## **Global tender notification for the procurement of Inverted Fluorescent Microscope with Live Cell Imaging Capability**

(GTE Approval Number: IISC-GTE-2023-255)

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## **Tender Summary**

1	Tender Number	MCB/SKU/01/2024-25		
2	Tender Date	26/07/2024		
3	Item Description	Inverted Fluorescent Microscope with Live Cell Imaging Capability		
4	Tender Type	Two bid system: (a) Technical Bid (Part A) (b) Commercial Bid (part B)		
5	Place of tender submission	The Chairperson, MCB Kind attention: Dr. Sudha Kumari Microbiology & Cell Biology. Indian Institute of Science Bengaluru, Karnataka 560012, India		
6	Last Date and Time for tender submission	15 <sup>th</sup> August 2024 5:00 PM		
7	Primary Point of Contact	Dr. Sudha Kumari Microbiology & Cell Biology. Indian Institute of Science Bengaluru, Karnataka 560012, India Email: sudhakm@iisc.ac.in		

## **Section 1: Bid Schedule**

This is a Request for quote (RFQ) from the **Original Equipment Manufacturer (OEM) or their authorized Indian distributor** for the procurement of a "(Inverted Fluorescent Microscope with Live Cell Imaging Capability)" at the Department of Microbiology & Cell Biology in the Indian Institute of Science, Bangalore. All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact.

## Section 2: Eligibility Criteria

Prequalification criteria:

- 1. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.
- 2. 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.
- 3. System Catalogue should be produced with the Technical Bid. Original Invoice, Original Warranty Certificate, and Original Test Reports should be produced for all imported items from OEM (Original Equipment Manufacturer) at the time of supply of equipment.
- 4. Manufacturers should have ISO or equivalent international standard certificate. Please attach the required certificate with the bid.
- 5. The supplier will support the user with all the spares for a minimum period of 5 years.
- 6. Details of experienced service engineers including contact details should be provided in the tender document.
- 7. Bidder shall have to submit audited accounts (Balance sheet profit and loss account) for financial year 2019-20, 2020-21 and 2021-22. The audited statement must be signed and stamped by qualified chartered accountants. The supplier will support the user with all the spares for a minimum period of 5 years.
- 8. Bidder must submit Income Tax return for assessment years 2020-21, 2021-22 and 2022-23.
- 9. The Bidder should have supplied similar equipment in at least 10 Central Universities preferably in centrally Funded Technical Institutes (IITs, IISc, IISER, NIT). Please provide the details and contact information.

### Section 3: Terms and conditions

#### (A) Submission of Tender

- 1. All documentation in the tender should be in English.
- 2. Vendors will be required to submit a technical proposal and a commercial proposal in two separate sealed envelopes (two bid systems). The technical bid should contain all commercial terms and conditions, except the price. Only vendors who meet the technical requirement will be considered for the commercial negotiation.
- 3. **The technical bid** (Part A) must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table with 5 columns.

a. The first column must list the technical requirements, in the order that they are given in the technical requirements below.

b. The second column must provide the specification of the instrument against the requirement (please provide quantitative responses wherever possible)

c. The third column should describe the compliance with a "YES" or "NO" only. Ensure that the entries in column 2 and column 3 are consistent.

d. The fourth column should clearly state the reasons/explanations/context for deviations if any.

e. The fifth column may contain additional remarks. It can be used to highlight the technical features, qualify the response of previous columns, or provide additional details.

- 4. The commercial bid (Part B) Indicating item-wise price for the items mentioned in the technical bid, as per the format of quotation provided in the tender, and other commercial terms and conditions. The commercial bid should indicate the following separately: (a) equipment price (b) optional items (c) Shipping cost and (d) the Total cost.
- 5. The technical bid and price bid should each be placed in separate sealed covers, superscribing on both the envelopes a 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.
- 6. The SEALED COVER superscribing tender number / due date & should reach the Chairperson Office, Department of Microbiology and Cell Biology, Indian Institute of Science, Bangalore 560012, India on or before the 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.
- 7. All queries are to be addressed to the person identified in "Section 1: Bid Schedule" of the tender notice.

- 8. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document (Indian Bidders only).
- 9. In addition to that listed in the technical table that the vendor would like to bring to the attention of the committee, such as data sheets, technical plots etc. must be listed at the end of the compliance table. The committee will go through the data provided and those available in their website to evaluate the suitability.
- 10. The decision of the purchase committee will be final. The Institute reserves the right to accept or reject any bid or to annul the bidding process and reject all bids, at any time before the award of the contract without thereby incurring any liability of the affected bidder or bidders.

### (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 the 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 for at least 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 commercial evaluation. The decision regarding acceptance and/or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and the decision in this regard shall be binding on the bidders.
- 4. The award of the 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 the 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 consider that the BIDDER had accepted the clauses as of the tender and no further claim will be entertained.
- 7. No revision of the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
- 8. 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, optional items, recommended spares, warranty, and 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 a warranty period of **a minimum of 1 year** from the date of delivery, including a free supply of spare parts and online assistance for 3 subsequent years. 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) 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.

#### (H) Delivery and Installation

The bidder shall provide the lead time to delivery, installation and made functional at IISc Bangalore from the date of receipt of the purchase order. The system should be delivered, installed, and made functional **within 140 days** from the date of receipt of the 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 the entire

system by the IISc, Bangalore shall be taken as the start of the warranty period. No partial shipment is allowed. The technical installation personnel/engineer, who will perform the installation, must possess proof of a training certificate from the manufacturing company/factory/principal, which should be submitted along with the tender offer.

### (I) Payment Terms:

100% payments (except AMC) will be released after completion of delivery and satisfactory installation subject to TDS as per rules. AMC cost (if ordered), after completion of the warranty period) will be released on a half-yearly basis at the end of each six months subject to satisfactory services. The AMC will be comprehensive. As per GFR, no advance payment can be made to the authorized Indian distributors unless an equal amount of bank guarantee is provided.

### (J) Statutory Variation:

Any statutory increase in the taxes and duties after the 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.

### (K) Disputes and Jurisdiction:

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

#### (L) General:

- 1. All amendments, time extensions, 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 complete the envisaged work. It is, however, advised not to furnish superfluous information.
- 3. The bidder may visit the installation site before submission of the 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.

# **Section 4: Technical Specifications**

## Technical Specification for "Inverted Fluorescent Microscope With LiveCell Imaging Capability"

Sl. No.	Specification	Essential/			
1.	Main Body.	Essential			
	- Inverted completely motorized (latest model) microscope with Infinity optical corrected optical system.				
	- All accessories for DIC and Fluorescence should be supplied. The microscope should be ready to upgrade with DIC.				
	- The microscope should be upgradable to dual deck configuration. The microscope should have intermediate magnification changer 1.0x to 1.5x which should be compatible with dual deck configuration.				
	<ul> <li>Motorized extra fine/fine/coarse focus, focus knob with rotary encoder, escape (for anti-collision) and refocus mechanism, laser safety interlock signal output, light distribution with motorized changer: 100% Eyepiece, 100% Left, 100% Right. The microscope should offer bigger FOV of 23mm or better at imaging port.</li> </ul>				
	- Microscope should come with a pre-cantered LED illumination for transmitted light and DIC applications (future upgradable). Power supply for LED must be inbuilt in microscope body.				
	- The microscope should have hardware based automatic focus correction to avoid drift caused by mechanical or thermal changes. Users should have control to keep this option "on" or "off".				
	- Vinyl cover to protect from dust.				
	- Microscope should have the facility to project the back aperture plane on monitor enabling user to view best TIRF Alignment.				
	Microscope should have the facility to guide/assist all the correct components are in the place for their chosen observation method				
2.	Condenser:	Essential			
	<ul> <li>Completely motorized universal turret condenser suitable for all microscopy techniques with 5 – 7 positions. Please quote with the maximum or better availabilities.</li> </ul>				

3.	Stage:	Essential
	- Completely motorized, smooth XY encoder-based stage	
	with Joystick control.	
	Universal Holder, well plate holder & stage ring holder.	
4.	Nosepiece:	Essential
	- Microscope should have motorized DIC compatible revolving	
	nosepiece to hold $\geq 6$ objectives at a time with anti-collision	
	mechanism.	
	- Automatic LED-based focus drift correction mechanism	
	(830nm LED or better) caused by thermal & mechanical	
	changes during long term live cell imaging experiments. So	
	higher magnification & higher resolution techniques.	
_	Objectives:	Essential
5.	High performance Objectives suitable for Dright field (	
	Fluorescence / DIC Observation with facility of cover-glass	
	correction with following specifications:	
	1) Apochromat 60x oil TIRF N.A. 1.49 or higher	
	2) Apochromat 100x oil TIRF /N.A. 1.49 or higher	
6.	Stage incubator system:	Essential
	- System should be equipped with best and highly sensitive	
	onstage incubation system with live cell imaging chamber	
	(includes CO <sub>2</sub> , temperature controller, objective heater,	
	chambers, petri-plates & multiwall plates of standard size	
	and dimensions.	
7	Focusing system:	Essential
7.	- Should have motorized coaxial coarse and fine focusing knob	
	with minimum fine reading of 10 nm or better.	
	Eni-fluorescence attachment:	Essential
8.		Losential
	- Motorized epi-fluorescence attachment with motorized 6 position	
	turret miter block.	
	- Eight Independent LED 365/435/470/500/550/580/635/740	
	Fluorescence Illumination 20,000 hours of life for fluorescence	
	observation with High speed 7microseconds or better TTL	
	riggering for fast dynamic experiments.	
		Essential
9.	Epi-Fluorescence Filters: Please quote for Highest quality	
	Band pass fluorescent filter for DAPI/365nm.	

10.	FRAP unit:	Essential
	- FRAP unit for bleaching using all four visible laser lines available with TIRF (405, 488, 561, 635/647/650nm). FRAP unit should be XY Galvo mirror based. Bleaching should be possible at user-specified ROI. Multi- near-simultaneous ROI bleaching should be possible.	
11.	Camera:	Essential
	- High Resolution monochrome sCMOS camera with 2304 x 2304 pixel resolution or better resolution, pixel size of 6.5 x 6.5um having 15000 electrons as full well capacity, camera speed should be 85-90fps at full resolution, dynamic range 21400:1. Camera should have 95% Q.E or better and should be able to control with Confocal software.	
12.	Splitting Optics:	Optional
	- Splitting optics for 2 color simultaneous GFP/RFP imaging using one camera. Suitable filters/DM must be provided to perform experiments like GFP/RFP combination.	
13.	Computer Workstation:	Essential
	<ul> <li>OS: Windows 10/11 pro, 64 Bit English version.</li> <li>CPU: Intel Xeon W-2225 (CPU 4.0 core 4) or better</li> <li>RAM: 64 GB</li> <li>HDD: 1<sup>st</sup> HP Z turbo G2 512x GB, PCIe H.2 SSD. 2<sup>nd</sup> SATA 2TB</li> <li>Optical Drive: Super Multi drive, up to x 16 speed.</li> <li>LAN: 10/100/1000network interface x 2</li> <li>Extension Slot: 2 PCI express 3.0 x 16 slots (one slot for Graphics)</li> <li>Graphics: NVIDIA Quadro RTX4000A or better</li> <li>Monitor : 32" HD 4k monitor .</li> </ul>	

10	Software: The quoted software should have the following	Essential
13.	features:	
(A)		
	- Basic image acquisition, Complete microscope control, Camera	
	control and Laser control	
	- Saving of all instrument parameters along with the image for	
	repeatable / reproducible imaging	
	- Time series imaging capabilities.	
	- Software should have real time simultaneous control for all the	
	motorized devices.	
	- Diverse measurement and statistical processing	
	- Software should be capable to recording intensity profiles and	
	other parameters of live cell imaging experiments as recorded data.	
	- It should be able to reproduce the TIRF angle setting for each laser	
	line independent of each other. It should be capable of handling &	
	controlling Multi laser for multi-color imaging.	
	- The system should have special experiment	
	management/designing facility so that user can plan his experiments	
	based on different system settings and different experimental	
	conditions.	
	- Software for image analysis should be available for free of cost.	
	- The software should be user programmable.	
	- Single software must be controlling Microscope including all	
	motorized components illumination camera TIFR and FRAP	
	hardware and incubator NIDAO card with suitable accessories	
	should be quoted to control third party devices/lasers	
	- AI module for advance analysis and image processing along with	
	AL (Artificial intelligence) based Out of focus illumination	
	rejection	
	Instrument Isolation: Imported Anti-vibration table	Essential
	IPS: Online 5 KVA IPS for back un	Listential
	or b. omme 5 iv viv or b for back up	
	Motorized TIRF System for 405/488/561/647 nm Lasers:	Essential
13.(B)	·	
	<ul> <li>System should consist of motorized TIRF attachments having</li> </ul>	
	auto Alignment for TIRF and Auto adjustment of incident angles	
	for optimizing the evanescent field depth. The Auto alignment	
	and Auto adjustment should also be possible to make	
	independently for each wavelength and experiment and settings	
	can be used and re-use for consistent result.	
	The microscope should some with completely restaring any	
	- The microscope should come with completely motorized, pre-	
	instance and pre-anglied laser unit equipped with following	
	excitation wavelengths and AOTF or direct modulation	
	controller:	
	1) Solid State Laser 405 nm	
	2) Solid State Laser 488 nm	
	3) Solid State Laser 561 nm	

4	4) Solid State Laser for 647/635/750 nm or with another far- red range peak.	
<u>E</u>	ach laser line should have 100mW or better power at source.	
Q	Please also quote for following Highest quality appropriate filter cubes suitable for TIFR multi-color live cell imaging applications: uad Band Filter for DAPI/FITC/TRITC/CY5 for TIRF imaging.	

# **Section 5- Technical Bid**

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

Sudha

Attn. Dr. Sudha Kumari Department of Microbiology And Cell Biology Indian Institute of Science, Bengaluru 560012, India Email: <u>sudhakm@iisc.ac.in</u>

### 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 Items 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, Designation, Seal

### Annexure-2:

### **Declaration regarding experience**

To, The Dr. Sudha Kumari, Department of Microbiology And Cell Biology Indian Institute of Science, Bengaluru 560012, India

Ref: Tender No: XXXXXXX

Dated: XXXXX

Supply and installation of "Inverted Fluorescent Microscope With LiveCell Imaging Capability" at the Department of Microbiology & Cell Biology in IISc Bangalore.

Sir/Ma'am,

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has ---- years of experience in supplying and installing "Inverted Fluorescent Microscope With LiveCell Imaging Capability".

(Signature of the Bidder)

Name, Designation, Seal

### Annexure-3:

Declaration of the track record

To,

The

Dr. Sudha Kumari,

Department of Microbiology & Cell Biology

Indian Institute of Science, Bengaluru 560012, India

Ref: Tender No: XXXXXXX

Dated: XXXXX

Supply and installation of "Inverted Fluorescent Microscope With LiveCell Imaging Capability" at the Department of Microbiology & Cell Biology in IISc Bangalore.

Sir,

I've 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'm competent officer in my company/firm to make this declaration.

Or

I declare the following,

S1.	Country in which	Blacklisted/debarred by	Reasons	Since when and
No.	the company is	Government/Semi		for how long
	Debarred/blacklisted	Government/Organizations		
	/case is Pending	/Institutions		

(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

### Annexure – 4:

### Declaration for acceptance of terms and conditions

To,

The Dr. Sudha Kumari, Department of Microbiology & Cell Biology Indian Institute of Science, Bengaluru 560012, India

Ref: Tender No: XXXXXXX

Dated: XXXXX

Subject- Supply and installation of "Inverted Fluorescent Microscope With LiveCell Imaging Capability" at the Department of Microbiology & Cell Biology in IISc Bangalore.

Sir,

I've carefully gone through the Terms & Conditions as 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

### 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 technical bid.

3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

## Section 6 – Commercial Bid

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

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 optional				
	items)				
2.b					
3.	Accessories for operation				
	and installation				
4.	All Consumables, spares and				
	software to be supplied				
	locally				
5.	Warranty (1 year)				
6.	Cost of Insurance and				
	Airfreight				
7.	CIF IISc, Bengaluru				

Any additional items

Sl. No	Description	Cat. Number	Quantity	Unit Price	Sub total

Addressed to

To, The Chairperson, MCB Attn. Dr. Sudha Kumari, Department of Microbiology & Cell Biology Indian Institute of Science, Bengaluru 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:

#### 1. 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.

2. Copy of this tender document duly signed by the authorized signatory on every page and sealed.

#### 2. Sealed Envelope "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.