

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

2A & 2B , Raja S.C. Mullick Road, Jadavpur, Kolkata-700032

NIT No. : IACS/BC/PKD/2018-19/3

Date: 12/04/2018

Sealed tender in two bids system (**Technical Bid & Financial bid**) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for supply and installation of **Live Cell Imaging Motorized Inverted Fluorescence Microscope** with necessary accessories.

Part-I (Technical Bid) of the tender should contain technical specifications in detail as well as commercial terms and conditions. Part-II (Price Bid) should clearly indicate group-wise price, if needed, as mentioned in the technical bid. The Technical Bid and Price Bid are to be submitted in separately sealed envelopes, distinctly marked accordingly and both to be put inside another envelop, that should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

Completed tender bids should reach the office of the **Registrar, Indian Association for the Cultivation of Science (IACS), 2A & 2B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032** on or before the scheduled date and time specified below:

Tender Notice No.	NIT No. IACS/BC/PKD/2018-19/3, Date: 12-04-2018
Last date and time of submitting tender	11.05.18 (12.00 noon)
Pre-bid meeting to discuss technical specification and detail presentation by the representative(s) of the interested companies on the technical specifications of their instrument and application with representative data acquired in their instrument elsewhere.	20.04.2018 @3.30 pm in S. N. Bose Hall, IACS Main Building
Date and time of opening tender (Technical Bids)	11.05.2018, at 12.30 PM
Place of opening tender	S. N. Bose Hall/or 2nd Floor Meeting Room, IACS Main Building
Date and time of opening of Price Bid	The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.
Contact	Email: bcpkd@iacs.res.in Tel.+91 33 2473 4971 [Ext 1505]

The technical bids will be opened first to judge/evaluate the technical specifications of the said instrument and thereafter the price bids of only technically qualified bidders will be opened.

Technical Bid Evaluation: The Technical Bids will be evaluated in the presence of the representatives of intending bidders who will be able to clarify technical aspects of their bids, if any, required by the Technical Evaluation Team.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or reimburse any expenses to any of the bidders for attending opening of technical bid.

Quotations received incomplete or beyond the stipulated time will be summarily rejected.

Bidders should submit their past experience for supplying and successful installation of similar units to other research Institutes/Universities/other organizations in India and abroad. Please provide documentary proofs of such successful installation and supportive documents that the instruments are running successfully.

For evaluation of L1 (least price) amongst the technically qualified bid only, the price of optional item will be considered in the event the committee decides to procure it. If the committee decides not to procure the optional items then the cost of those optional items will not be included in evaluation of L1.

1. TECHNICAL BID

The technical bid should contain technical specifications and should be kept in a separate sealed envelope duly superscribed as 'TECHNICAL BID' on the outer cover of the envelope as already detailed above. **It should be clearly mentioned on the envelope as "Technical Specification for Live Cell Imaging Motorized Inverted Fluorescence Microscope".**

Desired Specification for Live Cell Imaging Motorized Inverted Fluorescence Microscope

1. Microscope Frame (Motorized): Frame with high static rigidity, waterproof construction to help block penetration of water inside the frame. Frontal Controls for Motorized Light path selector 0:100/50:50/100:0, Transmitted light Intensity control, and light ON/OFF switch. The frame should come with Sextuple Motorized revolving nosepiece, Motorized fine & course focus adjustment with minimum step size 20 nm or better, attachable Motorized DIC slider. Frame should have the option to upgrade in confocal/TIRF system. Up-gradation should be carried out on site. Dedicated Touch Panel control for stage and full Microscope Control with XYZ movement Knob/Joystick should be quoted in main offer.

2. Transmitted light Illuminator: 100W transmitted light OR high Intensity Long life LED illumination for BF/Phase/DIC and POL, Microscope pillar should have tilt Mechanism for easy sample handling, condenser holder, adjustable field iris Diaphragm & easy access of Intensity control.

3. Observation tube: Wide-field Binocular observation tube, having Diopter adjustment. Eyepiece: Paired 10X eyepiece having F.N. 22 or higher with Diopter adjustment.

4. MECHANICAL XY Stage WITH POSITION REPRODUCIBILITY: Mechanical stage with right hand control with the holders for Petri Dish, Slide and Well Plate, microtiter plate Travel range 110 X 75mm or better.

5. Universal Condenser: Universal Long Working condenser for all contrast Techniques (N.A.0.55/W.D27 mm or better) with 5 or better Slots, Phase elements for 10X, 20X, 40X and DIC for 60X & 100X must be provided, Dedicated Polarizer and Analyzer must be quoted with main offer.

6. Objectives: High Transmission, Universal Plan Fluorite Phase/semi apochromat Objective 10X/ 0.30, W.D 10 mm or better;

Long Working Distance Plan Fluorite/semi apochromat Phase Objective 20X/0.45, WD 6.5 -7.7 mm or better with correction ring;

Long Working Distance Phase Fluorite/semi apochromat objective 40X/0.60, W.D. 3.0 to 4.0 mm or better with correction ring;

Universal Plan apochromat objective Objective 60X/1.35 or better, WD 0.12 mm (Spring, Oil) or better.

All these objectives should be quoted in the main offer.

Universal Plan Fluorite/semi apochromat/apochromat Objective 100X (Spring, Oil) or better with immersion oil having low level auto-fluorescence should be quoted as optional item.

7. Fluorescence: Motorized Fluorescence attachment for 6 or more nos. of Cube for Fluorescence with 120 watt /130 watt HG / metal halide light Source with 2000 hrs life span , should be Quoted with filters for Dapi, FITC/GFP,TRITC /RFP, Yellow Range, 4 filters, All Filter must be long life hard coated with band pass filter in excitation and band pass filter in Emission for prevent the cross talk. Motorized Shutter synchronized with Software.

8. Photo Micrograph attachment : (Two Camera)

For Fluorescence application:

Scientific Grade Monochrome Cooled CCD Camera with 1.4 MP resolution or better, Pixel Size: 6.4X6.4 μ or better, 2/3" CCD Chip or higher, Digital Output 14 Bit or better, Frame rate 15 fps or better at full resolution, Peltier Cooling or better, having quantum efficiency 60% or better. Installation must be easy on any PC or laptop equipped with a FireWire-port, USB or PCI card.

For BF/Phase Contrast/ DIC application :

high-resolution, 16-megapixel or more CMOS color cooled camera for sample's fine details and structures. with 4K Live Image, performance for bright-field applications, through fast live focusing and noise cancellation, and making the screen the standard for documentation, evaluation, and discussion. With binning 2X , 4X, Life Speed 50 FPS or more, cooled, pixel size of 1.25X1.25 μ or better.

9. Advanced Imaging and Analysis Software :

Software should be provided which can control all the motorized functions of the microscope. Multi-dimensional (5D) fluorescence acquisition (XYZ λ & T). Automated stitching or auto montage and multi point imaging module. Software autofocus modules. Basic deconvolution and online deblur/DE convolution module. Intensity measurements extended focal imaging. Fluorescence unmixing module to separate spectrally overlapping dyes and auto-fluorescence.

Instruction manual, software for image capturing, user experience customization, overlay multiple images, document groups for side by side image comparison, movie playback, Tile image, slice view for orthogonal plane viewing of 3D or time lapse data sets, snap /movie acquisition, time lapse at specific intervals, Z stack, Manual Multiple image alignment , Instantly create Extended focal images (EFI), Live deblurring, Image processing, Image analysis, Count and Measure Basic (Phases/regions), automatically compose word report.

10. Live Cell Imaging Set up:

On stage CO2 Incubator with top plate heating method, 35 mm petridish holder, Chamber Slide, Well-plate adopter, Temp , CO2 and Humidity control , time lapse Imaging facility should be quoted with main offer.

11. Computer and Monitor:

Latest 64 bit control computer with Intel Xeon/i-7 Processor, DDR RAM 16 GB or better, HDD: 1 TB SATA or better, DVD, SuperMulti SATA +R/RW, Graphics having 256MB DH DVI, Gigabit Ethernet, Win 7/10 Ultimate 64 bit , USB 2.0-3.0, Fire wire. Large 28" or higher LCD/LED monitor. Required UPS with a back up time of at least 30 minutes.

12. Warranty:

Entire equipment should be offered with comprehensive warranty including service and spares for three (3) years and local service support. The vendor should also quote for further 5 years Annual Maintenance Contract (AMC) and Comprehensive Maintenance Contract (CMC) separately after the expiry of initial period of warranty. Taxes as applicable will be deducted at the time of payment of AMC/CMC amount.

13. Service:

Past installation history of the said equipment in India. It is desirable that adequate number of installations by the company have been fulfilled in India and the instruments are in running condition. Notably, the company must have expert service support specifically for the said equipment in India.

14. Accessories:

Microscope cover; microscope scale for calibrating the pixel size; Lens cleaning paper books (10 packs); Objective Oil (3 bottles); Two spare bulb each for fluorescence and DIC.

*Installation and Application Training by factory trained personnel.

*Any other equipment/device/tools whichever are necessary for installation and operation of the complete System.

* Tender will not be accepted if the technical compliance chart is not provided following the given format below:

Sr. No	Tender specification	Your offered instrument specification	Extent of compliance

Important notes:

- i) Vendor should quote rates involved, if any, for the Optional Items/services mentioned separately.
- ii) Bidder providing misleading or wrong information will be disqualified

iii) All technical claims of the Bidder should be supported by product catalogue, public website of the manufacture.

iv) Qualified vendor will be required to undertake the room refurbishment for proper installation of the system. IACS will provide the space will electrical connection. The vendor will be required to install the necessary tables and other furniture as required by the instruments. They are expected to inspect the space and take the room preparation work before delivery of item.

v) The above mentioned technical specifications are highly desirable. However, the Institute reserves the right to go for customized specifications taking into considerations its financial constraints and technical preferences.

2. PRICE/ FINANCIAL BID

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope duly super scribed as 'PRICE BID' on the outer cover of the envelop as already detailed above. Price bids of only technically qualified bidders will be opened and they will be intimated the date and time of the opening of price bid at their e-mail ids. Rest of the bidders will stand rejected.

PRICE: Price to be quoted on CIF Kolkata and also on FOB basis.

3. BID SECURITY:

a. An Account payee Demand Draft/Pay Order of Nationalized Indian Bank for Rs. 1,00,000 (Rupees one lakh only) drawn in favour of "Indian Association for the Cultivation of Science (State Bank of India, Jadavpur University Branch, A/C No. 11079699211, IFSC: SBIN000093, MICR Code: 700002048)" is to be furnished by the bidders alongwith Technical Bid, except Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organisation or the concerned Ministry or Department.

Alternatively, the bidder shall have the option to furnish EMD in the form of Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any of the Commercial Banks. The Bid-Security should have at least 90 (ninety) days validity period beyond the final bid validity period.

In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

4. PERFORMANCE SECURITY:

An Account Payee Demand Draft on any nationalized bank of India or Bank Guarantee (BG) of any Indian Nationalized Bank preferably located at Kolkata of 10% of the order value in the name of "Indian Association for the Cultivation of Science" is to be furnished by the successful bidder as Performance security. Performance security money should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Bid security money or EMD will be refunded to successful bidder on receipt of the Performance security money.

5. TERMS OF PAYMENT :

Payment will be made through irrevocable Letter of Credit in two installments. 90% of the money will be released on submission of shipping of documents. Remaining 10% will be released after successful installation of the instrument.

6. Warranty: Entire equipment should be offered with comprehensive warranty including service and spares for three (3) years and local service support. The vendor should also quote for further 5 years Annual Maintenance Contract (AMC) and Comprehensive Maintenance Contract (CMC) separately after the expiry of initial period of warranty. Taxes as applicable will be deducted at the time of payment of AMC/CMC amount.

7. GENERAL INSTRUCTIONS :

1. Validity of tender: Tender submitted should remain valid for at least six months from the date of opening the tender. Validity beyond six months from the date of opening of the tender shall be lapsed by mutual consent.
2. The tender should accompany a compliance chart.
3. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof.
4. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the institute website. Prospective bidders are advised to occasionally to visit the website (www.iacs.res.in/tender) for any amendment.
5. Installation/Demonstration/Application training at site: Installation & user training at IACS, free of cost by the supplier.
6. Service facility: In India, preferably Kolkata, supplier should mention their details of service setup and man powers who are responsible for after sales support. Response time should be within 24 hrs.
7. The model number, make and a printed literature of the product should be submitted positively.
8. Proposed delivery schedule should be mentioned clearly.
9. Manufacturers / exclusive distributors / vendors should have history of supplying this type of instruments to this or other scientific organizations. Availability of a list in this regard would be preferred.
10. Authorized dealership certificate should be provided in case of principal manufacturing company is not quoting directly.
11. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
12. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of the technical bids will be the following working day at the appointed time.
13. In case of any dispute, the decision of IACS authority shall be final and bidding on the bidders.
14. For any clarification regarding technical specifications, information etc., please send your queries to bcpkd@iacs.res.in
15. The authority of IACS reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Acting Registrar