

Global Tender notification for “a compact supercontinuum laser source and a computer-controlled tunable filter”

Ref: PH/SBM/521/2021-22

Date: 20/06/2022

This is a notice inviting global tenders for the procurement of “**a compact supercontinuum laser source and a computer-controlled tunable filter**” (referred to as equipment or system in this document) 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.

(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: ≤ 450 nm to ≥ 2300 nm
3. Total power: > 100 mW. Total power in the wavelength range 450-860 nm should ideally be ≥ 25 mW
4. Output pulse width: ≤ 2 ns
5. Collimated output beam is required with beam diameter of ≥ 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 ≤ 500 nm to > 1064 nm. A wider wavelength from ≤ 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 are 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. 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**.
2. 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.**
3. In the commercial bid, the price should be inclusive of all discounts.
4. 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).

5. The vendors quoting should ideally be registered with IISc, and the quote should ideally carry the vendor registration number in the bid.
6. Lead time should be clearly mentioned in the technical and commercial bids.
7. The offer shall be valid at least 90 Days from the date of opening of the commercial bid.
8. The vendor/company should have existence for a minimum of 3 years. (Enclose Company Registration Certificate).
9. 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.
10. The quotations should be on C.I.P. Bangalore basis (by Air Freight only). Please provide Itemized cost of the system and required accessories. The quotation should mention the terms of delivery, delivery schedule, estimated delivery date, and payment terms.
11. 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.
12. 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.
13. The tender documents can be sent at the following address by post or in-person, and the document should reach us on/before **13 July 2022**.

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