

	INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036 Telephone: [044] 2257 9723/9798 E-mail: tender@imail.iitm.ac.in	
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The Senior Manager (Project Purchase)

Ref: PHY/GARA/031/2019
Date: 28.08.2019

Limited Tender No: PHY/GARA/031/2019

Due Date: 16.09.2019 at 5 PM

Pre-Bid meeting: - Not required.

Technical Bid opening meeting on 17.09.2019 at 11 AM, Department of Physics IIT-Madras.

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of **“Dye laser with doubling crystals”** conforming to the specifications given in Annexure I.

Instructions to the Bidder

- I. **Preparation of Bids:** - The tenders should be submitted under two-bid system (i.e.) Technical bid and Financial bid.
- II. **Delivery of the tender:** - The tender shall be sent to the addresses mentioned below, either by post or by courier so as to reach our office before the due date and time specified in our schedule. The offer/bid can also be dropped in the tender box on or before the due date and time specified in the schedule.
The tender box is kept in the office of the:

**The senior Manager,
 Project Purchase,
 IC & SR Building 2nd floor,
 I.I.T. Madras,
 Chennai – 600 036.**
- III. **Opening of the tender:** - The offer/bids will be opened by a committee duly constituted for this purpose. The technical bids will be opened first and will be examined by a technical committee which will decide the suitability of the bids as per our specifications and requirements. All bidders will be invited for opening of the technical bids. With respect to opening the financial bid, only technically qualified bidders will be called.

- IV. Prices:** - The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges to the **Department of Physics, IIT Madras, Adyar, Chennai**. The offer/bid should be exclusive of taxes and duties. The percentage of tax & duties should be clearly indicated separately. Kindly note that IIT Madras is eligible for concessional GST and relevant certificate will be issued.

In case of import supply, the price should be quoted without custom duty. IIT Madras is exempted from levy of IGST on Imports and eligible for concessional custom duty (not exceeding 5%) and the price should be quoted at C.I.P rates.

- V. Agency Commission:** - Agency commission, if any, will be paid to the Indian agents in rupees after receipt of the equipment and its satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in the tender document even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The foreign Principal should indicate the percentage of payment and it should be included in the basic price quoted originally (if any)..
- VI. Terms of Delivery:** - The item should be supplied to the **Department of Physics, IIT Madras** as per the Purchase Order. In case of import supply, the item should be delivered at the cost of the supplier to our Institution. The Installation/Commissioning should be completed as specified in our important conditions.
- VII. Technical Bid Opening:** The technical bid will be on 17.09.2019, 11 AM at the **Department of Physics, IIT-Madras**. The financial bids of those tenders who are technically qualified will be opened at a later date under intimation to them.
- VIII. IIT Madras** reserves the full right to accept / reject any tender at any stage without assigning any reason.

Yours sincerely,

The Senior Manager (Project Purchase)
IC&SR Building, I.I.T. Madras,
Chennai – 600 036.

SCHEDULE

Important Conditions of the tender

1. The due date for the submission of the tender is **16.09.2019 at 5 PM.**

The offers / bids should be submitted in two bids systems (i.e.) Technical bid and financial bid. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms etc. The Technical bid and financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The Limited Tender for supply of **“Dye laser with doubling crystals”** should be written on the left side of the Outer bigger cover and sealed.

2. **EMD: - The EMD in the form of Account Payee Demand Draft/Fixed Deposit Receipt/ Banker's Cheque or Bank Guarantee for 2% of the quoted value of the item; drawn in favor of The Registrar-IIT Madras, payable at Chennai should be enclosed in the cover containing financial bid.** Any offer not accompanied with the EMD shall be rejected summarily as non-responsive.

The EMD of the unsuccessful bidders shall be returned within 30 days of the end of the bid validity period. The same shall be forfeited, if the tenderers withdraw their offer after the opening during the bid validity period. The Institute shall not be liable for payment of any interest on EMD. EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME).

When a foreign vendor does not have a local agent in India, he can submit demand draft equal to 2% or wire transfer the amount to our account as detailed in the attachment (Annexure II) and enclose the proof with the financial bid.

3. **Performance Security: -** The successful bidder should submit Performance Security for an amount of 5% of the value of the contract/supply. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt from the commercial bank, Bank Guarantee from any nationalized bank in India. **The performance security should be furnished within 21 days from the delivery of the purchase order.**

Performance Security in the form of Bank Guarantee:- In case the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed through the Beneficiary Bank to the end user bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee from a Nationalized Bank of India.

The Bank Guarantee should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

4. **Indian agent:** If an Indian agent is involved, the following documents must be enclosed:
Foreign principal's proforma invoice indicating the commission payable to the Indian Agent and nature of after-sales service to be rendered by the Indian Agent.
 - ✓ Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.
5. The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers. A list of customers in India and abroad with details must accompany the quotations. Quotations for a prototype machine will not be accepted.

6. Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid.
7. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.
8. **Validity:** Validity of Quotation not less than 90 days from the due date of tender.
9. **Delivery Schedule:** - The tenderer should indicate clearly the time required for delivery of the item (subjected to the executive committee-IITMadras approval). In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.
If there is delay, the penalty will be @1% per week of delay subject to a max of 10% of the value of purchase order and if the delay is more than accepted time frame by IITM, the PO would be cancelled and liquidated damages will be enforced.
10. **Risk Purchase Clause:-** In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.
11. **Payment:-**
 - (i) No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done).
 - (ii) **Advance Payment:** No advance payment is generally admissible. In case of specific percentage of advance payment is required, the Foreign Vendor has to submit a Bank Guarantee equal to the amount of advance payment and it should be routed through the Beneficiary Bank to the end user Bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee through a Nationalized Bank of India.
12. **On-site Installation:** - The equipment or machinery has to be installed or commissioned by the successful bidder within 15 to 20 days from the date of receipt of the item at site of IIT Madras.
13. **Warranty/Guarantee:** - The offer should clearly specify the warranty or guarantee period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately (For more details please refer our Technical Specifications).
14. **Late offer:** - The offers received after the due date and time will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal, Courier or any other delay.
15. **Acceptance and Rejection:** - I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
16. **Do not quote the optional items or additional items unless otherwise mentioned in the Tender documents / Specifications.**

17. Disputes and Jurisdiction:

Settlement of Disputes: Any dispute, controversy or claim arising out of or in connection with this PO including any question regarding its existence, validity, breach or termination, shall in the first instance be attempted to be resolved amicably by both the Parties. If attempts for such amicable resolution fails or no decision is reached within 30 days whichever is earlier, then such disputes shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996. Unless the Parties agree on a sole arbitrator, within 30 days from the receipt of a written request by one Party from the other Party to so agree, the arbitral panel shall comprise of three arbitrators. In that event, the supplier will nominate one arbitrator and the Project Coordinator of IITM shall nominate on arbitrator. The Dean IC&SR will nominate the Presiding Arbitrator of the arbitral tribunal. The arbitration proceeding shall be carried out in English language. The cost of arbitration and fees of the arbitrator(s) shall be shared equally by the Parties. The seat of arbitration shall be at IC&SR IIT Madras, Chennai.

- a. **The Applicable Law:** This Purchase Order shall be construed, Interpreted and governed by the Laws of India, Court at Chennai shall have exclusive jurisdiction subject to the arbitration clause.
- b. Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.

20. All Amendments, time extension, clarifications etc., will be uploaded on the website only and will not be published in newspapers. Bidders should regularly visit the above website to keep themselves updated. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.

Acknowledgement: - It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

**SIGNATURE OF TENDERER
ALONG WITH SEAL OF THE
COMPANY WITH DATE**

Technical specifications

A tunable dye laser with doubling crystal mounted is sought for the existing Nd:YAG pump laser. The 2nd, 3rd, and 4th harmonics of the Nd:YAG laser are available. The output energy per pulse for the existing 10Hz, 5ns, pump laser is 850 mJ at 1064nm. The output energy per pulse of the 2nd, 3rd, 4th harmonics, respectively, are 425 mJ, 225 mJ, and 125 mJ.

The Dye laser should have the following specifications:

S.No.	Item	Description
1	Require fundamental output wavelength range	420 to 730 nm
2	Doubling crystals	Should be provided to give output in the range 280 - 420 nm
3.	Thermal stability	All crystals should have thermal stabilization facility
4.	Output energy per pulse	25 mJ at 545nm, 100 mJ at 560nm, 100 mJ at 625 nm, 4mJ at 270nm, 15 mJ at 365 nm, 10 mJ at 380 nm.
5.	Operational convenience	1) Switching over from one wavelength pumping to other should be possible without changing any optics in the dye laser 2) Fundamental and harmonics of the Nd: YAG laser should be usable with ease.
6.	Tuning of the fundamental output	The fundamental dye laser's tuning wavelength range should be achieved by one/two gratings. If, multiple gratings are required, change of gratings should not affect the cavity optics alignment. Grating should be mounted on a precision removable mechanics for this purpose. Please indicate the cost of extra grating with its precision mount separately as an option and also, the wavelength gap of each grating.
7.	Scanning the wavelength	Computer controlled wavelength scanning is required. <i>The required Software has to be provided.</i>
8.	UV crystal tuning	Easy scan with integrated look up tables for nonlinear crystals with Integrated 4 pellin broca prism based beam deviation compensator. All residuals beams should be blocked inside the system
9	Beam Parameters	a. Pulse width (ns): 5ns or lower b. Spectral line width: $\leq 0.05 \text{ cm}^{-1}$ c. Beam diameter: $\leq 6 \text{ mm}$ d. Absolute accuracy: $\leq 0.01 \text{ nm}$

		<p>e. Wavelength reproducibility: <0.005nm</p> <p>f. ASE: < 0.5 % at the peak</p> <p>g. Polarisation (fundamental): 96%, vertical</p> <p>h. Divergence: ≤ 0.5 mrad</p> <p>i. Beam shape: Circular</p>
10.	Safety interlock	There should be a provision to interconnect the safety interlock lines of our existing Quantel Brilliant B Laser to Dye Laser's interlock line.
11.	Interface	USB 2.0
12.	Compatibility and coupling	It is very important that the dye laser is fully compatible with customer's existing Quantel Brilliant B Nd: YAG Laser's 532nm and 355nm beams. Necessary optics with suitable mechanics to couple with the pump laser should be provided.

General specifications:

- a. **The supplier should have earlier accomplished successful coupling of the Dye laser with a Quantel Brilliant B Nd:YAG laser system.** Contact details of the customer who have bought the company's dye laser and successfully coupled with their Brilliant B Quantel Nd: YAG laser should be provided. Successful coupling is achievement of the optimum dye laser beam energy and beam properties with **Quantel Brilliant B Nd:YAG laser system** as the pump laser.
- b. The dye laser should be installed in our laboratory by a technical expert from the manufacturer. Complete training should be given on operation and maintenance of the laser.
- c. Suitable dye circulator with suitable dye cells (to attain a circular beam) should be provided with the system. An additional dye circulator should also be quoted as an optional item.
- d. Necessary dyes to obtain the fundamental range of wavelengths should be provided with the system.**
- e. At least 3 sets of safety glasses (in the range of 200-900nm) should be provided.
- f. User list of the Dye lasers should be provided.
- g. Training to operate the laser system should be provided free of cost.
- h. Minimum two years of comprehensive warranty is required. Warranty should commence from the date of installation.
- i. Should provide contact details of your customers who bought the Dye-laser from you in the last 2 years.
- j. The quotation should be C.I.P rates, Chennai.



CENTRE FOR INDUSTRIAL CONSULTANCY & SPONSORED RESEARCH (IC&SR)
INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CHENNAI 600 036



ELECTRONIC CLEARING SERVICE (Credit Clearing)/ REAL TIME GROSS SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS

A. Details of Account Holder

Name of the Institution	Indian Institute of Technology - Madras
Complete Contact Address	Industrial Consultancy and Sponsored Research Indian Institute of Technology-Madras, IIT- Madras Campus Post Office, Sardar Patel Road, Guindy, CHENNAI - 600 036
Telephone No./ Fax No.	Tel - 044-22578355 / Fax - 044-22570545
E- mail ID of the FO/AO/REG/DIR	dricrsr@iitm.ac.in

B. Bank Account Details:

Institution Account Name (As per Bank Record)	The Registrar, Indian Institute of Technology - Madras
Account No.	2722101001741
Account Print Name	IIT F A/C , The Registrar IIT Madras
IFSC CODE	CNRB0002722
Bank Name (in full)	Canara Bank
Branch Name	IIT-Madras Branch
Complete Branch Address	Canara Bank, IIT-Madras Branch, IIT- Madras Campus Post Office, Sardar Patel Road, Guindy, CHENNAI - 600 036
MICR No.	600015085
Account Type	Savings Account

Certified that the Institute's account is in an RTGS enabled branch.
I hereby declare that the particulars given above are correct and complete.

Date:

Signature of the Competent Authority
of the Institution with seal.

K. M. Jayaram
DEPUTY REGISTRAR (IC&SR) (IC)
IC & SR, I.I.T. MADRAS
CHENNAI - 600 036

Certified that the particulars furnished above are correct as per our records.

Date:



FOR CANARA BANK
B. Sekar
SENIOR MANAGER
I.I.T. MADRAS CHENNAI 600 036.

Signature of the Authorized
Bank Official with Bank Seal.

B. SEKAR
Senior Manager
SP No. 39312



CENTRE FOR INDUSTRIAL CONSULTANCY & SPONSORED RESEARCH (IC&SR)
 INDIAN INSTITUTE OF TECHNOLOGY MADRAS
 CHENNAI 600 036



K VIJAYALAKSHMI
 DEPUTY REGISTRAR (IC&SR) *KL*

Project Accounts
 July 5, 2019

TO WHOMSOEVER IT MAY CONCERN

In connection with project, US currency may be transferred to CANARA BANK, IIT – MADRAS
 Branch In connection with the following details.

FOR TRANSFER OF CURRENCY US DOLLAR

Please Credit in USD

(THROUGH)

JP MORGAN CHASE, NEW YORK
 SWIFT CODE: CHASUS33

For credit to

USD ACCOUNT No: 001 – 1395969, of CANARA BANK INTERNATIONAL DIVISION MUMBAI

For Further Credit to

ACCOUNT NO: 2722101001741 of IIT Chennai – Swift Code: CNRBINBBIT OF THE
 REGISTRAR, IIT, MADRAS

K Vijayalakshmi
 DEPUTY REGISTRAR(IC & SR) i/c

This is to certify that particulars furnished are correct.

for CANARA BANK
[Signature]
 Senior Manager
 SENIOR MANAGER
 CHENNAI-600 036.
 Canara Bank – IIT Madras branch

B. SEKAR
 Senior Manager
 SP No. 39312



DEPUTY REGISTRAR (IC&SR) (i/c)
 IC & SR, I.I.T. MADRAS
 CHENNAI - 600 036