



जवाहरलाल नेहरू उन्नत वैज्ञानिक अनुसंधान केंद्र  
(विज्ञान एवं प्रौद्योगिकी विभाग, भारत सरकार की स्वायत्त - मान्यता प्राप्त विश्वविद्यालय)

**JAWAHARLAL NEHRU CENTRE FOR ADVANCED SCIENTIFIC RESEARCH**

(An Autonomous Institution under Department of Science & Technology, Govt. of India - A Deemed University)

जक्कुर पोस्ट, बेंगलूरु 560 064, कर्नाटका, भारत / Jakkur P.O., Bengaluru - 560 064. Karnataka, INDIA

JNC/PUR/DST/TG/4426/20-21/59/E

December 16, 2020

**NOTICE INVITING TENDER**

Jawaharlal Nehru Centre for Advanced Scientific Research, Jakkur invites sealed tenders in two bids (Technical & Commercial) from qualified and experienced Vendors for **1 No. of Ultra Low Temperature Freezer and Bio Safety Cabinet** as per the terms and conditions below and as broad specifications shown in **ANNEXURE-I**

**TERMS & CONDITIONS:**

1. Any item not specifically mentioned in the technical specification but essential for successful implementation of the system (in the opinion of the bidder) must be brought to our notice and quoted accordingly.
2. At the time of installation, if it is found that some additional items are required to meet the operational requirement of the configuration, but not included in the bidder's original list of deliverables, the bidder shall supply such items to ensure completeness of the configuration at no extra cost.
3. Delivery period should be 8 weeks from the date of Purchase Order. Once delivered to onsite, the installation, commissioning and acceptance period will be within two weeks from the date of delivery of equipment.
4. The successful bidder immediately after the award of the Purchase Order shall prepare a detailed plan of installation as proposed to be followed by placement of the equipment, etc.
5. System Installation and integration of all supplied equipment and software shall be done by the successful bidder. Subcontracting in any form is not allowed.
6. Bidders should clearly specify after sales/service/application support/AMC capabilities. Bid validity should be 60 days.
7. Warranty and support: All supplied Equipment with Accessories – 3 years.
8. Provide all information as regards pre-installation requirements (i.e. room, environment) for system installation.
9. Detailed list of users of the system in India with contact details to be furnished.
10. Bid Security Declaration should be submitted in your Company Letter Head.
11. Performance Security: The successful bidder has to provide 10% Performance Security in the form of Bank Guarantee within 15 days after receiving Purchase Order. (The same PS will be treated as PBG). Letter of Credit will be established only after receipt of mandatory 10% Performance Security in advance.

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11. Performance Bank Guarantee: Successful bidder has to submit 10% PBG valid for three years.
12. Payment terms: 100% Irrevocable Letter of Credit. 90% payment will be affected against documents through bank, balance 10% after installation & acceptance, commissioning and submission of Performance Bank Guarantee for 10% of Purchase Order value valid for three years from the date of installation/commissioning. For local supplies, payment terms are 30 days from the date of supply / acceptance and submission of Performance Bank Guarantee for 10% of Purchase Order value valid for three years from the date of installation/commissioning.
13. Late & delayed quotations will not be considered.
14. As time is the essence of the contract, delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the successful bidder will forfeit Security Deposit. If the supplier fails to supply, install and commission the system as per specifications mentioned in the Purchase Order within the due date, the supplier is liable to pay liquidated damage of 0.5% of Purchase Order value per every week of delay subject to a maximum of ten percent beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier. JNCASR reserves the right to cancel the Purchase Order in case the delay is more than ten weeks. Penalties, if any, will be deducted from the Security Deposit. The maximum amount of penalty shall be ten percent. Liquidated damages shall be levied on the Purchase Order value, freight, insurance and duties.
15. The place of Applicable Law / Jurisdiction is Bengaluru, Karnataka, India.
16. Decision of the President, JNCASR will be final.
17. **Shipping Terms:** Price quoted should be on FCA basis for imported items.
18. **Goods & Service Tax:** Please note that JNCASR is eligible for GST Concession under 45/2017 notification and IGST under 47/2017 notification, will issue a certificate to this effect. The prices can be quoted either in foreign denominations or in INR. Exchange rates as on the date of price bid opening will be taken into account for comparison purpose.
19. **Custom Duty:** Please note that JNCASR is eligible for customs duty exemption under 51/96 notification and will issue a certificate to this effect. C.D. Nil at present.
20. **Formats for price-bid:** Corresponding to each part in the technical bid there should be a pricing referring to the Part name in the technical bid and mentioning quantity, unit price and total price. If there are any other charges, they should be also added at the end. All pages have to be serially numbered. References if any to technical bid should be provided along with the exact location (page number, etc). You are required to use the price bid format given by us only for commercial tender.
21. **Warranty Replacements:** Any replacement of defective items during Warranty period is the responsibility of the successful bidder. The expenditure involved like freight charges, customs duty, insurance charges, clearance charges etc. are to be borne by the successful bidder.

  
के. भास्करा राव / K. BHASKARA RAO  
वरिष्ठ भंडार एवं क्रय अधिकारी / SR. STORES & PURCHASE OFFICER  
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22. **Submission of Proposal:** The proposal should be submitted in a sealed two bid system. One containing sealed technical bid and the other one a sealed price bid. The bidder name, the nature of the envelope (either technical bid or price bid) must be clearly mentioned on top of each of the envelope. The sealed proposals must be addressed to Senior Stores & Purchase Officer, JNCASR. The proposals should be submitted at the Stores & Purchase Department, JNCASR.
23. **Evaluation of bids:** Technical bids will be evaluated by JNCASR. Price bids of technically qualified bidders only will be opened on date and time that will be decided by the JNCASR.
24. Public Procurement (preference to “Make in India”) order 2017 will be considered as per order No. P-45021/2/2017-PP (BE-II), dated 28.05.2018.

IMPORTANT DATES	
Last date for submission of bids (Two-bid system)	<u>December 30, 2020 up to 3.00 PM</u>
(a) <b>Technical Cover :</b> Technical Specs. Commercial Terms and Conditions, Brochures, Compliance statement EMD & Bill of quantities without Price Information.	
(b) <b>Price bid cover:</b> With complete specs & item wise Rates to be indicated.	
Opening of technical bids :	December 30, 2020 at 4.00 PM
Opening of commercial bids :	Will be informed later

(K. Bhaskara Rao)

Sr. Stores & Purchase Officer

के. भास्करा राव / K. BHASKARA RAO

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## SPECIFICATION FOR ULTRA LOW TEMPERATURE FREEZER & BIO SAFETY CABINET

1. Freezer should be of 400 - 450 Liters capacity will be preferred to fit our lab space.
2. System should have Programmable operating temperature from  $-50^{\circ}\text{C}$  up to  $-86^{\circ}\text{C}$  with  $1^{\circ}\text{C}$  increment
3. **It should be an energy efficient system with power consumption  $\leq$  (less than or equal to) 10.8 kWh per day under standard test conditions.**
4. **System must be fully functional in operating temperature range (ambient Temperature) from  $10^{\circ}\text{C}$  up to  $32^{\circ}\text{C}$**
5. **System should have a pull down time from ambient temperature to  $-85^{\circ}\text{C}$   $\leq$  (less than or equal to) 5.3 hrs**
6. Fully programmable microprocessor controlled with membrane keypad and eye level control panel.
7. Construction should be of Polyurethane foam (130mm thick) insulation.
8. System should be made up of 18 gauges Steel, 1.2 mm thick with powder coated paint to resist scratch and rust and the interior should be polished with 304 SS for easy cleaning and to eliminate potential for oxidation.
9. **Heated air vent with ice - cleaning plunger prevents vacuum formation, allowing the door to be quickly & effortlessly opened anytime in the day**
10. **Inner door should have silicone seal to prevent temperature loss and Outer door should have safe silicone triple point seal with flat soft sealing on outer door which is easy to clean, durable and prevent ice formation.** They should be no folded gaskets which leads to ice formation in between the folds hence making the gasket seal less durable and requiring replacement often
11. Freezer should have 5 Compartment with five inner doors.
12. Freezers should have heated air vent and front panel air filter.
13. Should have security keyed locks on the outer doors and lids keep out unauthorized users
14. Freezer must have battery back-up and 4 PIN security lock for unauthorized tampering.
15. Freezer must have RS 485 interface data logging port and it must also have on board SMART PLUS diagnostic software.
16. Audible and visible alarms for temperature, power failure, system failure, battery low etc .and it also have remote alarm port for connection to an auto dialer.
17. Freezer must use CFC-FREE, HCFC-FREE nonflammable refrigerants, and refrigeration system must be energy efficient and hermetically sealed two stage cascade refrigeration system.
18. Compressor should be capable to run any voltage between 190 – 270V.
19. **Freezer must have ISO 9001 standard quality test requirements and IEC 61010 Electrical safety CE & UL certified.**
20. Freezer should have efficient power consumption in the range of 10 to 11 kWh/day
21. Freezer must have capacity to hold 15 racks and 240 boxes of 2" / 5 cms height vials (Total sample (2" / 5 cms vials) capacity of 24,000 or more)
22. Freezer should have electric supply of 230v/50hz, 10 amps. Single phase.

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### Biosafety Cabinet

23. Cabinet should have protection of class 2 Type A2
24. Size of the cabinet should be 3 feet
25. Internal dimensions of Cabinet should be 27x 22 x 27 inch WDH
26. Cabinet should have working access height option from 8", 10" and 12"
27. Cabinet should have NSF 49 compliance for Personnel, Product and cross contamination test
28. Cabinet should have UV resistance laminated safety sash with >6 mm thickness
29. Cabinet should have Momentum sir curtain down flow velocity profile for better safety
30. Cabinet should have high velocity return air slots for added safety
31. Cabinet should be capable of automatically handling a minimum 300% loading of filter without compromising of total air delivery >10% and should have VFD motor
32. Inflow velocity should be >100 FPM
33. Cabinet should Have HEPA filter with efficiency of >99.99 % along with ISO class 5 cleanliness
34. Cabinet should have low flow mode for reduce energy consumption up to 50%
35. Power consumption should be <130 W for safe mode
36. Cabinet should have min 10\* slop front and sash for ease of use
37. Internal work area should have > 690 mm
38. Cabinet should have unipressure plenum design for better uniformity of flow
39. Cabinet should have microprocessor controller with audible and flashing LED and timer for light
40. Internal work area should be made up of single piece 16 G type 304 stainless steel
41. Work area side walls and rear wall should be made up of one-piece SS construction without any joints and paint
42. Cabinet should have cable port feature for safe and ergonomically way of introducing cable in to work area
43. Cabinet should have ss diffuser for filter protection and uniform airflow
44. Cabinet should be of UL certified

  
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