Open Tender Notification for the procurement of "High-volume ultra freezer" at the Biochemistry Department, Indian Institute of Science, Bangalore

(Last date of submission of tenders: 10th October, 2023)

(TENDER FROM DOMESTIC VENDORS)

September 18, 2023

Dear Sir/Madam,

Sub: High-volume ultra freezer

This is a domestic tender notification meant for the purchase of an "High-volume ultra freezer" towards the purpose of storing cells, bacterial cultures and the temperature sensitive reagents. Your quotation should clearly indicate the terms and conditions of the quotation, delivery schedule, entry tax, payment terms, warranty coverage etc. The quotation should be submitted in two parts: Part I (Technical Bid) and Part II (Commercial Bid) and both should be submitted in separate sealed envelopes. The Technical bid should be exactly the same as the Commercial bid except that prices must not be shown in the technical bid. The Technical bid should have an item wise compliance report of all specifications indicated below. The last day for submitting the bid is 10th October, 2023 from the date of tender notification. The offer should be valid for a period of at least 90 days from the last date of submission of quotes. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor. The quotations should be on FOR-IISc Bangalore basis in INR only.

The bid should address the following technical specifications for the: High-volume ultra freezer:

- Ultra Freezer, 5 inner compartments (4 shelves, 5 inner doors), door handle on left side, air-cooled.
- 230V/50Hz, power cords EU and UK Technical
- Capacity: 570 L; 20.1 Cu. Ft. Number of compartments; 5-7 Racks per shelf, Racks per freezer= 25-35,
- Box Capacity 50 mm (2 in; 10x10) box = 400 Sample Capacity 50 mm (2 in; 10x10 box; with Eppendorf MAX racks) = 40000 Temp Range
- Programmable temperature range from -50°C to -86°C in 1°C increments, even at ambient temperature upto 32°C Control: Micro Processor control LED display
- User interface based on PhysioCare Concept Circulation, Requires just one fan for reduced power consumption and noise.
- Cascade Refrigeration: Hermetically-sealed two stage cascade system with capacity to cope in high-ambient conditions

- Construction: Interior Polished 304 2B SS is easily cleaned, eliminates potential for oxidation, Exterior 18 gauge Steel, 1.2 mm thick with powder coated paint to resist scratch and rust
- Door seal: Inner door fitted with low temperature safe silicone seal to prevent temperature loss when opening the outer door. 01 Nos. Outer door fitted with low temperature safe seal, providing tight fit Insulation:
- PolyUrethane Foam Refrigerant charge: Natural Gas/ Green HydroCarbon (HFC, HCFC, CFC free)
- High stage: R290: Low stage: R170 Shelves: 5 compartment with 4 corrosion resistant Stainless steel, heavy duty Shelves.
- Sealed insulated inner doors with secure closures for 05 Nos. compartments to provide easy access & comfort of use Security:
- Specific Manual Lock on Door handle with Password protection for freezer settings to prevent unauthorized users from opening the main door and also changing the parameters on the display control.
- Option to secure the handle lock using padlock (not provided with ULT freezer) without requirement for additional adapters Power: On-Off switch is located behind the locked panel, preventing power from being accidentally turned off.
- Battery Backup: Activates alarms and display temperature during power outage.
- User Interface: Alarms Adjustable high/low temperature, powerfail, battery low, filter clean, fault
- Connectivity: Remote alarm port Standard (BMS), Ethernet optional
- Heated Air vent: Unique, Proprietary automatic vent port on front door improves energy consumption and uniformity while providing easier access for fast reopening of the chamber door after closure.
- Filter: Front mounted compressor filter is easily visible and accessible. Reusable filter rinses clean. Electric Power: 230 V/50 Hz, Current rating 7.0 A
- Programmed startup: Random startup times have been programmed, 1-1.5 minutes apart, preventing power supply overload should multiple freezer restart simultaneously following a power failure.
- Noise Level: 57.5 dB, Max Heat Output @-80°C: 346 W (1,180 BTU/ h) Power Consumption @-80°C: 8.3 kWh/day Pull down Time (freezer empty, from 20°Cambient to -80 °C): 3 hrs 50 min Warmup Time (freezer 2/3 full, from -85 °C to 0 °C): 40 Hrs Door open Recovery after 15 sec door opening (freezer set to -80 °C): 10 min Certification: CE and CSA certified WEEE,ROHS,REACH.
- Should maintain an internal Temperature of -86°C, even when operated in ambient temperature condition of up to 32°C Temperature Back Up: Optional CO2 and LN2 Backup are available

Important: Please note that the High-volume ultra freezer should match all technical specifications and item- wise compliance must be listed in a detailed document in the technical bid

- 1. The Bidder should belong to either Class-1 or Class-2 suppliers distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter. a) Class-1 supplier: Goods and services should have local content of equal to or more than 50%. b) Class-2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
- 2. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
- 3. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to the Class-1 supplier.
- 4. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.

The sealed tender documents should be addressed to <u>The Chair, Department of Biochemistry</u>, Indian Institute of Science, Bangalore 560 012. Last date for receiving queries is 10th Oct. 2023 from the date of tender notification.

Thank you,

Sincerely

Chair Department of Biochemistry, Indian Institute of Science Bangalore - 560 012