

	INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036 Telephone: (044) 2257 4126/4101 E-mail: vani@iitm.ac.in	
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Prof. VANI JANAKIRAMAN
Project Coordinator

Ref: BT/VANI/2019/013/SPL
Dated: 03.02.2020

Limited Tender No: BT/VANI/2019/013/SPL

Due Date: 17.02.2020, 5:00pm

Pre-Bid meeting: - Not required.

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 **“Bio Spectrometer for quantification of Biomolecules”** 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 **one bid system** (i.e.) Technical-cum-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:
Dr. Vani Janakiraman,
Department of Biotechnology,
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 Biotechnology**.
 - 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. **Bid Opening:** The bid will be opened on **18.02.2020, 4:00pm** at the **Department of Biotechnology, IIT Madras.**
13. **Accept /Reject:** IIT Madras reserves the full right to accept / reject any tender at stage without assigning any reason.
14. **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.
15. **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.
16. **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,

Dr. Vani Janakiraman,
Department of Biotechnology,
IIT Madras
Chennai - 600 036.

Technical Specification for Bio Spectrometer for quantification of Biomolecules

Description	
Compact UV – VIS spectrometer for wide variety of procedures for the most diverse molecular biology, cell biology and biochemical methods.	
Light Source	Xenon flash lamp
Monochromator	Holographic aberration-corrected concave grating
Detector	CMOS photodiode array
Wavelength range	200 nm to 830 nm
Wavelength Selection	Method-dependent, freely selectable
Spectral bandwidth	≤4 nm
Wavelength increment	1 nm
Systematic wavelength error	±1 nm
Random wavelength error	≤0.5 nm
Photometric measuring range	0.0 to 3.0 A at 260 nm
Photometric reading accuracy	ΔA = 0.001
Random photometric error	≤ 0.002 at A = 0, ≤0.005 (0.5%) at A = 1
Systematic photometric error	±1 % at A = 1
Stray light Component	< 0.05%
Height of light beam in the cuvette	8.5 mm
Diameter of light beam in the cuvette	1 mm
Cuvette type	Accommodate plastic disposable and standard Quartz Cuvettes
Methods	<ul style="list-style-type: none"> · Absorbance with one or more wavelengths, scans · Nucleic acids, Proteins, OD 600, dye labeling · Evaluation via factor, standard and calibration curve · Dual wavelength with subtraction and division evaluation
Method dependent evaluation	<ul style="list-style-type: none"> · Absorbance, concentration via factor and standard · Concentration via standard series using · Linear regression, Nonlinear regression with 2nd and 3rd degree polynoms · Spline evaluation · Linear interpolation (point to point evaluation) · Absorbance allocation via subtraction and division · Ratio 260/280, 260/230, molar concentration and total yield for nucleic acids · Frequency of incorporation of Cy3, Cy5 dyes and labeling density · Spectral zoom and peak evaluation for scans
Selectable cuvette path lengths	10 mm, 5 mm, 2 mm, 1 mm, 0.5 mm, 0.2 mm and 0.1 mm
Unit Selection	mg/mL, µg/mL, ng/mL, pg/mL, µg/µL, mg/dL, µmol/mL, nmol/mL, pmol/mL, pmol/µL, U, U/mL, U/L, %, abs, ΔA/min and user programmable units
Maximum Standards for calibration curve	12
Maximum replicates	3
Multi-wavelength measurements	Up to 6 wavelength with Abs and Scan data
Display	5.7" VGA TFT display – No need for Computer
Interfaces	USB, PC without need for dedicated software, thermal printer Output data and graph as Microsoft Excel files
Memory	> 100 method programs on the instrument

	> 1000 results with data, evaluation results and used parameters
Connecting ports	USB for stick, USB for PC and RS-232

Note:

Disposable cuvettes for 200 samples with Cuvette stand should be quoted with the instrument

System should be upgradable for measurement with 1.5ul of the sample without dilution