Date: 28.02.2024

Global Tender Enquiry for reflection high energy electron diffraction (RHEED) system and its integration onto a molecular beam epitaxy at the quantum materials and interfaces laboratory.

(As per the IISc-GTE-2023-337 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 reflection high energy electron diffraction (RHEED) system and its integration onto a molecular beam epitaxy at the quantum materials and interfaces laboratory 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 of the reflection high energy electron diffraction (RHEED) system to be integrated into MBE system.

S.No	Specification	Essential/Optional
1.	>=15 keV electron source to be mounted on CF63 with source	Essential
	power supply, deflection power supply, remote control, ultra	
	high vacuum compatible.	
2.	Mechanical X,Y motion, electronically controlled X and Y, beam	Essential
	rocking and beam blanking.	
3.	RHEED (fluoroscent) screen with view port shutter mounted on	Essential
	CF 63 chamber flange	
5.	High speed camera to capture RHEED patterns onto the	Essential
	computer. Software for image acquisition and storage. Video	
	capturing for RHEED oscillations. Camera accessories, camera	
	with USB connection to a computer, lens, flange mount.	