



INDIAN INSTITUTE OF TECHNOLOGY MADRAS
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Prof. Pradeep T
Project Coordinator

Ref: CHY/TPRA/2019-20/013/SPLX
Dated: 28.01.2020

Limited Tender No: CHY/TPRA/2019-20/013/SPLX

Due Date: 17.02.2020, 5:00pm

Pre-Bid meeting: - Not required.

Technical Bid opening meeting on Due Date: 18.02.2020, 4:00pm

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of “**UV-VIS SPECTROPHOTOMETER**” conforming to the specifications given in (**Annexure-I**).

Terms and Conditions of Limited Tender

- 1. Preparation of Bids:** - The Limited tenders should be submitted under **Two bid system** (i.e.) Technical- and -Financial bid.
- 2. Delivery of the tender:** - The tender shall be sent to the below-mentioned addresses either by post or by courier (duly sealed and super scribed on the envelope with the reference No and due date) so as to reach the following address before the due date and time specified in our Schedule:
Prof. Pradeep T,
Department of Chemistry
IIT Madras
Chennai - 600 036.
- 3. Price:** - The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges to **Department of Chemistry**.
 - a. The offer/bid should be exclusive of taxes and duties. The percentage of tax & duties should be clearly indicated separately. IIT Madras is eligible for concessional GST and relevant certificate will be issued.
 - b. 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 on EX-WORKS and CIP (stating the Cost, Insurance, Freight separately) and indicating the mode of shipment.
- 4. Terms of Delivery:** - The item should be supplied to our Departments as per 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.
- 5. Catalogue:** Original catalogue (not any photocopy) of the quoted model duly signed must accompany the quotation in the Technical-cum-financial bid
- 6. Late offer:** - The offers received after the due date and time will not be considered
- 7. Payment:** - 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).

8. **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.
9. **On-site Installation:** - The equipment or machinery has to be installed or commissioned by the successful bidder within number of days (as prescribed by PI's) from the date of receipt of the item at site of IIT Madras.
10. **Warranty/Guarantee:** - The offer should clearly specify the warranty or guarantee period for the machinery/equipment.
11. **Validity:** Validity of Quotation not less than 60 days from the due date of tender
12. **Technical Bid Opening:** The technical bid will be opened on **18.02.2020, 4:00pm** at the **Department of Chemistry**, IIT Madras and the **financial bids** of those tenders who are technically qualified will be opened at a **later date under intimation to them**.
13. **Performance Security:** -The successful bidder should submit Performance Security for an amount of 5% of the value of the contract/supply within 21 days from the issue of work/purchase order. The Performance Security should be furnished in the form of an Account Payee DD / FD Receipt from the commercial bank (or) Bank Guarantee from any nationalized bank in India.
14. **Accept /Reject:** IIT Madras reserves the full right to accept / reject any tender at stage without assigning any reason.
15. **Settlement of Disputes:** 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.
16. **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.
17. **Unsolicited offers:** "This notice is being published **for information only** and is not an open invitation to quote in this limited tender. Participation in this tender is by invitation only and is limited to the selected registered suppliers. Unsolicited offers are liable to be ignored. However, suppliers who desire to participate in such tenders in future may apply for registration as per procedure." The Website for Registration of vendors is <http://web.iitm.ac.in/supplier/> and the mail address for queries is "workflow@rt.iitm.ac.in".

Yours sincerely,

**Prof. Pradeep T,
Department of Chemistry
IIT Madras
Chennai - 600 036.**

Tendering specifications for UV-Vis spectrophotometer

Sections	Specifications	Description	Parameters and subsections
1	Technology / Application		Double beam UV-Vis spectrophotometer for Research, pharmaceutical and analytical applications.
2	Operation		PC controlled
3	Wavelength range		190-1100 nm
4	Absorbance range		± 4 A or better
5	Stray Light	At 220 nm (NaI) At 340 nm (NaNO ₂) At 198 nm (KCl)	< 0.02 %T < 0.02 %T < 1 %T or better
6	Bandwidth		0.5 or better with an option to vary the same as per the requirement
7	Resolution Test	(0.02% Toluene in Hexane (EP))	> 1.6
8	Wavelength accuracy	Holmium oxide solution (NIST 2034) 656.1 nm	± 0.1 nm or better
9	Wavelength reproducibility (10 measurements)	Holmium oxide solution (NIST 2034) 656.1 nm	< 0.01 nm or better
10	Photometric accuracy	At 1 A (NIST 930e)	± 0.004 A or better
11	Photometric reproducibility	At 1 A	< 0.001 A or better
12	Photometric drift		<0.0003 A/hour At 0 A, 700 nm or better
13	Photometric noise (RMS)	1 nm slit	< 0.00005 At 0 A, 700 nm or better
14	Scan speed		Variable, 1 to 3000 nm/min or better
15	Source		Deuterium & Tungsten
16	Pharmacopia compliance	US, Europe, Japan	Must have Pharmacopeia compliance
17	Beam Height		12-15 mm

18	Interface		USB
19	Reflectance		Accessories for the collection of reflectance at various angles should be provided
20	Transmission		Accessories for the collection of transmittance of films or plates of various thickness at various angles should be provided
21	Autosampler		<ul style="list-style-type: none"> a. Automated cell changer for 8 or more positions b. Software provided must take care of automatic cell change, sequencing, parameter change scripting and baseline for all the samples
22	Temperature controller	Peltier and/or chiller	<ul style="list-style-type: none"> a. A compact table top peltier and/or chiller (whichever is low cost) based temperature controller for the sample and reference should be provided with all the accessories b. Temp. Range : -10 to 100°C c. Chiller tank should be covered and MOC should be SS d. Must have touch keypad with digital display based controller e. Software must include necessary module to program and control the temperature based measurements f. Option to dehumidify measurement chamber to ensure non-condensing environment g. Please include all the accessories and chemicals (antifungal agent, antifreeze agent, etc) for the temperature controller use and maintenance.
23	Software		Spectrophotometer should be provided with PC controlled Software
24	Measurement modes		Measurements modes such as absorbance, transmittance, kinetics, concentration must be

			available with the equipment.
25	Warranty		3 years comprehensive warranty with replacement of parts
26	Calibration certificates		a. Manufacturer and Supplier should have ISO certification for quality standards. b. Equipment should be FDA/CE/BIS approved product.
27	Power supply		Indian power supply sockets.
28	Accessories		a. Please quote for all the essential accessories to start work from the day of installation. b. Please exclude UPS, cuvettes and computer from the quotation unless it is proprietary item. Minimum specifications of the required computer should be provided.
29	Manuals		Soft copy and hard copy of the operation and service manuals for the instrument should be provided.
30	Compliance		A detailed compliance statement for all the sections and subsections with supporting parameters must be attached with the response to the tender.
31	Operation and maintenance support		Supplier must sign a contract for the warranty period as per the Annexure II

Annexure II

This is a contract between _____ (referred as a supplier) and Department of Chemistry, IIT Madras (referred as beneficiary).

As per this contract, beneficiary will hold 10% of the total PO amount payable to the supplier until the end of three year comprehensive warranty period for the following list of services.

1. Service engineer must visit and solve the locally solvable issues of the equipment within two working days.
2. Any problem in the functioning of the equipment which requires replacement of the equipment parts; should be solved by supplier within four working days.
3. Upon any further delay in solving issues related to the equipment, an amount of 12500 INR per day will be deducted from the hold amount until the issue is solved.

Signed by,

Supplier

Date:

Place:

Beneficiary

Date:

Place: