Department of Electrical Communication Engineering
Indian Institute of Science, Bangalore 560012, India

15 May 2020

To Whom It May Concern

This is a Request for Quote (RFQ) for procurement of a **Supercontinuum laser with tunable filters** (referred to as **equipment** in the RFQ) at the Department of Electrical Communication Engineering (ECE), Indian Institute of Science, Bangalore.

To the extent possible, the equipment price should be broken up into as many individual components as possible. This aids price comparison on commercial bids.

All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the Primary Point of Contact listed below.

Direct all questions concerning this acquisition to **Dr Kausik Majumdar** at **kausikm@iisc.ac.in**.

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Procedure:

1. Vendors will be required to submit a technical proposal and a commercial proposal in **two separate envelopes**.
2. The deadline for submission of proposals is the **5th June 2020, 5 pm**. Proposals should arrive at the office of **Dr. Kausik Majumdar, Department of Electrical Communication Engineering, Indian Institute of Science, India, 560012** by the above deadline.
3. The technical proposal should contain a compliance table that should describe your compliance in a "Yes" or "No" response against each of the items in the table listed in this RFQ. **If "No" the second column should state the extent of deviation. The "third" 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.
4. Items in addition to that listed in the technical table that you would like to bring to the attention of the committee can be listed at the end of the compliance table.
5. **Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors.**

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Technical Requirements: Please note that the requirements listed below are only guidelines. It does not disbar tools that do not meet the criteria listed. Vendors are requested to quote for tools that meet the criteria to the best extent possible and list deviations. Deviations are NOT an automatic reason for disqualification. They will be discussed by the technical committee prior to making an informed decision.

Tool Name: Supercontinuum laser with tunable filters

A. Supercontinuum Laser

1. Minimum Wavelength: 400 nm or less
2. Maximum Wavelength: 2400 nm or more
3. Total average power: 4W or more
4. Spectral power density: The laser should provide 1mW/nm or more at the output in the entire range of 400nm to 2400 nm. Please provide spectral power density data.
5. Power stability: < +/- 1% in the long term. Please provide data.
6. Minimum power in the range of <850nm: 750 mW
7. Fundamental repetition rate: 40 MHz or more. Please provide option for variable repetition rate.
8. Seed pulse with: 6ps or less
9. Spatial mode: Single spatial mode across the output spectrum
10. Polarization state: unpolarized
11. Output: collimated. Please specify the output beam diameter and divergence as a function of wavelength.
12. Armoured fiber length: 1m or more
13. Cooling: Integrated air cooling.
14. Sync output: NIM.
15. Please mention operating temperature range.
16. Power requirement: Must provide all necessary adapters that are compatible in India.

B. Tunable filters:

1. The vendor must provide appropriate tunable filters to cover the entire range of 400-2200 nm. The vendor has the flexibility in choosing the number of filters depending on the range of individual filters. The vendor must provide the price of individual filters.
2. Bandwidth: <8 nm in the range up to 1100 nm and <20 nm above 1100 nm.
3. Transmission efficiency: >40% in the entire range.
4. Shutter: integrated.
5. Spatial mode: single mode
6. Polarization: Linear polarization
7. Output: The vendor must provide separate pricing for free space and fiber coupled output options.
8. All necessary interfacing between the laser and the filter must be included.

C. Warranty: The vendor should provide pricing separately for 1-year and 3-year warranty.

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Clauses	
1.	Please include options currently available that can be added on in the future.
2.	**Training and Installation:** Onsite installation and training should be quoted.
3.	**Warranty and AMC:** Warranty period and cost of AMC beyond warranty period should be included in the commercial bid.
4.	Please include standards to be used for calibration of tool parameters.
5.	**The cost of shipping up to CIP Bangalore should be included. IISc will help with customs clearance at Bangalore Airport. Please include your payment option.**
6.	Please list a set of acceptance tests for on-site (vendor) inspection and after installation at IISc.
7.	Spares for up to one year should be included.
8.	The delivery time should be indicated in the quote.
9.	A set of basic tools required for performing routine maintenance. A tool cart that can be locked and that can accommodate these tools should be provided.
10.	The payment terms will be specified in the commercial proposal and is subject to negotiation.
11.	Please provide details of the number of trained personnel in India, number in the southern region or in Bangalore who can service the machine.

On behalf of the technical committee,

Kausik Majumdar
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Department of Electrical Communication Engineering
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