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# Indian Institute of Science Bangalore

**Dr. Soumen Ghosh**

Assistant Professor

Laboratory for Ultrafast Chiroptical Science

Department of Inorganic and physical chemistry

Indian Institute of Science Bangalore

Bengaluru, 560012, Karnataka, India

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## **Domestic tender notification for the procurement of tunable repetition-rate amplified femtosecond laser system.**

### **Tender Summary**

1	Tender Number	IPC/SG/2023/01
2	Tender Date	1 <sup>st</sup> May 2023
3	Item Description	Tunable repetition-rate amplified femtosecond laser
4	Tender Type	Two bid system: (a) Technical Bid (Part A) (b) Commercial Bid (part B)
5	Place of tender submission	Dr Soumen Ghosh Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru 560012, India
6	Last Date and Time for tender submission	22 <sup>nd</sup> May 2023, 5:00 PM

This is a Request for quote (RFQ) from **Class I and Class II local suppliers/manufacturers** for the procurement of a “Tunable repetition-rate amplified femtosecond laser” at the Department of Inorganic and Physical Chemistry (IPC) in the Indian Institute of Science, Bangalore.

This Invitation for Bids is open to only domestic (India-based) manufacturers, Indian OEMs or its authorized Indian distributors. All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed 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 or Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 4<sup>th</sup> June 2020 will be followed. The bidders must go through the Government of India order stated above and follow all the rules and regulations therein.

Relevant definitions as per the Government of India order:

- **Class-I local supplier** - A supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%.
- **Class-II local supplier** - A supplier or service provider, whose goods, services or works are offered for procurement, has local content of more than 20% but less than 50%.
- **Local content** – The amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in per cent.

**Procedure:**

1. Vendors will be required to submit a technical proposal and a commercial proposal in **two separate sealed envelopes**. The technical bid should contain all commercial terms and conditions, except the price. **Only vendors who meet the technical requirement will be considered for the commercial negotiation.**
2. The cover letter should clearly state whether the vendor is a Class-I or Class-II local supplier distinguished by their “local content”. Failing this the bid will be automatically rejected.
3. The vendor must state the percentage of the local content and provide self-certification that the item offered meets the minimum local content requirement. They should also give details of the location(s) at which the local value addition is made.
4. Sperate detailed justification needs to be given to substantiate the qualification as Class 1 and Class 2 suppliers and the intender reserves the right to cross-check the factual validity of the same if some foreign parts or equipment is being put forward then please submit the “*bill of material*” details for the same for evaluation.
5. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table with 5 columns.
  - a. The first column must list the technical requirements, in the order that they are given in the technical requirements below.
  - b. The second column must provide the specification of the instrument against the requirement (please provide quantitative responses wherever possible)
  - c. The third column should describe the compliance with a “YES” or “NO” only. Ensure that the entries in column 2 and column 3 are consistent.

- d. The fourth column should clearly state the **reasons/explanations/context** for deviations if any. Without a clear explanation, just stating YES” or “NO” will not be considered.
  - e. The fifth column may contain additional remarks. It can be used to highlight the technical features, qualify the response of previous columns, or provide additional details.
6. Items in addition to that listed in the technical table that the vendor 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. Vendors are also encouraged to highlight the advantage of their tools over comparable tools from the competitors.
  7. The commercial bid must include the price of the item in Indian currency, inclusive of all discounts. All accessories needed for the instrument to function as per the technical specification must be listed. Please provide the itemized quotes for the instrument and any other attachments/accessories.
  8. As an option, please provide itemized costs 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.
  9. The commercial bid should indicate the following separately: (a) equipment price (b) optional items (c) Freight and insurance cost (d) Shipping cost and (e) the Total cost.
  10. List of customers and references: The Bidder should have supplied similar equipment in in **Govt. of India funded institutes (IITs, IISc, IISERs and NITs) and central universities**. Please provide the details and contact information.
  11. **The quotations should be on FOR-IISc Bangalore basis in INR only. Please quote the price of each optional line item, separately.**

The deadline for submission of the bids is 22<sup>nd</sup> May 2023, 5:00 pm Indian Standard Time. Proposals should arrive at the office of Dr. Soumen Ghosh, Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru, Karnataka – 560 012, India. Direct all questions concerning the acquisition to **Dr. Soumen Ghosh** at: [soumenghosh@iisc.ac.in](mailto:soumenghosh@iisc.ac.in)

#### **General terms and conditions:**

1. The decision of the purchase committee will be final. The Institute reserves the right to accept or reject any bid or to annul the bidding process and reject all bids, at any time before the award of the contract without thereby incurring any liability of the affected bidder or bidders.

2. The quote must also include references to 5 previous installations of similar equipment 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 references can be used to disqualify vendors with poor track records of service, build quality, system performance or poor availability of spares.
3. The bidder must also submit another list of 50 customers where similar systems have been installed.
4. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect should be provided.
5. The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.
6. Original Invoice, Original Warranty Certificate, and Original Test Reports should be produced for all imported items from OEM (Original Equipment Manufacturer) at the time of supply of the equipment.
7. The complete system is to be under a warranty period of a minimum of 1 year from the date of installation. No travel claims must be made by the vendor for servicing during the guarantee/warranty period.
8. If maintenance must be done by OEM, as an additional option, provide the cost of an annual maintenance contract (AMC) for 3 years, post-warranty. The AMC must cover one scheduled and one emergency visit per year. The AMC cost must also include an itemized list of spares that are essential for the scheduled visits.
9. The vendor should be able to repair and maintain the equipment once it is installed. Clarify if periodic (preventive) maintenance can be done by a trained on-site engineer (i.e. IISc employee) or requires a specialist from the OEM. The bidder should have qualified technical service personnel for the equipment based in India.
10. All the quotations must be valid for at least 120 days at the time of submission.
11. The quotations should indicate the terms of delivery, delivery schedule, tax, and payment terms.
12. After the award of the purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.
13. The lead time for the delivery of the equipment should not be more than 8 months from the date of receipt of our purchase order.

14. The payment would be through letter of credit with 80% LC payment against dispatch of documents and 20% after the completion of delivery and satisfactory installation subject to TDS as per rules. As per GFR, no advance payment can be made to domestic vendors, unless an equal amount of bank guarantee is provided.
15. The bidder is responsible for the installation of the equipment on the IISc campus.
16. Necessary training to operate the procured setup and required literature support (in the English language) should be provided without additional cost.
17. Bidders should undertake to support the system with spares and software bug fixes, if any, for the next 5 years.
18. Wherever requested in this specification sheet, data must be supplied along with the technical compliance documents. Technical bids without supporting data will be deemed as technically non-compliant.
19. 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.
20. Printed literature and published papers in support of all compliance with the prescribed specifications may be provided.
21. Technical evaluation by the institute must include a demonstration to verify the functionalities and capabilities of the system quoted. Any discrepancy between the promised specifications and demonstrated specifications will be deemed as technical non-compliance. If the need arises, the vendor must be ready to physically visit IISc for a techno-commercial discussion.
22. The intender reserves the right to withhold the placement of the final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all the above conditions without assigning any reason.

**Technical requirements of tunable repetition-rate amplified ultrafast laser system:**

<b>Parameters</b>	<b>Value</b>
Central wavelength	1030+/-10 nm
Output power	$\geq 10$ W
Pulse duration (Gaussian, FWHM)	<190 fs
Max. pulse energy	$\geq 1$ mJ
Tunable Base repetition rate	1 – 200 kHz

Pulse-to-pulse energy stability	< 0.5% rms
power stability	< 0.5% rms
Beam pointing stability	< 20 $\mu$ rad/ $^{\circ}$ C
Output beam mode quality	TEM <sub>00</sub> , M <sup>2</sup> <1.3
Beam diameter (1/e <sup>2</sup> )	4-6 mm
Beam divergence	<1.1 times diffraction limited
Output pulse polarization	Linear, horizontal, contrast >1:500
Pulse contrast	<1:1000 pre-pulse, <1:200 post-pulse
Pulse picker	Should be included and integrated in laser head
Hardware & Software	Appropriate hardware, computer and software accessories needed for functioning - laser chiller with coolant, computer with software interface, beam tubes, compatible power meter with sensor, etc. should be provided.
Additional	No further accessories (except for laser tables and power outlets) must be required for instrument functioning