

## **Request For Quote for the procurement of “a compact supercontinuum laser source and a computer-controlled tunable filter” from domestic (India-based) manufacturers**

Ref: PH/SBM/521/2021-22

Date: 18/03/2022

This is a Request for Quote (RFQ) from domestic (India-based) manufacturers for the procurement of an “**a compact supercontinuum laser source and a computer-controlled tunable filter**” (referred to as equipment or system in the RFQ) that will be utilized for optics experiments. The required technical details including terms and conditions are provided below. The last date of reaching the quotation to us is mentioned below.

With respect to this tender, the rules laid out by the Government of India in order No. P45021/2/2017-PP (BE-II) issued by the Public Procurement Section, Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 04th June 2020, will be followed. Per this order, the government has defined a ‘Class-I local supplier’ as “a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%”. A ‘Class-II local supplier’ is “a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%”. Only ‘Class-I’ and ‘Class-II’ local suppliers are eligible to participate in this open domestic tender. Any ‘Non-local supplier’, i.e., “a supplier or service provider, whose goods, services or works offered for procurement, has local content less than 20%” is ineligible to participate in this tender.

### **(A) Specifications of supercontinuum laser:**

1. Photonic Crystal Fibre based supercontinuum laser source covering visible to infrared wavelength range in one module/unit is required.
2. Wavelength range:  $\leq 450$  nm to  $\geq 2300$  nm
3. Total power:  $> 100$  mW. Total power in the wavelength range 450-860 nm should ideally be  $\geq 25$  mW
4. Output pulse width:  $\leq 2$  ns

5. Collimated output beam is required with beam diameter of  $\geq 2$  mm near 1064 nm
6. Output should be single mode, close to Gaussian (cross-sectional) intensity profile
7. Beam quality:  $M^2 < 1.1$
8. Power stability:  $< \pm 1\%$

**(B) Specifications of tunable filter:**

9. Computer-controlled, portable filter for selecting specific narrow wavelengths from the supercontinuum laser in one module/unit is required. The supercontinuum laser and the filter unit should be integrated. All necessary interfacing between the laser and the filter must be included.
10. Acousto-Optic Tunable Filter (AOTF) is preferred.
11. Wavelength tunability range: from  $\leq 500$  nm to  $> 1064$  nm. A wider wavelength from  $\leq 500$  nm to  $> 1350$  nm is preferred. Quote separately for the wider wavelength tunability range.
12. In case multiple filters are used to cover the above wavelength range, the filters should be integrated and assembled in one unit.
13. Output mode: Free-space collimated. Arrangement for fibre-coupling is preferred (quote separately).
14. Polarization: Linear, horizontal with respect to base
15. Filter bandwidth: As good as possible. Specify the FWHM bandwidth for different wavelength range.
16. Multiple wavelength channels should be accessible and controllable through the software. At least six different tunable wavelength channels is required.
17. Integrated mechanical shutter is required.

**(C) Specifications of the system (laser + filter):**

18. Operating voltage, frequency: 220 VAC, 50 Hz
19. The system should be plug & play, maintenance-free, software-controlled, and suitable for 24/7 operation
20. Operation temperature: 20 deg C to 30 deg C

21. Cooling: Integrated air-cooling is required
22. All accessories such as RF driver, necessary software, connectors, adapters, cables etc. required for the independent operation of the device should be included.
23. Installation should be performed on site
24. The vendor/company and/or their associate (agent) in India should provide after sales service, full support, and repair if required.
25. Warranty: 2 years [onsite repair is preferred] from the date of installation. Quote for extending the warranty period for an additional one (i.e., total of three) years.

**Terms and conditions:**

1. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.
2. The bid should be submitted in a two-cover system, i.e., technical bid and commercial bid separately in sealed covers. The technical bid should contain all commercial terms and conditions, **except the price**.
3. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table that should describe your compliance in a "yes" or "no" response against each specification. If "no" the second column should mention the extent of the deviation. The third column should state the reason 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 requirement table below. **Tender documents without technical compliance documents will not be considered.**
4. In the commercial bid, the price should be inclusive of all discounts.
5. The vendor/company should have a track record of having previously supplied similar equipment in well-known national/international institutes/universities (please furnish the details).
6. The vendors quoting should ideally be registered with IISc, and the quote should ideally carry the vendor registration number in the bid.

7. The covering letter in the bid should clearly mention whether the vendor is a 'Class I' local supplier or a 'Class II' local supplier, failing which the vendor will be automatically disqualified. The vendor should indicate the percentage of the local content and provide self-certification that the items offered meet the minimum local content requirement. They should also give details of the location(s) at which the local value addition was made.
8. Lead time should be clearly mentioned in the technical and commercial bids.
9. The offer shall be valid at least 90 Days from the date of opening of the commercial bid.
10. The vendor/company should have existence for a minimum of 3 years. (Enclose Company Registration Certificate).
11. The vendor/company must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere.
12. The quotations should be on FOR-IISc Bangalore basis in INR only
13. The Institute reserves the right to accept or reject any bid, or to annul the bidding process and reject all bids, at any time prior to the award of contract without thereby incurring any liability of the affected bidder or bidders.
14. Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:
  - a. To accept OR reject lowest tender or any other tender or all the tenders.
  - b. To accept any tender in full or in part.
  - c. To reject the tender, offer not confirming to the tender terms.
15. The tender documents can be sent at the following address by post or in-person, and the document should reach us on/before **11 April 2022**.

The Chairman  
Department of Physics  
Indian Institute of Science,  
Bangalore 560012, Karnataka, India  
Attention: Sebabrata Mukherjee