

Date: 10 December 2021

## 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 a **tunable laser source** to Micro and Nano Sensors Lab, CeNSE, IISc Bangalore. The laser should be operating in 1570 nm – 1610 nm (L band) wavelength range and must have wavelength and power tunability.

### 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 **03 January 2022, 5:30 pm** Indian Standard Time. Bids should arrive at the office of **The chairman, kind attention: Prof. Akshay Naik, FF-13, Centre for Nano Science and Engineering, Indian Institute of Science, Bangalore 560012**, India, by the above deadline.
3. The technical proposal should contain a technical compliance table with 5 columns.
  - a. The first column must list the technical requirements, in the order that they are given in the technical requirement below.
  - b. The second column should provide specifications of the instrument against the requirement (please provide quantitative responses wherever possible).
  - c. The third column should describe your compliance with a “Yes” or “No” only. Ensure that the entries in column 2 and column 3 are consistent.
  - d. The fourth column should state the reasons/explanations/context for deviations, if any.
  - e. The fifth column can contain additional remarks from the OEM. You can use this opportunity to highlight technical features, qualify response of previous columns.
4. Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors
5. If multiple systems can fulfil the requirements, vendors can submit multiple bids.

6. In the commercial bid, please provide the itemised cost of the system and required accessories, such as software, power supply, etc.
7. As an option, please provide itemised 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.
8. The quotes should be CIF/CIP Bangalore, India. So please include the cost of shipping. Customs can be extra.
9. In the quote, you are requested to provide itemised cost for spares expected over 2 years of use.
10. Please indicate the warranty provided with the tool.
11. Any questions or clarifications can be directed to:  
The chairman,  
kind attention: Prof. Akshay Naik,  
FF-13, Centre for Nano Science and Engineering, Indian  
Institute of Science, Bangalore 560012  
[anaik@iisc.ac.in](mailto:anaik@iisc.ac.in)

## B. Terms and Conditions

1. The decision of purchase committee will be final
2. The vendor is responsible for the installation of the system at the IISc campus.
3. The RFQ must include references of 5 previous installations, preferable in India. Please provide the names and contact addresses of the referees, so that the committee can contact them independently. Details of such systems with model numbers and users should be provided. The reference letters can be used to disqualify vendors with poor track record of service, build quality, system performance, or poor availability of spares.
4. The vendor must also submit a list of 50 customers where similar systems have been installed.
5. Clarify if periodic (preventive) maintenance be done by a trained on-site engineer or requires a specialist from the OEM. The vendor should have qualified technical service personnel for the equipment based in India and must assure a response time of <2 business days after receiving a service request.
6. The lead-time for the delivery of the equipment should not be more than 2 months from the date of receipt of our purchase order.
7. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason.

8. Wherever requested in this specifications sheet, data must be supplied along with technical compliance documents. Technical bids without supporting data will be deemed as technically non-compliant.
9. All guaranteed specifications will have to be demonstrated, upon request, in an active installation. Failure to demonstrate any promised specifications will be deemed as technical non-compliance.
10. Printed literature and published papers in support of all compliance to the prescribed specifications may be provided.
11. Technical evaluation by the institute may include demonstration to verify functionalities and capabilities of the system quoted. Any discrepancy between the promised specifications and demonstrated specifications will be deemed as technical noncompliance. If need arises, the vendor must be ready to physically visit IISc for a techno commercial discussion.
12. The **validity of commercial quotation should be at least 60 days** from the last date for the submission of tender documents.
13. The payments to non domestic vendors will be through a Wire transfer/Letter of Credit and milestone of the payment will be determined after the mutual discussions with the successful bidder. As per GFR no advance payment can be made to domestic vendors, unless an equal amount of bank guarantee is provided.

## **Technical Requirements:**

### **A. Technical Specifications of the tunable laser source**

The tunable laser source should have the following essential specifications:

1. Laser type: Wavelength and Power Tunable laser (fiber output)
2. Wavelength tuning range: 1570 nm to 1610 nm (L band)
3. Max output power: 10 dBm to 15 dBm
4. Linewidth  $\leq 10$  kHz
5. Wavelength fine-tuning resolution 1 MHz
6. Wavelength accuracy  $\pm 1.5$  GHz
7. Side-mode suppression ratio  $> 40$  dB
8. Optical Signal to noise ratio  $> 40$  dB



9. Polarization Extinction Ratio > 18 dB
10. Back reflection < -14 dB
11. Relative intensity noise < -140 dB/Hz at 10 MHz
12. Wavelength stability  $\pm 10$  pm per day
13. Internal power monitor with accuracy  $\pm 0.5$  dBm
14. Computer interface through GPIB/USB/Ethernet/RS232 for programmable control