

Date: 28.02.2024

Global Tender Enquiry for narrow gap non-optical cryostat.

(As per the IISc-GTE-2023-336 dated 19th Feb 2024 – Government of India relaxation on global tender enquiry)

To Whom It May Concern

This order is being processed using Government of India funds. As such these funds are governed by GFR 2017 rules. The Government recently amended the GFR rules of global tender enquiry (GTE), and vendors must submit bids that are compliant with the latest rules.

This is a Request for Quote (RFQ) from the Indian Institute of Science (IISc), Bangalore, for the supply of narrow gap non-optical cryostat for quantum materials and interfaces group at CeNSE, IISc Bangalore.

A. Procedure:

1. Vendors will be required to submit a technical proposal and a commercial proposal in **two separate sealed envelopes**. Only vendors who meet the technical requirement will be considered for the commercial negotiation.
2. The deadline for submission of proposals is **20th March 2024 5:30 pm** Indian Standard Time. Bids should arrive at the office of
The chairman,
kind attention: Prof. Dhavala Suri,
TF-02, Centre for Nano Science
and Engineering, Indian Institute
of Science,
Bangalore 560012, India, by the above deadline.
1. The commercial bid and technical bids must be submitted in two separate envelopes. A technical bid must contain a point-by-point technical compliance document. The technical bid must not contain any price information.
2. The technical proposal should contain a compliance table with 5 columns. The first column must list the technical requirements in the order that they are given in the technical configuration below. The second column should describe your compliance in a “Yes” or “No” response. If “No” the third column should provide the extent of the deviation (please provide quantitative responses). The fourth column should state the reasons for the deviation if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirements table below.
3. As an option, please provide itemized cost for any suggested accessories/add-ons that may enhance the usability, capability, accuracy, or reliability of the tool. Vendors are encouraged to quote for as many add-ons as their tool portfolio permits under the optional items.

4. Clarify if periodic (preventive) maintenance be done by a trained on-site engineer or requires a specialist from the OEM.
5. If maintenance requires OEM, as an additional option, provide the cost of an annual maintenance contract (AMC) for 3 years, post-warranty. The AMC must cover 1 scheduled and 1 emergency visit per year. It must also indicate who will service the AMC, an Indian agent, or the OEM. The AMC cost must also include an itemized list of spares that are essential for the scheduled visits.
6. The bid must include references of 3 previous installations, preferable in India. Please provide the names and contact addresses of the referees so that the committee can contact them independently.
7. A pre-tender meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
8. Payment terms should be mentioned in the technical bid. The payment terms have to be CIF or CIP.
9. If multiple systems can fulfill the requirements, vendors can submit multiple bids.
10. After the award of the Purchase Order (PO), the vendor must provide an Order Acknowledgement within 15 days from the receipt of the PO.
11. Training for at least 2 users from IISc should be provided to make them well familiar with the operation of various components and successful day-to-day operation.
12. The purchase of optional items is subject to budgetary constraints.
13. The bidder must confirm that the system manufacturer runs their own clean room with at least 2 systems of the quoted type installed there for ten years.
14. Spare parts of the system must be available for min 7 years.
15. Supplier must confirm that he runs a free of charge service hotline. Include the telephone number and email and persons on the hotline. Telephone response time max 30 min.
16. Service visit response time by OEM engineer not agent max 5 working days.
17. Provide audited financial statements of last three financial years. (F.Y2020-21,2021-22,2022-23)
18. The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time before the award of contract without thereby incurring any liability of the affected bidder or bidders. The tender opening date is tentatively set for **21 March, 2024**.
19. Any questions or clarifications can be directed to: The chairman,
kind attention: Prof. Dhavala Suri,
TF-02, Centre for Nano Science and
Engineering, Indian Institute of Science,
Bangalore 560012 dsuri@iisc.ac.in
20. The **validity of commercial quotation should be at least 60 days** from the last date for the submission of tender documents
21. The decision of purchase committee will be final.

Technical Specifications

1. Cryocooler minimum temperature: at least 4 K (Heat Load:0.2W @4.2K) @50Hz
2. Cryocooler maximum temperature: 300 K
3. Bolt-on aluminum/steel Instrumentation Skirt with:
 - a. Two instrumentation feedthroughs for 19-pin connectors.
 - b. Vacuum valve with NW-25 flange for evacuation.
4. water cooled helium compressor compatible with cryocooler with low water flow specified rate.
5. Voltage specification, standard compressor: as per Indian input power conditions, single phase, 50 Hz
6. Helium hoses, 1 set
7. Closed vacuum shroud: aluminum/steel Construction, large sample space (minimum 30mm Diameter); outer diameter of the cryostat mouth should not more than 50 mm, to facilitate insertion of cryostat with electromagnets.
8. Closed radiation Shield: No holes, aluminum/steel construction.
9. Instrumentation for sample temperature control:
 - a. 10-Pin hermetic feedthrough.
 - b. 1*50 Ohm Durable metalized thermofoil heater.
 - c. 1* Curved Matched Silicon Diode sensor installed at the cooler tip for temperature control.
(preferably LS-DT-670B-SD).
 - d. 1* Calibrated Silicon Diode sensor installed with 4" [102 mm] free length for accurate sample temperature measurement (preferably DT-670-SD).
 - e. Temperature controller to read the temperature from both the sensors (preferably Lakeshore 336).
 - e. Sample holder with 16 pins compatible for wire bonding, along with complete thermally anchored wiring.
 - f. Sample temperature of ≤ 4 K must be demonstrated on a test sample on the sample holder, for 8 pin sample holder.
10. Installation Kit and Technical Manuals.
11. Testing and training should be done on site.
11. Export packing.

Optional:

1. Cryocooler Minimum Temperature: < 4 K (Heat Load:1W @4.2K) @50Hz.
2. 2*19 DC cables wiring (thermally anchored with stages) from connector to sample space.
3. Motorised rotation of the sample holder, vacuum jacket.