

सामग्री प्रबंधन अनुभाग भारतीय प्रौद्योगिकी संस्थान,रूडकी रूडकी–247667, हरिद्वार, उत्तराखण्ड, भारत Phone-(O) 01332-28-4293, 4693

E-mail: mmiitr@iitr.ac.in

GSTIN-05AAALI0033R1Z5

PAN-AAALI0033R

Material Management Section Indian Institute of Technology Roorkee-247667(Haridwar) (Uttarakhand) (India) Phone-(O) 01332-28-4293, 4693

E-mail: mmiitr@iitr.ac.in



निविदा प्रलेख / Tender Document

No. 1600001198/MM-6/IITR/2020-21/Laser, Optical Parametric/CHEMISTRY/55

29-Jul-2020

Bids under two bid systems (Technical and Commercial) are invited Online at CPP Portal (https://eprocure.gov.in/eprocure/app) from the reputed manufacturer/authorized supplier/dealer for the following items. **Manual bids will not be accepted.**

वस्त् की तकनीकी विषिष्टताये / Technical Specifications of item:

Sr. No	Name of item / Specifications	QTY	UOM
1	Amplifier	1	Set
2	Laser Tables	1	Set
3	Spectrometer System	1	Set
4	Optical Parametric	1	Set
ote:		1	

1. The firm must quote itemwise separately. L-1 will be assesed itemwise as mentioned above.

(For Detailed Technical Specification Plz refer Annexure-VII)

नोट—1: कृपया वस्तु का मूल्य एवं कर अलग—अलग दर्षाए।

Note-1: Please quote the Rate & Taxes of the item separately.

Note-2: E-way bill is to be issued by the Venders/Transporter

Note-3: The HSN / SAC Code of the item must be mentioned.

For Reasonability of Rates, The firm must enclose the last two supply orders for the same item with Financial Bid (Annexure-III) only.

	Critical Date Sheet		
1	Published Date	29-Jul-2020	(16:00)
2	Bid Document Download / Sale Start Date	29-Jul-2020	(17:00)
3	Seek Clarification Start Date	29-Jul-2020	(18:00)
4	Seek Clarification End Date	6-Aug-2020	(16:00)
5	Pre Bid Meeting Date	7-Aug-2020	(11:00)
6	Bid Submission Start Date	10-Aug-2020	(15:00)
7	Bid Submission End Date	18-Aug-2020	(17:00)
8	Bid Opening Date	19-Aug-2020	(12:00)

Chapter-1: Instruction to bidders

- A. The Tender should be enclosed with proper certifications like Agency Certification, Authorization certificate and/or Proprietary Certificate, as the case may be , in support of your offer.
- B. बोली का जमा किया जाना / Submission of Bids:

The bids should be submitted online in two parts -

- (i) The Technical Bid (Annexure-I, II & VII) with EMD and Tender Acceptance Letter
 - (ii) The Financial Bid (Annexure-III & IV) & Price Bid in .XLS Format Rates in .xls format will only be considered for Financial evaluation.

1600001198 Page 1 of 16

- 2 The bids should be on official pad preferably with GST Number of the firm
- The quotations should bear full details and where possible may be duly supported with catalogues, pamphlets, literature, samples of the item/items as the case may be for comparing the quality and rates of the item(s).
- 4 The transportation cost, insurance charge etc., if any, percentage/ rate of GST or all other taxes and duties should be clearly mentioned.
- 5 The bids / rates / tenders should remain valid for a minimum period of 90 days from the date of financial opening.
- Since this purchase being for research purpose, I.I.T., Roorkee is registered in DSIR, New Delhi, it is therefore exempted from the payment of custom duty/GST up to the limit of exemption as per Govt. Rules. The bidder should quote accordingly.
- 7 The rates shall not be subject to escalation of any nature.
- 8 The rates quoted should be applicable to educational institutions and any cost advantage received in lieu thereof should be passed on the Institution.
- 9 While quoting / sending rates, the firm shall give an undertaking as per Annexure-II.
- C. विधि निक्षेप / Earnest Money Deposit (EMD):

The Technical Bid should accompany an EMD of value as mentioned below against each item should be deposited online into below mentioned account.

Details of IIT Roorkee Bank Account:

Account Name: NON MHRD GOVERNMENT FUND IIT ROORKEE

Account No.: 00000032685865515
Bank Name: STATE BANK OF INDIA
Branch Address: IIT ROORKEE, ROORKEE

IFSC Code: SBIN0001069 MICR: 247002094

The Bidder will have to fill EMD details & provide the tender reference number in the narration/remarks while doing the payment as per quoted items and share the receipt of the same in pdf on CPP Portal (https://eprocure.gov.in/eprocure/app). The qualification in Technical bid will be subject to the submission of EMD in above mentioned account within schedule date and time as mentioned in the NIT. IITR shall not be responsible for any delay in submission of EMD.

In case the EMD is not received in above mentioned account within the aforesaid period, the bid will be out rightly rejected.

Exemption on submission of EMD will be given against valid MSME/NSIC certificate under valid category.

The earnest money shall be refunded to all the unsuccessful firms, without any interest after finalization of the contract.

EMD shall be refunded to the successful firms on receipt of PBG/Security Deposit. No interest is payable on the EMD to either the successful firms or the unsuccessful firms.

1	Item No.1	In Rs. 9,00,000/-	Portal is of item no. 4. But the Bidder has to
			submit EMD as per items quoted as mentioned
2	Item No.2	In Rs. 55,000/-	on Point C, else your bid will be rejected. ईएमडी राशि रु 17,500 / - पोर्टल में उल्लिखित
			आइटम नंबर 4 का है। लेकिन बोलीदाता प्वाइंट सी
3	Item No.3	In Rs. 1,50,000/-	पर उल्लिखित उद्धृत आइटम के अनुसार ईएमडी
			जुमा करनी है, अन्यथा आपकी बोली खारिज कर
4	Item No.4	In Rs. 17,500/-	दी जाएगी।

D. निष्पादन बैंक प्रत्याभृति / Performance Bank Guarantee (PBG):

In case the total order value of items becomes Rs.25.00 Lakhs or above, 10% of the cost price in the form of Bank Guarantee or FDR pledged in favor of "The Registrar, IIT Roorkee" is required at the time of installation of the equipment which should remain valid at least during the warranty period plus sixty days. No interest shall be claimed by the bidder on the PBG submitted.

- E. बोलियो का खोला जाना / Opening of Bids:
- The Technical Bids will be opened online at CPPP Portal (https://eprocure.gov.in/eprocure/app)-Plz refer Critical Date
 Sheet

1600001198 Page 2 of 16

- The Financial bids of only the Technically Qualified bidders will be opened. The date and time for opening the Financial Bid will be communicated to the respective firm later by the system (CPP Portal (https://eprocure.gov.in/eprocure/app))
- 3 Representatives of the firms(s) may be present at the time of openings, if they so desire.

Chapter-2: Conditions of Contract

F. ठेका देना / Award of Contract:

The final selection of the bidder for the award of the contract will be made on the basis of the lowest commercial bid amongst the Technically Qualified Bidders.

G. पूर्व–आपूर्ति निरीक्षण / Pre-supply Inspection:

Authorized representative of the Institute shall make the final inspection before supply of the item at site of the firm, if required.

H. वस्तु की आपूर्ति / Supply of Item:

The whole supply as per order shall have to be completed within the time mentioned in the order failing which the I.I.T. Roorkee shall have the right to accept or reject any quantity of items ordered. The firm will have to arrange for supply of the material in good condition.

I. भगतान की शर्ते / Payment Terms:

A. Payment in INR for supply of goods:

Where installation is not required: 100% payment will be made after satisfactory delivery of material duly certified by the HOD/P.I.

OR

Where Installation is required :100% payment will be made after satisfactory delivery and installation of the material duly certified by the HOD/P.I.

OR

80% payment will be made on receipt and acceptance of goods and balance 20% on successful installation and commissioning duly certified by the HOD/P.I.

OR

100% Advance will be paid against submission of 110% Bank Guarantee of the Total Order value. Bank Guarantee should be in favor of "The Registrar, IIT Roorkee" which should be valid till the date of Installation/Delivery period + 30 days.

B Payment in INR for AMC/Service:

Quarterly/Halfyearly after satisfactory completion of work/service duly certified by the H.O.D./P.I.

J. दंड/Penalty:

A penalty of 0.5% of the total order value per week shall be levied for the delay subject to a maximum of 5% of the total order value.

In case of the non-supply of the item after the acceptance of the work/supply order, EMD will be forfeited by the Institute.

K. अप्रत्याषित घटना/Force Majeure:

For the purpose of and within the scope of contract by way of indication and not of limitation, the term "Force Majeure" shall mean acts of nature, strikes, Lockouts, or other industrial disturbances, act of public/enemy, wars, blockades, insurrection, riots, epidemics, landslides, earthquakes, storms lightening, flood, washouts, civil disturbances, explosion and any other similar even not within the control of either party on which by exercise of due care and diligence neither party is able to prevent or overcome.

L. मध्यस्थता / Arbitration:

In the event of any difference or dispute arising out this work, all effort shall be made by both the parties to settle the same amicably. Failing an amicable settlement, the dispute shall be finally settled through arbitration conducted under the Arbitration and Conciliation Act 1996, by arbitrators appointed in accordance with the said Act. The arbitration shall give reasoned and speaking award. All disputes are subject to Roorkee jurisdiction only.

M. बोली अस्वीकृती के लिए मानदंड / Criteria for bid rejection:

- 1 If technical bid found without the required undertaking (Annexure-II).
- If it found at a later date that any information given in the bids is Incorrect/false then the bid is liable to be disqualified/rejected.
- 3 Canvassing in any form will result to disqualification.
- 4 If "extra, as actual" etc. are mentioned against any of the price components in the bid the bid will be rejected.
- 5 If the firm quotes 'NIL' charges / consideration, the bid shall be treated as unresponsive and will not be considered.
- 6 If financial bid is found along with technical bid in pdf on CPP Portal, then the bid shall be rejected outrightly.

Chapter-3: Schedules of requirements

- N. टिप्पणी / Note:
- 1 If the supplier/firm is manufacturer/authorized dealer/sole distributor/of the item, the certificate to this effect should be attached.

- Please note that the firms must submit the compliance Statement in an organized and structured manner in respect of all the specifications as per Annexure-VII with the supporting catalogue/leaflet of the firm. Annexure-I, II & VII have to be submitted with Technical Bid and Annexure-III & IV with financial bid.
- It may also be noted that the tender bids received after the stipulated date & time or found incomplete and the tender bids containing false/incorrect information shall be summarily rejected. The Institute shall not entertain any communication in this regard, whatsoever.
- 4 The firm is required to give its Bank Account details with IFSC for the purpose of making e-payment.
- The Indian Institute of Technology (IIT) Roorkee reserves the right to reject any quotation wholly or partly without assigning any reason.
- The quantity shown in the tender can be increased or decreased to any extent depending upon the actual requirement.
- 7 The decision of the institute in all matters relating to eligibility, acceptance, rejection of the bid will be final and binding on the applicants.
- 8 IIT Roorkee discourages High Sea Sale purchase. All tenders with High Sea Sale will be rejected.
- 9 The firms should clearly mention (in the financial bid) the Harmonized System of Classification (HS code) defined by the Central Custom and Excise Board (Govt. of India)- for the item(s) involving import.
- 10 If the bid opening date happens to be a holiday, then the bid will be opened at 3.30PM of the next working day followed by the holiday.
- If an agent submits bid on behalf of the Principal/OEM, the same agent can not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
- 12 Indian Agent should submit the certificate from the Foreign Principal that they are the Authorized & Registered Indian Agent.
- The quantity shown against the item is approximate and may vary as per demand of the Institute at the time of placing order. Also, the final requirement of each line item will be decided by the Institute at the time of placing the PO.
- Any corrigendum/addendum/errata in respect of the Tender Notice/ Enquiry letter shall be made available CPP Portal (https://eprocure.gov.in/eprocure/app). Hence prospective bidders are advised to visit the CPP Portal (https://eprocure.gov.in/eprocure/app) regularly.
- Bidders shall be responsible for the correctness of the information provided in the enquiry letter/tender document. If it is found at a later date that any information given in the bid is Incorrect/false then the bid is liable to be disqualified/rejected.
- Before submission of bids, bidders should read the complete enquiry letter/tender document carefully and ensure that the bidders fulfill the eligibility criteria.
- In case the item/product is under rate contract with DGS&D or GeM, then Bidder should certify that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.
- In Item Wise BoQ .xls sheet, In column M, leave blank for the item/service not provided/quoted by you. If quoted 0 then it will be considered that the item/service will be provided free of cost.

Or

In Item Rate BoQ .xls sheet, If quoted 0 for the items/services in column M then it will be considered that the items/services will be provided free of cost.

The Institute reserves the right to rectify any discrepancy of this advertisement, if found later on. In case of any inadvertent mistake in the process which may be detected at any stage even after the issue of purchase order, the Institute reserves the right to modify/withdraw/cancel any communication made to the bidder.

Chapter-4: Specifications and allied Technical details

Chapter-5: Price Schedule (to be utilized by the bidders for quoting their prices online in .XLS format at CPPP Portal (https://eprocure.gov.in/eprocure/app)

Plz. See Annexure- I, II, VII

Plz. See Annexure- III & Price Bid in .XLS Format

Chapter-6: Contract Form

Purchase Order is used as Contract Form

Chapter-7: Other Standard Forms, if any to be utilized by the purchaser and bidders

Plz. See Annexure- IV & Tender Acceptance Letter

*उप कुलसचिव (सामग्री प्रबंधन) / सहायक कुलसचिव (सामग्री प्रबंधन)

Deputy Registrar (MM)/ Assistant Registrar (MM)

*Document Digitally Signed on https://eprocure.gov.in/eprocure/app

For any Clarification regarding technical specifications of item Please Contact:

Prof. Ravindra Pandey, Deptt. of Ph.-01332-28-4318

Deptt. of Chemistry, Chemistry, Email: r.pandey.fcy@iitr.ac.in
IIT Roorkee IIT Roorkee

1600001198 Page 4 of 16

तकनीकी बोली

विस्तृत विवरण अनुपालन रिपोर्ट के साथ प्रस्तुत किया जाना है (अपने आधिकारिक लेटर हेड पर विकेता/फर्म द्वारा प्रस्तुत करने के लिए)

Detailed specification cum compliance report to be submitted with the Technical Bid (to be submitted by the vendor/firm on its official letter head)

(For Detailed Technical Specification Plz refer Annexure-VII)

Sr.No	Name & Required Specifications of Item(s)	Qty	UOM	Offered specifications of item(s) by the firm
1				
	Firm's Profile :			
1	Manufacturer/Authorized Agent/Distributor/Dealer/Supplier(valid certificate must be attached)			ached)
2	E-mail I.D. & Telephone/Mobile No. Detail of Bank A/C			
Note:	1. "offered specifications", should be filled up properly in the format provided as per Annexure-I.			
	2. Volume & Weight of the item should also be mentioned.			
	3. The HSN / SAC Code of the item must be mentioned.			

Signature:
Name :
Designation :

Seal of the Organisation

1600001198 Page 5 of 16

उपबंध / UNDERTAKING

Ref. No. Dated:-	No. 1600001198/MM-6/IITR/2020-21/Laser, Optical Parametric/CHEMISTRY/55 29-Jul-20
	That all the terms/conditions mentioned in the enquiry letter/tender against which the rates are being given are acceptable to the firm.
	It is certified that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.
	It is certified that the firm has never been black-listed from any Government Department. (State/Central Govt./Autonomous/ PSU)
	Signature
	Name

1600001198 Page 6 of 16

Financial Bid

(to be submitted by the vendor/firm on its official letter head)

Ref. No. No. 1600001198/MM-6/IITR/2020-21/Laser, Optical Parametric/CHEMISTRY/55

Date: 29-Jul-20

Rates:

Ī	Sr. No	Name of item / Specifications	Qty	UOM	Rate	Amount (INR) Or In
	31.110	Name of item / Specifications	αιγ	OOW		Other Currency
Ī					To be filled in	.XLS sheet (attached)
Ī		Т	otal			To be filled in .XLS sheet
		Grand	l Total Rs.	•		(attached)

¹⁾ Price of the items should be clearly mentioned if supplied Free of Cost.

Terms 8	ያ Con	ıditi	ons
---------	-------	-------	-----

1 Prices (Quoted in Rs.): FOR Deptt. of Chemistry, IIT Roorkee

2 Payment: Should be clearly mentioned, As per clause-I of enquiry letter.

3 Validity:

4 Delivery period:5 Other charges:6 Warranty:

7 Rejection: Equipment if found not as per the required specification would be rejected.

8 Penalty Clause: As per clause-J of enquiry letter.

In case of the non-supply of the item after the acceptance of the work/supply

order, EMD will be forfeited by the Institute.

9 PBG: In case the total order value of items becomes Rs.25.00 Lakhs or above, 10% of the

cost price in the form of Bank Guarantee or FDR pledged in favor of "The Registrar, IIT Roorkee" is required at the time of installation of the equipment which should remain valid at least during the warranty period plus sixty days. No interest shall be

claimed by the bidder on the PBG submitted.

It is certified that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.

Signature
Name
Designation
Seal of the Firm/Organization

1600001198 Page 7 of 16

Mandatory field to fill up by the supplier (enclosed with financial bid only):

Ref No: Date:	No. 1600001198/MM-6/IITR/2020-21/Laser, Optical Parametric/CHEMISTRY/55 29-Jul-20
1	Please tick (V) carefully the following as per requirement:
А	Customs Duty Exemption Certificate (with following supporting document) i) GATT Declaration ii) Authority Letter for custom clearance iii) Bank Release Order (BRO) iv)
В	Road Permit / Trade Tax Declaration (against Form-32). []
С	GST Exemption Certificate. []
2	Please fill up the following details:
А	Complete address of Freight Forwarder, Air lines etc. in whose favor Bank Release Order (BRO) has to be issued: M/s
В	Complete address of Custom House Agent (CHA) / Clearing Agent in whose favor GATT / Authorization for custom clearance has to be issued: M/s
С	Complete address of the firm / supplier / CHA to whom original clearance documents will be sent: M/s
3	Supplier has to submit above details with the financial bid wherever possible and has to send the above detail to mmiitr@iitr.ac.in and our CHA well ahead in time prior to shipment.
4	IITR CHA Address :

M/s Cwick (Import Consolidation), Private Limited, L-II/101, New Mahavir Nagar Extension, Outer Ring Road, New Delhi-110018, E-Mail: info@cwickimport.com and followup@cwickimport.com, Tel: +91-09313996082, +91-11-25996082, +91-11-25992781

5 **Details of Institute:**

IEC CODE	0100000011	
AD CODE	0001069-2770325	S.B.I., IIT ROORKEE
	0303974-2770324	P.N.B. IIT ROORKEE

Instructions for Online Bid Submission

Instructions to the Bidders to submit the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app.

- 1 Possession of valid Digital Signature Certificate (DSC) and enrollment/registration of the contractors/bidders on the e-Procurement/e-tender portal are prerequisite for etendering.
- Bidder should register for the enrollment in the e-Procurement site using the "Online Bidder Enrollment" option available on the home page. Portal enrollment is generally free of charge. During enrollment/registration, the bidders should provide only valid and true information including valid email id. All the correspondence shall be made directly with the contractors/bidders through email id as registered.
- 3 Bidder need to login to the site through their user ID/ password chosen during enrollment/registration.
- Then the Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by SIFY/nCode/eMudra etc. recognized by Controller of Certifying Authorities (CCA) India on eToken/SmartCard, should be registered.
- 5 The registered DSC only should be used by the bidder in the transactions and should ensure safety of the same.
- 6 Contractor/Bidder may go through the tenders published on the site and download the tender documents/ schedules for the tenders.
- 7 After downloading/getting the tender document/schedules, the Bidder should go through them carefully and then submit the documents as required, otherwise bid will be rejected.
- 8 Any clarifications may be sought online through the tender site, through the contact details or during pre-bid meeting if any. Bidder should take into account the corrigendum if any published before submitting the bids online.
- Bidder may log in to the site through the secured login by the user id/ password chosen during enrolment/registration and then by submitting the password of the e-Token/Smartcard to access DSC.
- Bidder may select the tender in which he/she is interested in by using the search option and then move it to the 'my tenders' folder.
- 11 From my tender folder, he may select the tender to view all the details uploaded there.
- It shall be deemed that the bidder has read and understood all the terms and conditions before submitting the offer. Bidder should go through the tender schedules carefully and upload the documents as asked; otherwise, the incomplete bid shall stand rejected.
- Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/ schedule and ordinarily it shall be in PDF/xls/rar/jpg/dwf formats. If there is more than one document, all may be clubbed together and provided in the requested format. Bidders Bid documents may be scanned with 100 dpi with black and white option. It is advisable that each document to be uploaded through online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip/rar and the same if permitted may be uploaded. The file size being less than 1 MB the transaction uploading time will be very fast.
- The Bidders can update well in advance, the documents such as certificates, annual report details etc., under "My Space option" and these can be selected as per tender requirements and then send along with bid documents during bid submission. This will facilitate the bid submission process faster by reducing upload time of bids.
- Bidder should submit the Tender Fee/ EMD as specified in the tender. The hard copy should be posted/couriered given in person to the Tender Inviting Authority, within bid submission due date and time as indicated in the tender. Scanned copy of the same should be uploaded as part of the offer.
- While submitting the bids online, the bidder shall read the terms and conditions and may accept the same to proceed further to submit the bid packets.
- 17 The bidder has to select the payment option as offline to pay the Tender FEE/ EMD as applicable and enter details of the same.
- The details of the DD/any other accepted instrument, physically delivered, should tally with the details available in the scanned copy and the data entered during bid submission time, otherwise submitted bid shall not be acceptable or liable for rejection.
- The bidder has to digitally sign and upload the required bid documents one by one as indicated. Every act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read, understood and agreed with all clauses of the bid document including General conditions of contract without any exception.
- The bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid may be rejected.

1600001198 Page 9 of 16

- 21 If the price bid format is provided in a spread sheet file like BoQ_XXXX.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Priced-bid/BOQ template shall not be modified / replaced by the bidder; else the bid submitted is liable to be rejected for the tender.
- The bidders are advised to submit the bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission due date and time (as per Server System Clock). The TIA shall not be held responsible for any delay or the difficulties faced during the submission of bids online by the bidders.
- After the bid submission (i.e. after Clicking "Freeze Bid Submission" in the portal), the acknowledgement number indicated by the system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender and also be used as entry pass to participate in the bid opening.
- The time settings fixed in the server side and displayed at the top of the tender site, shall remain valid for all actions of requesting, bid submission, bid opening etc., in the e- Tender system. The bidders should follow such time during bid submission.
- All the data being entered by the bidders would be encrypted using Public Key Infrastructure (PKI) encryption techniques to ensure the secrecy of the data. The data entered is not retrievable by unauthorized persons during the bid submission and until the time of bid opening by any person.
- Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- The confidentiality of the bids is maintained with the use of Secured Socket Layer (SSL) 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- The bidder should logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.
- For any queries regarding e-Tendering process, the bidders may contact at address as provided in the tender document. Parallely for any further queries, the bidders are advised to contact over phone: **0120-4001005** or send an e-mail to cppp-nic@nic.in.

1600001198 Page 10 of 16

Prequalification

- An undertaking by the firm that it has never been black-listed must be attached along with the Bid, failing which the Bid shall be rejected. (As per Annexure-II)
- 2 True copy of Permanent Account Number.
- 3 Details of GST along with a copy of certificate to be attached.
- Submission of samples if required, for all items indicated in the NIT. The make of items proposed to be supplied should be indicated and submitted along with the techno commercial unpriced bid without indicating the pricing components.
- Willingness to execute all orders which are placed to meet emergency requirement on priority basis. The Bidder shall note that standards for workmanship, material and equipment, and references to brand names designated by the Purchaser in the tender document are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in his bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

1600001198 Page 11 of 16

Tender Acceptance Letter

(To be given on Company Letter Head)

	Date:
	Sub: Acceptance of Terms & Conditions of Tender.
Te	ender No. 1600001198/MM-6/IITR/2020-21/Laser, Optical Parametric/CHEMISTRY/55
Tender descrip	otion:
Dear Sir,	
,	1 I/We have downloaded/ obtained the tender document(s) for the above mentioned 'Tender No.' from the web site(s) namely:
	as per your advertisement, given in the above mentioned website(s).
	2 I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from Page No. to (including all documents like section(s), schedules(s) etc.), which form part of the contract agreement and I/we shall abide hereby by the terms/conditions/ clauses contained therein.
	3 The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.
	4 I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s)/ corrigendum(s) in its totality/entirety.
	5 In case any provisions of this tender are found violated, then your department/organisation shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.
	Yours Faithfully,
	(Signature of the Bidder, with Official Seal)

1600001198 Page 12 of 16

Technical Specifications for Laser, Optical Parametric amplifier and Spectrometer System

S. No.	Items	Detailed Technical Specification
1.1	Amplifier	Amplifier
		Pulse duration: <35fs
		Central Wavelength ~800nm
	-	Power: 5W or more
		Repetition rate: IKHz
	Be .	Spatial mode: TEM00
		Power Stability: <0.5%rms over 24 hrs
		Beam M ² :<1.3 (both axes) or better
		Beam Diameter (1/e²) 10-11 mm
		Pre-Pulse Contrast Ratio: > 1000:1
		Post-Pulse Contrast Ratio: > 100:1
		Stable operation over a 4°C temperature range
		Seed laser for Amplifier:
		Central wavelength: Fixed at ~800 nm
		Pulse duration: <35fs, Suitable bandwidth for seeding Amplifier
		Output average power: \geq 400 mW or more @ 800 nm
		Power Stability: It is mandatory to provide power stability <0.5% rmsover 2 hrs or better
	1	Repetition rate: ~80MHz
		Spatial mode: TEM00
		Beam Divergence < 1.5 mrad .
		Beam M ² :<1.3 (both axes)
		Solid state Q switched pump laser for the Amplifier
		Wavelength: 527nm
		Repetition rate:1KHz
		Nominal Repetition Rate 1–10 kHz
		It is mandatory to provide Power/Energy Stability <0.5% rms(over
		2hours) .
		Fully compatible for above mentioned amplifier
		Dedicated laptop with 8GB RAM or more and 1TB HDor more/512 GB
		SSD or more, MS Windows 10 Professional 64Bit, INTEL 8th Generation
		i5-8400 2.8GHhz CPU 6Core or better
		It is mandatory to include all the necessary items such as power supply unit,
		water chillers, filters, routing optics and other necessary accessories for the
		complete function of the amplifier.
1.2	Optical parametric	Tuning range: 290 nm-1 Imicron
	Amplifier (to couple	Pulse duration: 100-120fs
	with amplifier)	Pump energy upto: 2.5mJ; output power at 3 microns ≥ 8 mW and 6 microns
	.,	≥ 4.5mW
		Repetition rate: 1KHz
		Necessary beam routing optics from amplifier to the OPA should also be
		included. Any additional accessories, if required for the complete
		functioning of the OPA should be provided. For DFG, it is mandatory to use
		KTA crystal.
		Dedicated laptop with 8GB RAM or more and 1TB HD or more/512 GB
		SSD or more, MS Windows 10 Professional 64Bit, INTEL 8th Generation
		i5-8400 2.8GHz CPU 6 Core or better.
1.3	Power meter and power	Suitable powerheads and power meter for different wavelengths ranging
	heads	from 1 mW to 10 W (800 nm - 11 micron) should be included.
1.4	Laser Goggles	8 pairs of googles for 800nm wavelength and 2 pairs for 527nm
1.5	Optical fibre	Optical fibre Spectrometer
	Spectrometer	Spectrum Analyser for UV-VIS-NIR region 200nm-1100nm with suitable
	*	detectors and software. Plug and play via the micro USB connection. Optical
		resolution: ~0.1-10.0 nm FWHM, Signal-to-noise ratio: 300:1 or better
1.6	Power backup	1hr for the entire system. Power back up for 5 kVA for chillers and 10 kVA
		for the entire system along with UPS with isolation transformer should be
		provided.
1.7	Reusable items	It is mandaotay to quote total price for the reusable items, which are not
		covered under warranty for three years. It is also mandatory to provide the
		covered under warranty for three years. It is also mandatory to provide the list of reusable items and price breakup for the same in a separate sheet.

Moment

DE

Hmanyo

Page 13 of 16

Technical Specifications for Laser, Optical Parametric amplifier and Spectrometer System

	after expiry of 3 years of comprehensive	completion of 36 months' comprehensive warranty. If the downtime of the instrument is more than one week, the warranty will be extended accordingly.
	warranty General Instructions	Warranty It is mandatory to provide 36 months of comprehensive warranty from the date of complete installation and commissioning. The warranty should cover all electronics, optics, filters, gratings, batteries and UPS for all
		the items from 1.1 to 1.8.
		It is mandatory to quote for CHT/CHT IT Roorkec.
	*	The vendor should have 10 years of experience in installing such systems in institutes of repute viz. IITs, IISERs, IISc and Central Universities.
		The vendor must quote the price including delivering, installation and training atDepartment of Chemistry, IIT Roorkee.
		Installation and sales and service: It is mandatory to give user list for the above mentioned instruments in India. This should also provide the list of institutions where the above mentioned spectrometers are installed. Installation and training. The company has to do installation and provide complete training to students.
		The vendor must have excellent sales service and applications support with a number of service engineers and service centre at Delhi and around. The service engineers must be experienced and factory trained. The response time of engineer to visit IIT Roorkee should not exceed 5 working days.
		Delivery time: Within 12 weeks after issuing of letter of credit. Vendors have to quote item 1.1-1.8 all together and must mention the individual prices of each item. L1 will be decided upon the sumtotal of items mentioned in 1.1-1.8
2	LASER Tables	1500 x 457 mm doubler interface.
		1500 x 3600 x 457 mm table sections doubled Specifications:
		• Mounting Holes M6
		• Surface Flatness ±0.1 mm over 600 mm square
		• Mounting Hole Pattern 25 mm grid
		• Mounting Flole Borders 12.5 mm
		Working Surface: ferromagnetic stainless steel Top and Bottom Skins: 4.8 mm thick with integrated damping layer
		Type of Dampers: Narrowband Tuned Dampers and Broadband Dampers
a .		Tuned Dampers mass-spring type two tuned mass dampers
		Tunability Range of Narrowband Dampers 25 Hz to 525 Hz
		Broadband Damping Constrained layer core, damped working surface and
		composite edge finish
		Hole Sealing Type Easy clean conical cup, 19 mm deep, non-corrosive high impact polymer material
		• Maximum Dynamic Deflection Coefficient 0.8 x 10 ⁻³ or better
		• Maximum Relative Motion Value <2.0 x 10 ⁻⁷ mm or better
		• Deflection Under Load < 1.3 x 10 ⁻³ mm or better
		Non-Magnetic Surface: No Alpha-Numeric Grid Labels: Yes
		Grid Markings: Standard grid markings on the table for easy and
		repeatable component placement
		Side Panel Highly Damped, composite wood to help eliminate vibrations
		from the side.
		Six S-2000 standard vibration isolators Isolator Height 16 in. (406.4 mm) SET
		• Load per Isolator > 900Kg
		• Number of Isolators:4
	a .	• Tie Bar Flange: No
		Self Cantering : Yes

4

Munh

Hmaunye

Technical Specifications for Laser, Optical Parametric amplifier and Spectrometer System

į		• Settling Time: 1.5 s
		• Releveling Accuracy: ±0.010 in. (0.254 mm)
		Horizontal Damping Oil Harian tall Ladding 5 Us 959;
		Horizontal Isolation. 5 Hz 85% Horizontal Isolation. Resonance 1.5 Hz
***		L · · · · ·
· ·		Horizontal Isolation, 10 Hz 95% Abortion Labbridge, 10 Hz 0886 or better
		Vertical Isolation, 10 Hz 98% or better Newton Isolation, 5 Hz 04% or better
		• Vertical Isolation, 5 Hz 94% or better
:		Vertical Isolation, Resonance 1 Hz
:		• Height Adjustment +1.3 in. (33 mm)
	4	Horizontal Amplification at Resonance 9 dB
		Vertical Amplification at Resonance 10 dB
		Maximum Air Pressure 85 psi or better
		Float Height Indicator: Yes
	4	Air Compressors for Pneumatic Isolator Systems
		Super-precise vertical adjustment down to better than ±0.010 in. (0.25 mm)
		Operating Sound Level (1ft) (dB): 30 or better
		Release Value Sound Level (dB): 62 or better
		• Flow Rate:(20–80 psi0.68 (19.3) - 0.80 (22.7)) [CFM(dm3/mm)] or better
		Tank Capacity (liters): 3.5 or more
		• Max. Air Pressure [psi (kg/cm2)]: 116 or better
		Regulator Filter: Yes
		Air Intake Filter: Yes
		Automatic Turn Off Switch: Yes
		Warranty: 12 months from the date of complete installation and
		commissioning.
		Delivery time: Within 12 weeks after issuing of letter of credity
."/		It is mandatory to quote for EHFCIP HT Roorkee. CFOR)
3 .	Spectrometer System	Focal length: 320mm or higher
		Aperture: F/4.1 or better for high light throughput
		Gratings: Motorized, Interchangeable indexed 4 gratings turret
		Resolution: ≤ 0.1 nm at 500 nm with 16 µm pixel CCD with 1200 lines/mm
		grating.
	:	Adaptive focus for best resolution adjustment at
	4	Iris for resolution enhancement without using software enhancement
		No. of Input: One entrance slit
		No. of exits: One, exit detector port
		Wavelength accuracy centre: 4 pm or better
		Wavelength repeatability: 10pm or better
		Image astigmatism correction: Optimized toroidal optics
		USB interface.
	-	Software: Latest 32 &64 bit Software should be provided
		Following Gratings to be offered:
		300 lines/mm blazed at 300nm
		1200 lines/mm blazed at 300nm
		1200 lines/mm blazed at 600nm
		1800 lines/mm holographic (FH) optimised for 360 - 1100 nm
		Detector EMCCD for spectrometer
		Active pixels: 1600 x 200 or more
		Pixel size (W x H): 16 x 16µm or smaller
	Television	Image area: 25.6 x 5.2 mill with 100% till factor or better
	***	Sensor: Back Illuminated EMCCD with UV coating
-		Peak Q.E: > 95%
1		Quantum efficiency>; 30% from 200nm to 350nm
		Active area pixel well depth: 200,000 e-or higher
		Register well depth:
		Conventional mode: 400,000 e-
	-	Electron Multiplying mode: 800.000 e-
		Cooling: -80°C with air (minimum) with option to add water cooling to
		lower the tempaerture -100 °C or lessReadout Conventional modes: 50kHz,
		I MHz, 3MHz or similar with
	-c	prinimum read noise <;1 with EM on

Musey)

1600001198

Monaump

Technical Specifications for Laser, Optical Parametric amplifier and Spectrometer System

personal and the second of the	Maximum spectra: 649 with Full vertical binning or higher
N N	Digitization: 76 bit
	EM gain: 1 - 1.000 times (software controlled)
- Control of the Cont	Sensitivity (e-/count):
6 7	Conventional mode: Adjustable from 0.8 -3
Viene en el di	EM mode: Adjustable from 5 -20
	Linearity: Better than 99%
	Vertical clock speed: 4.9, 9.8, 19, 38,57 (software selectable).
	Software: to control both spectromèter and detector through USB, making a
	fully integrated system
	Warranty: 12 months from the date of complete installation and
	commissioning.
	Dedicated computer with 16GB RAM or more and 17B 11D or more/\$12
	GB SSD or more, MS Windows 10 Professional 64 Bit. INTEL 8th
1 10 10 10 10 10 10 10 10 10 10 10 10 10	Generation 15-8400 2.8 Ghz CPU 6 Core or better
- DD	Delivery time: Within 12 weeks after issuing of letter of credit.
S. Comment of the Com	It is mandatory to quote for CHACH HT Roorkee. (60R)
Oscilloscope	Analog Channels 4
	Analog Bandwidth 350MHz or higher
- The second sec	RF Channel 9KHz-200MHz or better
	Display 9 inch WVGA color display or higher
	Rise Time ≤ 1.14ns or better
	Record Length 10 M Points or better per channel
	Sampling Rate(per Channel) 2.5 GSs/s on all channels
	simultaneously
	Vertical Resolution 8 bits or better
	Input Coupling and Impedance AC, DC; $1 \text{ M}\Omega$, 50Ω
	Sensitivity Range I mV/div to 10V/div
	Time Base Range I ns/div to 1000 s/div
	Accuracy: ±10 ppm or better
	Math function Arithmetic and Math functions features such as
	(Multiplication, addition, FFT, Intg, Diff, etc)
	Standard accessories One passive probe per analog channel (500MHz,
president of the control of the cont	10X, 3.9 pF)
	Warranty: Standard Three Years Warranty
	Upgradable Options
	(a)Bandwidth Upgradable upto 1.0 GHz
	(b)Upgradable forupto 16 Digital channels
	(C) RP Bandwidth upto 3 GHz
	(d)Upgradable for Arbitrary Function Generator (Single Channel, minimum
	upto 50 MHz)
	(e) Power Measurement and Analysis tool.
	(a) . one mountaine and many to took
	Vendor should be authorized from OEM
	Service centre should be available in India.
	OEM should have a NABL accredited calibration lab facility in India.
<u>.</u>	It is mandatory to quote for CIF/CIP IIT Roorkee. (FOR)
	Oscilloscope

Monny

Hone