to ensure continuous safe working conditions, even without maintenance adjustments.
5. In order to preserve safety to the user and the environment, the exhaust blower on the cabinet must continue operating when the supply blower stops working. If the exhaust blower should fail, the supply filter will also be turned off.
6. The microprocessor must display the inflow and down flow air velocities in real-time on an LED display to ensure the user knows whether or not the cabinet is working under safe operating conditions.
7. The front window must be a 10" sash opening and be made of laminated safety glass to ensure containment of potentially hazardous samples in the case of accidental glass breakage.
8. All interior and exterior parts must be painted or smooth to ensure no risk of cuts to users or maintenance personnel.
9. The front of the cabinet must be angled 10° to help minimize glare on the window to the user, and to ensure that the user's posture is comfortable during a working session.
10. The cabinet noise level must be less than 65 dB(A) for a 4 foot cabinet as measured in a sound proof room 12 inches in front of the cabinet and 15 inches above the work surface.
11. The Biosafety Cabinet should have microprocessor controller and same must be located on a slanted front panel so it is easy to see and reach from a seated working position in front of the cabinet.
12. The interior of the front window must be accessible for cleaning without requiring the user remove or support the window.
13. The interior walls of the cabinet must be made of 304 Stainless steel.
14. The biological safety cabinet must be capable of achieving current state-of-the-art in energy efficiency. A biological safety cabinet with lights on and fan at operating speed should consume less than 200 watts for a nominal four foot width and have a reduced energy mode for non-operational maintenance on containment in the work area.

Cont. 2



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15. The cabinet must automatically reduce fan/blower motor speed to 30% when the front window sash is in closed position to ensure reduced energy consumption when the cabinet is not in use.
16. In order to provide maximum effectiveness, efficiency and safety to laboratory Personnel, UV light must be programmable to allow for specific exposure times from 0 to 24 hours. The automatic shut off feature on the UV light saves money on replacement of the bulbs.
17. The Cabinet should be provided with taps for Vacuum, Water and Non Combustible Gas.
18. The Bio safety Cabinet should be NSF certified.
19. The Bio safety cabinet should incorporate HEPA filter of the class H 14 EN 1822 or better and having minimum efficiency of 99.995% at 0.3  $\mu\text{m}$  particle size.
20. Approximate Dimension  
Exterior 1500 H x 1300 W x 800 D; Interior 800 H x 1200 W x 500 D or better
21. Ventilation System Exhaust and Inflow air volume approx 300-350 CFM
22. Heat Emissions at 25°C should be approx 0.2 KW or lesser.
23. The cabinet Should be provided with Microprocessor controller and large LED display for inflow and Down flow air velocity and hours of operation, Audible and visual Alarms for HEPA filter failure, blower failure, airflow speed failure, Incorrect window position.
24. The BSC design must incorporate an LED Indicator to indicate filter loading and should provide visual and audible alarm in case of excessive HEPA filters loading resulting in unsafe airflows deviation from the NSF recommended air inflow and down flows measure in meters per second or foot per minute.
25. The cabinet should be provided with fixed / adjustable Height Stand, UV Light and one set of detachable arms rest and one / two electrical outlet.
26. The Drain Pan of the BSC should be made of Stainless Steel. The drain pan should not be painted or power coated.
27. The Bio safety cabinet should have dual side wall with negatively pressurized interstitial space.
28. The bidders should provide details of Standard Warranty available for one year of installment and include within the overall price.

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. 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 Cabinet**" so as to reach to the undersigned latest by **21/4/2015 (3:00 PM)**, the same shall be opened on same day at **3.30 PM**.

धन्यवाद,

(कय एवं भण्डार अधिकारी)

**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.
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.