

Tender No: IISc/IPC/2024-25/001; 15 October 2024

Global Tender Notification for the Procurement of Spectrofluorometer.

(Last Date for Submission: 06 November 2024)

Indian Institute of Science Bengaluru (IISc) invites the best quotations from the bonafide, resourceful, and eligible manufacturer/exclusive distributor/vendors for the procurement of a **spectrofluorometer** and relevant accessories with the technical specifications mentioned in section 3, on C.I.P. Bengaluru basis (**by Air Freight only**). The quotation should clearly mention the validity of the quote (minimum 90 days validity), terms of delivery, delivery schedule, estimated delivery date, and payment terms.

The Bidder must submit their tender in two separate sealed and distinctly marked envelopes: one containing the technical bid without mentioning any costs and the other containing the commercial bid. Both the envelopes should reach us duly signed on or before 17:00 hours, 06 November 2024.

As per the Ministry of Finance OM: No.F 4/1/2023-PPD(pt.) dated 28-06-2024, Sub: Relaxation under Rule 161(iv) of General Financial Rules 2017 for issuance of Global Tender Enquiry (GTE) for procurement of Medical Devices -reg.; the spectrofluorometer (item No: 120) is exempted from the instructions related to GTE.

The sealed envelopes containing the bids should mention “Quotation for spectrofluorometer” on the cover. **The sealed bids should be addressed and sent to:**

**The Chair
Department of Inorganic and Physical Chemistry
Indian Institute of Science, Bengaluru
Bengaluru – 560 012
India**

For any inquiry, contact the IPC office: office.ipc@iisc.ac.in; Ph.No: 080-2293 2382

Please enclose a technical compliance statement along with the technical bid. Bids without a compliance statement and a detailed compliance table may be disqualified.

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Section 1: Bid Schedule

1	Tender No:	IISc/IPC/2024-25/001
2	Tender date	15 October 2024
3	Instrument	Spectrofluorometer
4	Tender type	Global Tender
5	Documents to be submitted	i) Technical bid (part A) ii) Commercial bid (part B)
6	Place of tender submission	The office of The Chair, Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru – 560 012 India
7	Last date and time of tender submission	17:00 hours, 06 November 2024
8	For Further clarification	The Chair, Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru – 560 012, India office.ipc@iisc.ac.in ; Ph.No: 080-2293 2382

Section 2 – Eligibility Criteria

1. This is a global tender inquiry, and any bidder with registered head offices within or outside India is eligible to bid. However, The Bidder's firm should have been in existence for a minimum of 3 years. (Enclose Company Registration Certificate).
2. Only the Original Equipment Manufacturer or their authorized representatives shall participate in the bid.
3. The order will be placed only on the bidder who participated in the bid.
4. A complete bid with the following must be submitted:
 - a) Technical bid with a technical compliance sheet, supporting documentation and **masked** commercial bid (a copy of the commercial bid, but **'without'** any pricing information) in one sealed envelope. The envelope should be **'marked' as 'Technical Bid'**.
 - b) Commercial bid, including CIP pricing, warranty information, and other commercial terms and conditions, in another sealed envelope. The envelope should be **'marked' as 'Commercial Bid'**.

- c) The envelopes with technical and commercial bids should be placed in a single sealed envelope.
 - d) All envelopes must be addressed to the tenderee as per information in Point 6 of the Bid Schedule. The tender number and date must be inscribed on all the envelopes.
5. The Bidder should sign and submit the declaration of Acceptance of Terms and Conditions as per -Annexure 4.
 6. 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 must be given as per **Annexure 3**.
 7. Any bids that are deemed incomplete can be summarily rejected without further consideration.

Section 3 – Terms and Conditions

A) Submission of Tender:

1. All documentation in the tender should be in English.
2. The tender should be submitted in two envelopes (two bid system).
 - a) Technical Bid (Part-A)** – Technical bid consisting of all technical details and checklist for conformance to technical specifications (Section 5). The technical bid should contain a technical compliance table given in Section 4 of this document.
 - b) Commercial Bid (Part-B)** – Indicating item-wise price for the items mentioned in the technical bid, **as per the format of quotation provided in Annexure 5**, and other commercial terms and conditions.
3. The technical and price bids should be placed in separate sealed covers, superscripting the tender no. and the due date on both envelopes. Both these sealed covers are to be placed in a bigger envelope which should also be sealed and duly superscripted with the Tender No, Tender Description & Due Date.
4. The SEALED COVER superscripting tender number, tender description and due date, and the contact address and contact phone and email of the Bidder should reach the Office, Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore – 560 012, India on or before the due date mentioned in the tender notice. Write **“Quotation for spectrofluorometer”** clearly on top of the envelope. If the due date is a holiday, the tender will be accepted on the next working day. If the quotation cover is not sealed, it will be rejected.

5. All queries are to be addressed to the person identified in “Section 1 – Bid Schedule” of the tender notice.
6. GST/other taxes, levies etc., are to be indicated separately. The BIDDER must mention GST Registration and PAN in the tender document (Indian Bidders only).
7. The Institute reserves the right to accept or reject any bid, to annul the bidding process, and reject all bids at any time before the award of the contract without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders.
8. Incomplete bids will be summarily rejected.

B) Cancellation of Tender:

Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights to:

- a) Accept OR reject the lowest tender, any other tender, or all the tenders.
- b) Accept any tender in full or in part.
- c) Reject the tender, offer not confirming to the tender terms.

C) Validity of the Offer:

The offer must be valid for at least 90 Days from the closing date of this tender.

D) Evaluation of Offer:

1. Bids deemed to be complete per the information given in Section 2 of this document will be considered for technical evaluation. Technical bids (Part A) from such eligible bidders will be opened and evaluated. Bidders not furnishing the documentary evidence required in Section 2 will not be considered.
2. Pre-qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision regarding acceptance and/or rejection of any offer in part or full shall be at the sole discretion of IISc Bangalore, and the decision in this regard shall be binding on the bidders.
3. The award of the contract will be subject to acceptance of the terms and conditions stated in this tender (Annexure 4).
4. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
 - a) Non-submission of complete offers.
 - b) Receipt of bids after the due date and time and/ or by email/fax (unless specified otherwise).
 - c) Receipt of bids in open conditions.

5. If any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bangalore shall construe that the BIDDER had accepted the clauses as of the tender, and no further claim will be entertained.
6. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
7. The lowest bid will be calculated based on the total price of all items tendered for Basic equipment, along with accessories selected for installation, operation, preprocessing and post-processing. Any optional items, recommended spares, additional warranty, annual maintenance contract, and any such items will be considered only if they are being purchased as part of this tender.

E) Pre-requisites for Installation:

The Bidder must provide the prerequisite installation requirement of the equipment along with the technical bid.

F) Warranty:

1. The complete system is to be under warranty for a minimum period of 2 years.
2. During the warranty period, any complaint must be attended to within 2 working days after raising a service request.
3. After such a service call, if the instrument is found to be defective, it must be replaced or rectified at the cost of the Bidder within 30 days from the date of receipt of written communications from IISc, Bangalore.
4. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

G) Annual Maintenance Contract:

1. Costing for an annual maintenance contract for a period of at least 3 years post the warranty period is to be quoted.
2. The cost of annual maintenance must be locked in for the period of 3 years post the warranty period.
3. AMC must cover service breakdowns + at least 1 maintenance visit per year.
4. AMC cost (if ordered, after the completion of warranty period) will be released on an yearly basis at the end of each year subject to satisfactory services.
5. Quote must include pricing for both comprehensive and non-comprehensive AMC.
6. Expected consumables for the maintenance of this system and their price, preferably with a lock-in at least during the warranty period, must be provided as an optional item in the quotation.

H) Delivery, Installation and Training:

1. The Bidder shall provide the lead time for delivery, installation and commissioning at IISc Bengaluru from the date of receipt of purchase order. The system should be delivered, installed and commissioned within 90 days from the date of receipt of purchase order.
2. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system, inspection of all the items and features/capabilities, and testing by IISc, Bengaluru. After successful commissioning and inspection, the date of taking over of entire system by the IISc, Bengaluru shall be taken as the start of the warranty period. No partial shipment is allowed.
3. The Bidder should also arrange for technical training to the local facility technologists and users during installation. Additionally, 1 training visit per year must be included during the warranty and AMC periods, if and when the AMC (as detailed in section G) is purchased.

I) Purchase Order:

1. The order will be placed on the Bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in the tender is only indicative. IISc, Bangalore reserves the right to increase /decrease the quantity of the items depending on the requirement.
3. If the quality of the product and service provided is not found satisfactory, IISc Bangalore reserves the right to cancel or amend the contract.

J) Payment Terms:

1. Payment terms must be clearly included in the commercial bid.
2. AMC cost (if ordered) will be released on an yearly basis at the end of each year starting from the end of the warranty period subject to satisfactory services.
3. The price basis must be **CIP Bangalore (by Air Freight only)** basis.
4. As per GFR, no advance payment can be made to domestic vendors, unless an equal amount of bank guarantee is provided.

K) Statutory Variation:

Any statutory increase in the taxes and duties subsequent to Bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore, subject to the claim being supported by documentary evidence. However, if any decrease takes place, the advantage will have to be passed onto IISc, Bangalore.

L) Disputes and Jurisdiction:

Any legal disputes pertaining to this tender or any breach of contract shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

M) General:

1. All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension in the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.
2. The Bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is however, advised not to furnish superfluous information.
3. Any information furnished by the Bidder found to be incorrect, either immediately or at a later date, would render the Bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.
4. Power requirement: Indian standard power supply, 220/240 Volts AC with frequency 50 Hz.
5. Operation and service manual in English (electronic and hard copy) with complete circuit diagram and PCB layout for all equipment should be provided with the instrument.
6. Standard samples (if required) to be provided by the company for testing the instruments at the time of installation on-site to the quoted accuracy in the given technical specification for the demonstration of the performance of equipment.
7. The vendor should have a track record of having previously supplied at least five identical instruments in CFTIs such as JNCASR, IITs, IISERs, and NITs with the specifications mentioned in the current tender. Details of such systems should be provided. The vendor must provide the user list (with contact details including emails and phone numbers) of at least 5 customers from Indian Institutes/Labs with contact person name, address, phone, fax, and email IDs. The primary focus of these installed systems should have included reliable data in the form of pictorial graphs must be provided.
8. The committee reserves the right to reject the technical bid if the above condition is not satisfied.
9. The vendor should have qualified technical service personnel for the equipment based in India and should assure a response time of <48 hours.
10. Wherever requested data must be supplied along with technical compliance documents, technical bids without supporting data will be deemed technically non-compliant.
11. All guaranteed specifications may have to be demonstrated at the time of installation. The service engineers should bring any necessary standard samples for that purpose.

Section 4 - Technical Specifications for Spectrofluorometer

Broad System Requirements and Usage:

We intend to purchase a spectrofluorometer to measure the fluorescence and the fluorescence lifetime of solid and liquid molecules and materials with the following minimum specifications or better for the Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru. The following technical criteria are to be met by any *spectrofluorometer* with accessories that are being quoted under this tender notice:

1. Access to the quoted instrument should be multi-user friendly with an easy-to-use software interface and modular hardware design that allows rapid user training. It should also be easy to change from one operational mode to another with relative ease so that our researchers and students can set up experiments and handle the instrument. Minimal changes to sample compartment and beam paths should be needed when switching from solution phase experiments to Solid State experiments.
2. In addition, the quoted system should have a modular design, providing the flexibility to support upgradation for the possibility of integrating future updates either at the time of procurement or at a later date.

Table of Technical Specifications (Columns 3-5 are to be filled-in and submitted for verifying technical compliance.)

Sl. No.	Technical Specifications	Technical Compliance (Yes/No)	Provided Specification	Deviation, if any/ Remarks/Details
Part A- Steady-state Spectrofluorometer				
1	<p>General</p> <p>a) Spectrofluorometer with perfect focus at all wavelengths.</p> <p>b) Excitation and emission wavelength range: 250 nm to 800 nm or better</p> <p>c) Spectral resolution: ≤ 0.1 nm</p> <p>d) Straylight rejection: 1×10^{-8} or better in a double excitation monochromator configuration</p> <p>e) Signal-to-noise ratio: $> 20000:1$ using water Raman signal excitation at 350 nm</p> <p>f) Wavelength Accuracy: ± 0.5 nm</p> <p>g) It should be possible to correct the emission against source intensity fluctuation using reference detector. The</p>			

	<p>emission channel should be calibrated. The correction should be software/computer controlled</p> <p>h) Sample compartment with reference channel excitation correction detector for real time excitation correction and filter holders for customer supplied filters</p> <p>i) Measurement modes required: Emission, Excitation, and synchronized modes</p> <p>j) Should supply the computer workstation, mouse, monitor and necessary software controlling the hardware such as slits, gratings and for the recording the emission and data analysis.</p>			
2	<p>Light source: Xe lamp – Power 70 Watt or higher with greater than 60% lamp plasma collection efficiency</p>			
3	<p>Monochromators</p> <p>a) Excitation Monochromators –</p> <p>i. Czerny-Turner design-based double Spectrometer with triple grating turret having an intermediate slit or better.</p> <p>ii. One grating, 1200g/mm, blazed between 300-350 nm or better should be included.</p> <p>iii. Total focal length >650mm</p> <p>b) Emission Monochromators -</p> <p>i) Czerny-Turner design-based double Spectrometer with triple grating turret having an intermediate slit or better.</p> <p>ii) One grating, 1200g/mm, blazed between 400-500 nm or better should be included.</p> <p>iii) Total focal length >650mm</p> <p>c) The selection of the excitation wavelength range, slits, excitation shutter, and emission wavelength range should be computer controllable.</p>			
4	<p>Detector: Room temperature/cooled PMT detector.</p> <p>a) Wavelength Range 250 nm to 800 nm or better</p> <p>b) Quantum efficiency >10% in the range of 250nm -500 nm and \geq 5% in the range of 500 nm to 700 nm.</p>			

5	<p>Sample compartment and measurement modes:</p> <p>a) The sample compartment should be wide enough to accommodate polarizers.</p> <p>b) Right angle and front face (for solid films) detection geometry should be possible.</p> <p>c) It should be possible to instantly switch between right-angle detection and front-face detection by moving a mirror-type assembly.</p> <p>d) The minimum angle for front-face emission collection should be 25° or less</p> <p>e) A solid sample holder should be provided. It should be possible to rotate the sample holder to record at various angles.</p>			
6	<p>Integrating sphere for emission quantum yield measurement</p> <p>a) An integrating sphere that can be connected to the main machine or placed inside the sample compartment is required.</p> <p>b) The integrating sphere should be capable of measuring the quantum yield as low as 1%</p> <p>c) Should provide liquid and solid sample holders for the integrating sphere</p>			
Part B- Time-resolved Spectrofluorometer				
7	<p>General:</p> <p>a) Measurable lifetimes: ~100ps to >1s.</p> <p>b) Measurement modes: Time-correlated single photon counting (TCSPC), Time-resolved emission spectroscopy (TRES), and fluorescence anisotropy</p> <p>c) Time domain monochromator: Range - 250-850nm, 450nm blaze angle. Wavelength and slit control should have motorized and manual options.</p> <p>d) Sample Chamber: A large sample chamber capable of holding cryostat assembly should be provided.</p> <p>e) A safety shutter interlocked to the sample compartment must be there.</p> <p>f) Motorized optics, with filter holders and a large sample compartment</p>			

	<p>g) Front face sample holder for measuring thin film samples at varying angles of incidence</p> <p>h) Polariser mounts and polarizers (2 Nos) for anisotropy measurements</p> <p>i) Computer workstation, monitor, keyboard, mouse, and necessary software for data acquisition, data fitting, and post-measurement data analysis. The lifetime measurement system should be software-controllable.</p>			
8	<p>Detector:</p> <p>a) Picosecond hybrid photon detection module; dark counts <500cps typical spectral response range - 300-850nm, ~150ps transit time spread (TTS). Quantum efficiency $\geq 20\%$ in the 450 to 800 nm range. It should have thermoelectric temperature regulation and overload protection.</p> <p>b) High voltage and bias generator, pre-amplifier, and constant-fraction discriminator with power supply should be provided. All cables, interfaces, and software for the connection and control of the detector should be provided.</p>			
9	<p>Excitation sources and controllers:</p> <p>a) External controller which can be connected and mechanically adapted to control and work with the existing pulsed LED light sources having pulse width >1.2 ns and power 1-2 pJ/pulse.</p> <p>b) External controller which can be connected and mechanically adapted to control and work with the existing pulsed diode laser sources having pulse width >80 ps and average power 2mW.</p>			
10	<p>Optional items:</p> <p>a) Polarisers for steady-state spectrofluorometer component</p> <p>b) Laser diode sources for time-resolved spectrofluorometer component</p> <ul style="list-style-type: none"> • Wavelength 532 nm, 635 nm, 375 nm, and 405 nm • Repetition rate: 25MHz or higher • Pulse width: 70 ps or lower • Spectral FWHM = <5nm <p>c) Cuvettes</p>			

Annexure 1:

Details of the Bidder:

The Bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

Sl. No.	Type	Details
1.	Name of the Bidder	
2.	Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)	
3.	Registration No/ Trade License (attach attested copy)	
4.	Registered Office Address	
5.	Address for communication	
6.	Contact person- Name and Designation	
7.	Telephone No	
8.	Email ID	
9.	Website	
10.	PAN No. (attach copy)	
11.	GST No. (attach copy)	

Signature of the Bidder

Name:

Date:

Designation, Seal

Annexure 2:

Declaration Regarding Experience

To,
The Chair
Department of Inorganic and Physical Chemistry
Indian Institute of Science, Bengaluru
Bengaluru – 560 012
India

Ref: Tender No: IISc/IPC/2024-25/001;

Dated: 15 October 2024

Sub: Supply and installation of spectrofluorometer

Sir,

I have carefully gone through the Terms & Conditions contained in Section 3 of the above referred tender. I hereby declare that my company/firm has years of experience in supplying and installing spectrofluorometers having steady state and time resolved measurement capabilities and accessories.

(Signature of the Bidder)

Printed Name Designation, Seal

Date:

Annexure 3:

Declaration of track record

To,
The Chair
Department of Inorganic and Physical Chemistry
Indian Institute of Science, Bengaluru
Bengaluru – 560 012
India

Ref: Tender No: IISc/IPC/2024-25/001;

Dated: 15 October 2024

Sub: Sub: Supply and installation of spectrofluorometer.

Sir,

I have carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm is not currently debarred / blacklisted by any Government / Semi-Government organizations / institutions in India or abroad. I further certify that I am competent officer in my company / firm to make this declaration.

OR

I declare the following:

Sl. No.	Country in which the company is debarred/ blacklisted / having pending case	Blacklisted / debarred by Government / Semi Government Organizations or Institutions / having pending case	Reason	Time Period

(Note: In case the company / firm was blacklisted previously, please provide the details regarding period for which the company / firm was blacklisted and the reason/s for the same).

(Signature of the Bidder)

Printed Name Designation, Seal

Date:

Annexure 4:

Declaration of acceptance of terms and conditions

To,
The Chair
Department of Inorganic and Physical Chemistry
Indian Institute of Science, Bengaluru
Bengaluru – 560 012
India

Ref: Tender No: IISc/IPC/2024-25/001;

Dated: 15 October 2024

Sub: Sub: Supply and installation of spectrofluorometer.

I have carefully gone through the Terms & Conditions contained in the above referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully
(Signature of the
Bidder)

Printed Name Designation, Seal

Date:

Annexure 5

Details of Commercial Bid

The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned. The sealed commercial bids should be addressed and sent to:

The Chair

Department of Inorganic and Physical Chemistry

Indian Institute of Science, Bengaluru

Bengaluru – 560 012

India

Sl. No	Description	Cat. Number	Quantity	Unit Price	Sub Total
1.	Essential items noted in the technical specification				
1.a	(details of essential items)				
1.b					
2.	Optional items noted in the technical specification				
2.a	(details of essential items)				
2.b					
3.	Accessories for operation and installation				
4.	All consumables, spares, and software to be supplied locally				
5.	Warranty (2 years)				
6.	AMC 3 years beyond warranty				
8.	CIP/CIF IISc, Bengaluru				

List of any additional items, such as Spares and Hardware/PCBs likely to go obsolete after the next 3 Years