

OPEN GLOBAL TENDER NOTICE

Supply and Installation of Motorized Fluorescence Microscope with Total Internal Reflection Fluorescence Module



TENDER DOCUMENT

PH/PRSH/602/25-26

**Department of Physics
Indian Institute of Science, Bangalore**

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BID SCHEDULE

| | | |
|---|---|--|
| 1 | Tender Number | PH/PRSH/602/25-26 |
| 2 | Tender date | 29 th August 2025 |
| 3 | Item description | Supply and installation of Motorized Fluorescence Microscope with Total Internal Reflection Fluorescence Module |
| 4 | Tender type | Two bid system: a. Technical Bid (Part A) b. Commercial Bid (Part B) |
| 5 | Place of tender submission | Office, Department of Physics, Indian Institute of Science, Bangalore 560012 080-2293-2010 |
| 6 | Last date and time for tender submission | 19 th September 2025, 5:00 PM |
| 7 | For further clarification | Prof. Perna Sharma Department of Physics Indian Institute of Science, Bangalore 560012 Email: perna@iisc.ac.in |

Eligibility Criteria

Prequalification criteria:

1. The Bidder's firm should have existed for at least 3 years. The bidder should enclose company registration certificate. Start-ups and MSMEs may be given relaxation in this clause.
2. Only the Original Equipment Manufacturer or their authorized representatives across the globe shall participate in the bid.
3. 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 has to be given as per Annexure 3.
4. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per Annexure 4.
5. The bidder should provide a support certification as per Annexure 6
6. The Bidder should have qualified technical service personnel for the instrument(s) based in India.
7. Foreign currency quotations should be on CIP Bangalore basis. INR quotes should be on a FOR-IISc Bangalore basis.
8. The order will be placed only on the bidder who participated in the bid.

Terms and conditions

A. Submission of Tender:

1. All documentations in the submission should be in English.
2. The bid should be submitted in the two-cover system, i.e., technical bid and commercial bid separately in sealed covers.
 - a. Technical Bid (Part-A) – The technical proposal should contain a compliance table besides the technical specifications listed in the description section below.

The compliance table should include all the items and in the same order. The first column should describe your compliance in a “Yes” or “No” response. The second column should state the extent of deviation if the answer was no or describe the exact specifications if the answer is yes. The “third” column should state the reasons for the deviation if the answer was No. The fourth column can be used to compare your solution with that of your competitors or provide details as requested in the technical requirements table below. Suppliers who include any indication of prices in the technical bid will be automatically disqualified.
 - b. Commercial Bid (Part-B) – Commercial bid indicating item wise price breakdown for the items mentioned in the technical bid, as per the format provided in tender, and other commercial terms and conditions. The price should be inclusive of all discounts and installation and training.
 - c. The technical bid and price bid should each be placed in separate sealed covers, superscripting on both the envelopes the tender no. and the due date. Both these sealed covers are to be placed in a bigger cover which should also be sealed and duly superscripted with the Tender No, Tender Description & Due Date.
 - d. The SEALED COVER superscripting tender number / due date should reach the address mentioned above on or before due date mentioned in the tender notice. In case the due date happens to be a holiday, the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.
3. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document and provide a copy of both documents (Indian Bidders only).
4. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.
5. The Institute reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to the award of contract, without there by

incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.

6. A technical evaluation by the purchase committee may include a demonstration to verify the functionalities and capabilities of the system quoted. The purchase committee reserves the right to reject the bids based on their technical evaluation of the quality of data, capability demonstration, and service. If the data/requested capability demonstration does not happen within a stipulated timeframe, the bid will be rejected. Any discrepancy between the promised specifications and measurements will be deemed as technical non-compliance. Imported items should be shipped on C.I.P. Bangalore basis (by Air Freight only), and all components and accessories indicate component-wise and itemized breakup. Provide certificates for the country of origin of manufacturing for each line item. The price of every line item in the commercial bid should be quoted along with the total quoted price for the instrument to be operational (installed and ready to use) in our facility.
7. The purchase committee reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to the award of contract, without there by 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.
9. The decision of purchase committee will be final.

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:

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

C. Validity of the offer:

The offer shall be valid 90 Days from the date of opening of the commercial bid.

D. Evaluation of the offer:

1. The technical bid (Part A) will be opened first and evaluated.
2. Bidders meeting the required eligibility criteria as stated in Section 2 of this document shall only be considered for Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
3. 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 in regard to acceptance and / or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and decision in this regard shall be binding on the bidders.

4. The award of contract will be subject to acceptance of the terms and conditions stated in this tender.
5. 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 due date and time and or by email / fax (unless specified otherwise).
 - c. Receipt of bids in open conditions.
6. In case 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.
7. 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.
8. Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, pre-processing and post processing, optional items, recommended spares, warranty, annual maintenance contract.

E. Pre-requisites:

The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.

F. Warranty:

The complete system is to be under warranty period of minimum 5 years including free supply of consumables, spare parts, and data analysis software from the date of functional installation. Vendor should include cost of any spares that are expected to be needed during the warranty period, including electronics, subcomponents, and software. 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. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

G. Annual Maintenance Contract (AMC):

An annual maintenance contract is not required for this purchase.

H. Purchase Order:

1. The order will be placed on the bidder whose bid is accepted by IISc Bangalore based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in 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.
4. After the award of the purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order

I. Delivery, Installation and Training:

The bidder shall provide the lead time to delivery, installation and made functional at IISc Bangalore from the date of receipt of purchase order. The system should be delivered, installed,

and made functional within 4-6 months from the date of receipt of purchase order. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc Bangalore. After successful installation and inspection, the date of taking over of entire system by the IISc Bangalore shall be taken as the start of the warranty period. No partial shipment is allowed. The bidder should also arrange for technical training to the local facility technologists and users. The bidder should provide onsite application training for the local facility technologists and users. The bidder should also arrange technical training for the local facility technologists and users.

J. Payment Terms:

For INR quotes, 100% payments will be released after completion of delivery, satisfactory installation, and qualification, subject to TDS as per rules. As per GFR no advance payment can be made to domestic vendors. For INR quotes, the price must be on FOR IISc Bangalore basis only.

For quotes in foreign currency, the quote must be on a CIP Bangalore basis. The payment terms for the foreign currency quotes should be mentioned along with the commercial offer.

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 on to IISc Bangalore.

L. Dispute and Jurisdiction:

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 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. The bidder may visit the installation site before submission of tender, with prior intimation.
4. 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.

Technical specifications

A. Microscope body

1. Inverted motorized microscope with scanning (X, Y, and Z) and automated axial drift correction (hardware) with intermediate magnification changer of 1x/1.5x or 2x built in the base of the microscope itself.
2. Double-deck motorized filter turret. Should be possible to accommodate two cameras to two output ports.
3. High-speed motorized XY-stage (encoded) controlled by a joy stick with high stability for fast lateral scanning.
4. Z focus in 10 nm steps or lower
5. Continuous automated drift correction in IR range (LED or laser), controllable both with the microscope control unit and remote control. Drift correction feedback frequency should be more 100 Hz.
6. D imaging-capable i.e. X, Y, Z, wavelength (λ), time lapse, and multi point
7. Objectives: U Plan semi apochromat objective 60X oil with NA of 1.4 or better, Plan Super apochromat objective 100X oil with NA of 1.49 or better, U Apochromat high NA (1.45 to 1.5) objective for TIRF microscopy 100X and 60X oil.
8. Motorized condenser with DIC attachment
9. Tilttable eyepiece tube and eyepieces
10. Transmitted illumination source: Halogen lamp or LED for brightfield microscopy with for sequential imaging with fluorescence
11. Epi-fluorescence illumination source: High power LED or Xenon arc lamp with ability to switch between laser illumination and epifluorescence illumination
12. Fluorescence filter cubes with narrow band excitation, bandpass barrier filters, dichroic beam splitters for the following excitation/emission: DAPI/Hoechst, FITC/GFP, TRITC/Rhodamine, Texas Red/RFP, CY5, along with four empty filter cubes
13. Motorized epi-filter turret
14. Adapter for 35-mm dishes, multi-well dishes and slides
15. Optionally 3D Cylindrical Lens Kit: Please do include a 3D Cylindrical Lens kit suitable for STORM/DNA-PAINT studies.
16. A Z-Piezo stage with a maximum range of 100 μ m and minimum step size of 5 nm with 2 to 3 mm/sec or better should also be offered with all suitable adapters like, 35mm Petri Dish, 60mm Petri Dish, 96 Well Plate Holder etc. as standard.
17. All the cabling and controls required to integrate all the parts and operate from the controlling computer.

B. Total Internal Reflection Fluorescence (TIRF) Module

1. Motorized TIRF module with multi-wavelength TIRF capability, with TIRF tuning for all wavelengths
2. The laser illumination should be configured with a different turret than the epifluorescence turret
3. Filter cube for quad bandpass emission filters for 405/488/561/640 nm excitation and a filter cube for quad-band emission filters for 405/488/532/640 nm excitation. Filter should contain complete set with dichroic and emission filters. Reflected wavefront error of dichroic filters should be less than $1-\lambda$. Include additional five empty filter cubes.

4. All the cabling, controls required to integrate, align, mounts for integrating illumination devices and detectors and operate from the controlling computer and the microscope system described above

C. Warm Plate:

1. The System should be provided with Warm Plate metal type that could be used from ambient temperature to 60 °C as standard and should be flush fitting onto the mechanical stage.

D. Detector

1. Back-illuminated sCMOS camera
2. 6.5µm pixel size, 2048x2048 active pixels, image area of 13.3x13.3mm, read noise <1.0e⁻, capability to read in 11/12/16 bit, dark current <0.5e⁻, full frame rate of 40 fps, QE>95%, optionally Camera should also be able to be connected to a water chiller for noise free operation
3. C-mount adapter
4. All the cabling and controls required to integrate, align and operate from the controlling computer

E. System control and application software

1. Software for fully automated acquisition and device control
2. Ability to control all parts of the integrated system comprising the microscope body, laser combiner (not included in this tender), TIRF module, and sCMOS detector
3. Post-acquisition image processing capability

F. Computer Workstation

1. Minimum specifications – Xeon core processor, 32 GB RAM or better; 4 TB HDD, 0.5 TB SSD; 64-bit OS; high resolution 24-inch display; 4GB NVIDIA GPU card
2. 5kVA UPS for all components of the microscope and controlling computer
3. System should also be capable of integrating the laser/laser combiner onto the software quoted and all necessary components or hardware should also be included in the offer as standard

G. Training and Warranty

1. On-site installation and training
2. 5 years complete system warranty

The above-mentioned technical specifications are highly desirable. However, lower technical specifications may be considered if the above-mentioned specifications are found to be unsuitable in financial terms. The Institute reserves the right to go for lower specifications taking into considerations its financial constraints and technical preferences.

Section 5- Technical Bid

The technical bid should furnish all requirements of the tender along with all annexures in this section and be submitted to

The Chairperson,
Attn: Prof. Prerna Sharma
Department of Physics,
Indian Institute of Science,
Bangalore – 560012, India.

Annexure-1:**Details of the Bidder**

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

Details of the Bidder

| Sl. No. | Item | Details |
|---------|--|---------|
| 1 | Name of the bidder | |
| 2 | Nature of Bidder (Attach an 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 | Email ID | |
| 7 | Website | |
| 8 | Contact person- Name and Designation | |
| 9 | Telephone No | |
| 10 | PAN No. (attach copy) For Indian Vendor only | |
| 11 | GST No. (attach copy) For Indian Vendor only | |

Signature of the bidder

Name

Designation, Seal

Date

Annexure-2:

Declaration regarding experience

To,
The Chairperson,
Attn: Prof. Prerna Sharma
Department of Physics,
Indian Institute of Science,
Bangalore – 560012, India.

Ref: Tender No: XXXXXXXXXX
Dated: XXXXX

Dear Sir/Madam

I've carefully reviewed the Terms & Conditions in the above-referred tender. I hereby declare that my company/firm has ----- years of experience in supplying and installing the proposed equipment.

(Signature of the Bidder)

Printed Name
Designation, Seal

Date:

Annexure-3:

Declaration regarding track record

To,
The Chairperson,
Attn: Prof. Prerna Sharma
Department of Physics,
Indian Institute of Science,
Bangalore – 560012, India.

Ref: Tender No: XXXXXXXX

Dated: XXXXX

Dear Sir/Madam,

I've carefully reviewed the Terms & Conditions 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'm a 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 / case is Pending | Blacklisted/debarred by Government / SemiGovernment/Organizations/Institutions | Reason | Since when and for how long |
|---------|---|--|--------|-----------------------------|
| | | | | |

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

Yours faithfully

(Signature of the Bidder)

Name
Designation, Seal

Date

Annexure – 4:

Declaration for acceptance of terms and conditions

To,
The Chairperson,
Attn: Prof. Prerna Sharma
Department of Physics,
Indian Institute of Science,
Bangalore – 560012, India.

Ref: Tender No: XXXXXX
Dated: XXXX

Dear Sir/Madam,

I've carefully reviewed the Terms & Conditions mentioned 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'm an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)

Name
Designation, Seal

Date:

Annexure – 5:

Details of items quoted:

- a. Company Name
- b. Product Name
- c. Part / Catalogue number
- d. Product description / main features
- e. Detailed technical specifications
- f. Remarks

Instructions to bidders:

- 1. Bidder should provide technical specifications of the quoted product/s in detail.
- 2. Bidder should attach product brochures along with the technical bid.
- 3. Bidders should clearly indicate compliance or non-compliance with the technical specifications provided in the tender document.

Annexure 6 – Support Certification

Declaration for instrument support

To,
The Chairperson,
Attn: Prof. Prerna Sharma
Department of Physics,
Indian Institute of Science,
Bangalore – 560012, India.

Ref: Tender No: XXXXXX
Dated: XXXX

Dear Sir/Madam,

I've carefully reviewed the Terms & Conditions mentioned in the above-referred tender document. I declare that the model quoted has not been discontinued by our organization and the repair parts will be available for at least another five years. I further certify that I'm an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)

Name
Designation, Seal

Date:

Section 6 – Commercial Bid

The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned under:

| S. No. | Description | Cat. Number | Quantity | Unit Price | Sub Total |
|--------|---|-------------|----------|------------|-----------|
| 1. | Essential items noted in the technical specification | | | | |
| 1a | ...(details of essential items) | | | | |
| 1b | ... | | | | |
| | | | | | |
| 2. | Optional items noted in the technical specification | | | | |
| 2a | ...(details of Optional items) | | | | |
| 2b | ... | | | | |
| | | | | | |
| 3. | Accessories for operation and installation | | | | |
| 4. | All Consumables, spares and software to be supplied locally | | | | |
| 5. | Warranty (5 years) | | | | |
| 6. | Cost of Insurance and air freight | | | | |
| 7. | CIP/CIF IISc, Bengaluru | | | | |

Any additional items

| S. No. | Description | Cat. Number | Quantity | Unit Price | Sub Total |
|--------|-------------|-------------|----------|------------|-----------|
| | | | | | |

Addressed to

The Chairperson,
Attn: Prof. Prerna Sharma
Department of Physics,
Indian Institute of Science,
Bangalore – 560012, India.

Section 7 – Checklist

(This should be enclosed with technical bid - Part A)

The following items must be checked before the Bid is submitted:

A. Sealed Envelope “A”: Technical Bid

1. Section 5 - Technical Bid (each page signed by the authorized signatory and sealed) with the below annexures:
 - a. Annexure 1: Bidders details
 - b. Annexure 2: Declaration regarding experience
 - c. Annexure 3: Declaration regarding clean track record
 - d. Annexure 4: Declaration for acceptance of terms and conditions
 - e. Annexure 5: Details of items quoted
 - f. Annexure 6: Support Certification
2. Copy of this tender document duly signed by the authorized signatory on every page and sealed.

B. Sealed Envelop “B”: Commercial Bid

Section 6: Commercial Bid

Your quotation must be submitted in two envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) super scribing on both the envelopes with Tender No. and due date and both of these in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No., Tender description & Due Date.