#### **Domestic Tender**

This is a Request for Quote (RFQ) from the Indian Institute of Science (IISc), Bangalore, for the Supply and installation of "High end operating microscope" at the Centre for Nano Science and Engineering, Indian Institute of Science, Bangalore.

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# Section 1 - Bid Schedule

1	Tender No	CeNSE/VN/01/2023-24			
2	Tender Date	12.12.2023			
3	Item Description	Supply and installation of "High end operating microscope"			
4	Tender Type	Two bid system (i) Technical Bid (Part A) (ii) Commercial Bid (Part B)			
5	Place of tender submission	Chair's Office First Floor Centre for Nano Science and Engineering Indian Institute of Science, Bangalore 560012			
6	Last Date & Time for submission of tender	2 <sup>nd</sup> January 2024, 5 PM			
7	For further clarification	Prof. Vini Gautam Centre for Nano Science and Engineering Indian Institute of Science, Bangalore 560012 Email: vini@iisc.ac.in			

# Section 2 – Eligibility Criteria

Prequalification criteria:

- 1. The Bidder's firm should have existence for a minimum of 3 years. (Enclose Company Registration Certificate)
- 2. However, in the interest of promoting local suppliers, if the Bidder belongs to either class 1 or class 2 supplier distinguished by their "local content" as defined by recent edits to GFR, they should mention clearly which class they belong to in the cover letter
  - a) Class 1 supplier: Goods and services should have local content of equal to or more than 50%.
  - b) Class 2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
- 3. Purchase reference has defined by the recent edits to GFR (with in the "margin of purchase preference") will be given to the Class 1 supplier.
- 4. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.
- 5. The Bidder must not be blacklisted/banned/suspended or have a record of any servicerelated dispute with any organization in India or elsewhere. A declaration to this effect has to be given as per Annexure 3.
- 6. MSME can seek exemption to some qualification criteria. IISc follows GFR2017 for such details
- 7. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class 1 local suppliers/Class 2 local suppliers by claiming services such as transportation, insurance, installation, commissioning, training and other sales servicesupport like AMC/CMC, etc., as local value addition.

# Section 3 – Terms and Conditions

# A) Submission of Tender:

- 1. All documentations in the tender should be in English.
- 2. Tender should be submitted in two envelops (two bid system).
  - a. Technical Bid (Part-A) Technical bid consisting of all technical details and check list for conformance to technical specifications. The proposal should contain a compliance table with 4 columns in addition to the ones in the technical requirements table that has been included with this RFQ below. The compliance table should include all the items in the same order and format. The first column should describe your compliance in a "Yes" or "No" response. If "No" the second column should state the extent of deviation. The "third" column should state the reasons for the deviation if any. The fourth column can be used to compare your tool 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) Indicating item wise price for the items mentioned in the technical bid, as per the format of quotation provided in tender, and other commercial terms and conditions. The commercial bid should be broken up to the maximum extent possible into separate items with a cost against each (in particular the optional items) to enable better comparison of price for various configurations across the bidders. As an option, please provide itemized cost for any *suggested* accessories/add-ons that may enhance the usability, capability, accuracy or reliability of the tool. Vendors are encouraged to quote for as many add-ons as their tool portfolio permits.
- 3. The technical bid and price bid should each be placed in sparate 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.
- 4. The SEALED COVER superscripting tender number / due date & should reach Chair's Office, Centre for Nano Science and Engineering, Indian Institute of Science, Bangalore 560012, India on or before due date mentioned in the tender notice. In case due date happens to be holiday the tender will be accepted and opened 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 should mention GST Registration and PAN in the tender document (Indian Bidders only).

- 7. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.
- 8. 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.
- 9. The technical proposal must include references of at least 3 previous installations done in India within last 5 years of similar equipment from the equipment manufacturer. Please provide the names and contact addresses of the three independent referees so that the committee can contact them independently to get reference.
- 10. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.
- 11. The quotation should be on FOR IISc Bangalore basis in INR only

#### 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 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, preprocessing 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 4 years including free supply of consumables, spare parts and data analysis software from the date of functional installation. If the instrument is found to be defective, it has to 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:

An annual maintenance contract for a period of 2 years post warranty should be provided on completion of warranty period.

#### H) 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 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.

## 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 90 days 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.

### J) Payment Terms:

The payment will be determined after the mutual discussions with the successful bidder.

#### 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) Disputes 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 informat
- 3. The bidder may visit the installation site before submission of tender, with prior intimation.
- 4. All imported equipment should be quoted in the currency of the country of origin, and all locally sourced items should be quoted in Indian Rupees.

5. 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

# A. Technical Specifications of Fluorescence Microscope with Live Imaging Capabilities:-

S.No	Specification	Essential/Optional
1.	Fully motorized infinity corrected upright fluorescence microscope stand for BF/DIC/Fluorescence with touch screen and remote control for controlling motorized components of the microscope and saftey features like interlock for lasers.	Essential
2.	Trinocular observation tube with three position prism for selection of light path for full observation to 10X eyepiece, 50% - 50% Camera Port - eyepiece, 100% Camera Port	Essential
3.	Programmable motorized X-Y scanning stage including multipoint, tile and mosaic imaging software	Essential
4.	Universal Sample Holder for slides, 35-60mm petridishes, 6/12/24 well plates, labtek chambers etc	Essential
5.	LED illumination for bright field (halogen color). Minimum power for BF LED illumination with minimum flux of 25Im@500mA and a life time of 10,000 Hrs.	Essential
6.	LED illumination for Fluorescence catering to the following fluorophores to be included. Minimum power for Fluorescence LED illumination >100W after the fiber / liquid light guide, with a lifetime of > 10,000 hours.	Essential
7.	Band pass fluorescent filters for wavelenths in range: DAPI, CFP, GFP, Cy3, Cy5; atleast 4 empty filter cube: these are part of the turret	Essential
8.	Should have the provision of coupling additional laser/LED light sources for widefield fluorescence microscopy.	Essential
9.	Motorized 6 position revolving DIC nosepiece, Long working distance Condenser (NA 0.55/WD.27mm or better) with modules for DIC and minimum 5 position turret.	Essential
10.	High precision Z-focus drive with step size of 25 nm or better. Should be equipped with escape (for anti-colllision) and refocus mechanism	Essential
11.	Z-drift compensator for long time stability time lapse imaging (must use near IR light to detect the correct focus position).	Optional
12.	C Mount Adapter for Left Side 100% Port for mounting Camera.	Optional
13.	C Mount Adapter for Trinocular Port for mounting Camera.	Essential
14.	10X Eye Piece with FOV 20mm or better.	Essential
15	Plan apochromatically corrected optics consisiting of following objectives (correction of chromatic and spherical abberations from 400nm – 900nm):	Essential

	AV air abiastive NA > 0.4	
	4X air objective NA > 0.4	
	10X air objective NA > 0.4	
	20X air objective long working distance NA > 0.7	
	20X water dipping objective NA > 0.5; WD > 2mm	
	40X air objective long working distance with NA > 0.6	
	40X water dipping objective NA > 0.8; WD > 2mm	
16.	Motorized 8 position fluorescent mirror turret, with motorized shutter	Essential
17.	Monochrome cooled CCD or sCMOS camera for wide field imaging in epi-fluorescence (reflected fluorescence) and DIC imaging modes. Minimum resolution of 2048 x 2048 pixels. QE between 400 to 850 nm should be greater than 45%, with peak QE at least 80%. Minimum full resolution frame rate 30 fps.	Essential
18.	High speed connection (camera link, CoaXPress etc.) for full resolution frame rates of 100 fps for the CCD or sCMOS camera	Optional
19.	Plan super apochromat objective - 60x; NA > 0.8 water dipping	Optional
20.	Plan super apochromat objective - 60X; NA > 1.0 oil immersion	Optional
21.	CO <sub>2</sub> Incubation System with temperature and Humidity Control. The parameters of the incubation system should be controlled by software.	Essential
22.	The sytem should be capable of reflected light microscopy in brightfield and confocal modes, with appropriate vertical illuminators and epi-plan objectives. Optional capability for DIC, darkfiled, and polarized modes in reflection microscopy should be provided.	Essential
23.	The system should have atleast 2 high sensitive GaAsP/HyD detectors having atleast 45% QE and 2 PMT detectors and enable simultaneous detection of 4 fluorophores. Transmitted Light detector integrated with transmitted light PMT detector & LED lamp, with motorized switching.	Essential
24.	Hybrid XY scanner with scanning speed of 15 fps or better at 512 x 512 pixels	Essential
25.	Variable pinhole with confocal zoom of atleast 1-40. Should be capable of both spectral and conventional imaging. The system should be able to perform both online and offline spectral unmixing.	Essential
26.	Scan Resolution of 6K x 6K or better with a confocal depth of 80um or better	Essential
27.	FOV (field of view) of 20mm or better	Essential
28.	Laser combiner with 4 solid state Lasers, of wavelengths in these ranges: 400-410, 480-490, 530-578 & 620-660 nm, with minimum powers of 15mW with fast laser switching capability (using either AOTF or some similar technology: please specify). Bleed through less than -40dB (In laser power: 0.01%) Leakage Less than -65dB (In laser power: 0.00003%). Power stability ±20% in ±2.4°C. The imaging software should give access to control the intensity and banking of our laser through a dedicated analog box & externa trigger for seamless imaging with built in laser as well as out custom laser (SC NIR/vis/IR lasers. All the built-in lasers should be usable in future for FCS and FCCS upgradation. Option to add extra laser later.	Essential
29.	Solid state diode laser 594 nm for dedicated m Cherry applications	Optional

	Capability to replace the vendor suplied laser with a user supplied			
30.	laser. Please mention separately if the laser, and the dichroics in the	Essential		
	combiner can be replaced on site.			
	Cost of the replacement process with necessary components to be			
31.	quoted as optional items.	Optional		
32.	System should be capable of any hardware upgradation in future	Essential		
	Software should be capable (e.g. SDK) of controlling every component			
	of the system including microscope, laser and confocal unit. Should be			
	compatible for 3D, 4D, 5D and 6D imaging (X,Y,Z,t,multi color, multi	Essential		
33.	point). Image stitching in coordination with XYZ stage. The SDK should			
	give an access to the scanning parameters and the data output			
	through Analog box to be controlled through third party software			
	such as matlab/labview for customised applications.			
1	Advanced 3D image reconstruction with rendering from a Z-stack			
34.	image series including 3D deconvolution capability in widefield and	Essential		
	confocal modalities.			
35.	Software should have AI based module for segmentation and down	Essential		
	stream processing analysis.			
	High-end 64 bit control computer with minimum Intel Xeon Processor,			
36.	Win Pro or better, DDR4 RAM 64 GB or more; 256 GB SSD or better;	Essential		
	HDD: 2 TB SATA or more, NVIDIA graphics card 8 GB or better, USB 3.0. 2 x 27" Monitor or better.			
	Additional offline software with complete features as the main			
37.	software with high end PC and monitor (same specs as the main	Essential		
57.	system) should be made available.	Essential		
	Active anti-vibration isolation table of appropriate size with			
38.	breadboard table top	Essential		
	Online UPS for the complete system including lasers should be			
20	included in the supply. The system should have a dedicated online	Facential		
39.	branded UPS system with atleast 30 min back up for the whole	Essential		
	system.			
40.	Triggering and external instrument control capability for complex	Optional		
40.	integration of the system	Optional		
	Advanced Image capture and processing software for 2D			
41.	deconvolution, co-localization analysis, 3D restoration, batch	Essential		
	processing, on-line analysis, time-lapse imaging, movie acquisition;	Loocifiai		
	software capability to perform FRAP (provide details)			
42.	Capability to perform FRET; provide details	Optional		
43.	Capability to perform FCS; provide details	Optional		
44.	Lens cleaning papers, immersion oil and standard slides for calibration	Essential		
	should be provided at the time of installation.			
45.	Trained manpower support for one year cost to beborne by the vendor.	Optional		
	venuur.			

# B. Training and demonstration

Training on usage of the machine (hardware and software) must be demonstrated by the successful bidder at bidder's cost to the end users at IISc, Bangalore. The vender should be responsible for the complete system installation, functioning maintenance, andtraining by trained personnel. Bidders

should clearly specify the after sales service/application support capabilities without any additional cost

# Section 5 – Technical Bid

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

The Chairperson, Attn: Prof. Vini Gautam Centre for Nano Science and Engineering Indian Institute of Science, Bangalore 560012 Email: vini@iisc.ac.in

#### Annexure-1:

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

#### **Details of the Bidder**

SI. 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 Chairperson, Centre for Nanoscience and Engineering, Indian Institute of Science, Bangalore – 560012, India

Ref: Tender No: XXXXXXXXX Dated: XXXXX

Supply and installation of "High end operating microscope".

Sir,

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 Confocal systems.

(Signature of the Bidder) Printed Name Designation, Seal Date:

## Annexure-3:

#### Declaration regarding track record

To, The Chairperson, Centre for Nano Science and Engineering Indian Institute of Science, Bangalore – 560012, India

Ref: Tender No: XXXXXXX Dated: XXXXX

Supply and installation of "High end operating microscope"

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

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

(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).

Yours faithfully (Signature of the Bidder)

Name Designation, Seal

Date:

## Annexure – 4:

Declaration for acceptance of terms and conditions

To, The Chairperson, Centre for Nano Science and Engineering Indian Institute of Science, Bangalore – 560012, India

Ref: Tender No: XXXXXX Dated: XXXX

Supply and installation of "High end operating microscope"

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

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 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:

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total
1.	Essential items noted in the technical specification		Quantity		
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 (5 years)				
6.	AMC 2 years beyond warranty				
7.	Cost of Insurance and Airfreight				
8.	FOR-IISc, Bengaluru				

#### Any additional items

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

#### Addressed to

The Chairperson, Attn: Prof Vini Gautam Centre for Nano Science and Engineering 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:

# 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 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.