Global tender for Picosecond pulsed laser system at 405nm

Summary

1.	Tender Number	IAP/CMC/22-23/03A
2.	Tender Date	23 August 2023
3.	Item Description	Picosecond pulsed laser system @405nm and pulse width <50
		ps along with fully digital ultra-low-noise laser driver system
4.	GTE approval number	IISc-GTE-2023-249
5.	Quotation to be addressed to	Prof. C. M. Chandrashekar
		Department of Instrumentation and Applied Physics,
		Indian Institute of Sciences,
		Bengaluru 560012
		Email : <u>chandracm@iisc.ac.in</u> nikithar@iisc.ac.in
6.	Last Date and time for online submission of quotation	13 September 2023, 5:00 PM

To whom it may concern

This is a **Request for global quote (RFQ)** for procurement of **Picosecond pulsed laser system** (a)405nm and pulse width < 50 ps along with fully digital ultra-low-noise laser driver system and associated software at the department of **Instrumentation and Applied Physics** (IAP), Indian Institute of Science, Bangalore.

All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed below.

The deadline for submission of proposals is 13th September 2023 by 5:00 PM. Proposals should submitted online to the following email id's : <u>chandracm@iisc.ac.in</u> and <u>nikithar@iisc.ac.in</u> and should be addressed to Prof. C. M. Chandrashekar, Department of Instrumentation and Applied Physics, Indian Institute of Science, Bangalore, Karnataka 560012, India.

General Terms and Conditions

- 1. Indian vendor's can submit quote on behalf of their foreign principle and in that case the quotation should be in foreign currency and should not include any custom duty charges and local tax.
- 2. The lead time for the delivery of the equipment should not be more than 3 months from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.
- 3. All the quotations must be valid for at least 90 days at the time of submission.
- 4. List of customers and references: The Bidder should have supplied similar equipment in Central Universities preferably in centrally Funded Technical Institutes (IITs, IISC, IISER, NIT). Please provide the details and contact information.
- 5. The Bidder must not be blacklisted/banned/suspended or have a record of any servicerelated dispute with any organization in India or elsewhere. A declaration to this effect should be provided.
- 6. Items in addition to that listed in the technical table that you would like to bring to the attention of the committee, such as data sheets, technical plots etc. can be listed at the end of the compliance table.
- 7. Vendors are encouraged to highlight the advantage of their tools over comparable tools from the competitors.
- 8. If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
- 9. 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.
- 10. Warranty terms and additional warranty options is a must for all the components. Please specify the service plan like whether the local distributor will address the issue or the parent company.

- 11. Terms and conditions for the annual maintenance contract beyond the warranty period should be mentioned.
- 12. After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.
- 13. Please quote the price of each optional line item, separately.

Technical requirements: Please note that the requirements listed below are only guidelines. It does not disbar bids that do not meet the criteria listed. Vendors are requested to quote for equipment 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.

Picosecond pulsed laser system @405nm and pulse width <50 ps along with fully digital ultra-low-noise laser driver system

Sl. No.	Technical Specification	Value / Range
1.	Average power	100 mW, mode-hop-free laser emission
2.	Central wavelength	405 nm, Single frequency
3.	Pulse width	<50 picosecond
4.	Picosecond pulsed laser	Up to 80 MHz
	repetition rate	
5.	Beam quality	Collimated, circular beam, typ. diameter 1 mm and M ² <
		1.5 (< 1.2 typ.)
6.	Fiber coupling	With fiber coupling of laser light
7.	Polarization	<100:1 vertical
8.	Power stability	<1% (STD/mean)/h typ.
9.	Laser head dimension	Approx. 192 x 80 x 60 mm ³
11.	External sync output	TTL/NIM
12.	Feedback protection	Built-in feedback protection ((30 dB optical isolator)
13.	Driver Unit	 Compatible driver unit specifications : (a) Microprocessor type driver unit (b) Ultra-low-noise laser driver with full digital control (c) Should power 1 or 2 laser heads (d) Should have PC control or push button operation (e) Auto-detection of laser head and operating parameters (f) In-build temperature control (g) Digital communication interface : USB / ethernet
14.	Software /graphic interface to control	Must be included with graphic interface capabilities
15.	Any cables, connectors or other accessories required to connect laser system with laser driver system and to PC.	Must be included
16.	warranty	Minimum of one year

Other requirements:

1.	Compatible operating system(s) for the interface software should be specified. Suitable
	software drivers available should be specified.
2.	Please include other options currently available which can be added on in the future.
3.	Training and installation: Different options for training and installation by service
	engineer to be listed and quoted.
4.	The cost of shipping to IISc should be included.
5.	List of acceptance tests for on-site (vendor) inspection and after installation at IISc.
6.	A set of basic experiments for performing routine checks of acceptable operation with
	clear instructions to be provided.
7.	The payment terms will be specified in the commercial proposal and is subject to
	negotiations.
8.	Please provide details of the number of trained personnel in India, number in southern
	region or in Bangalore who can service the instrument.

Prof. C. M. Chandrashekar Instrumentation and Applied Physics Indian Institute of Science Bangalore, Karnataka 560012 **chandracm@iisc.ac.in**