



Institute of Nano Science and Technology

Habitat Centre, Sector 64, Phase X, Mohali -160062, Punjab, India

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NOTICE INVITING TENDER

INST invites tender from the reputed manufacturers or their authorized dealers so as to reach this office on or before scheduled date and time for the instrument, as per specifications given in the Annexure attached to the Tender form. All offers should be made in English and should be written in both figures and words. Tender forms can be downloaded from the website (www.inst.ac.in) of the Institute.

The bidders are requested to read the tender document carefully and ensure compliance with all specifications/instructions herein. Non-compliance with specifications/instructions in this document may disqualify the bidders from the tender exercise. The Director, INST reserves the right to select the item (in single or multiple units) or to reject any quotation wholly or partly without assigning any reason. Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored and rejected.

EQUIPMENTS LIST

S. No.	Ref. No.	Item Description	Qty	Tender Submission Date and Time	Tender Opening Date and Time	Tender Fee (Non-refundable)	EMD
1	INST/12(256)/2016-Pur – EQUIP 1	Confocal Laser Scanning Super Resolution Microscope with Accessories	01 No	10/04/2017 upto 2.00PM	10/04/2017 at 3.00PM	Rs. 500/-	Rs 8,10, 000/-
2	INST/12(256)/2016-Pur – EQUIP 2	Flow Cytometer Analyzer and High Speed Cell Sorter with Accessories	01 No	10/04/2017 upto 2.00PM	10/04/2017 at 3.00PM	Rs. 500/-	Rs 4,10, 000/-

Note: The Institute shall not be responsible for any postal delay about non-receipt / non delivery of the bids or due to any reason.

TERMS AND CONDITIONS

Important Conditions of the tender to be abide by the tenderer

- Due date:** The tender has to be submitted before the due date. The offers received after the due date and time will not be considered.
- Preparation Bids:** The offer/bid should be submitted in two bid systems (i.e.) Technical bid and financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid. The Technical bid and the financial bid should be put in separate covers and sealed. Both the sealed covers should be put into a bigger cover along with letter of EMD and to be sealed. The tender number and details should be superscripted on the left side of the outer cover. The Quotations should be valid for 180 days from the date of opening of tender. The Quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to “**The Director, Institute of Nano Science and Technology, Habitat Centre, Sector 64, Phase –X, Mohali, 160062, Punjab, India**” so as to reach on or before the due date.
- Delivery of the tender:** The tender shall be sent to the below mentioned addressee either by post or by courier so as to reach our office before the due date specified in our Schedule. The offer/bid



can also be dropped in the tender box on or before the due date specified in the schedule. The tender box is kept in Foyer area of INST.

4. **Tender Preparation Expenses:** The tenderer shall solely bear all the costs associated with the preparation and submission of the bid. The Institute shall in no case be responsible or liable for such costs, regardless of the conduct or outcome of the tender process. In no case, such costs shall be reimbursed by the Institute.
5. **Opening of the tender:** The offer/bid will be opened by a committee duly constituted for this purpose. The technical bid will be opened first and it will be examined by a technical committee which will decide the suitability as per our specification and requirement. The financial offer/bid will be opened only for the offer/bid which technically meets all our requirements as per the specification. The bidders if interested may participate on the tender opening Date and Time. The bidder should produce authorization letter from their company to participate in the tender opening. Only one representative will be allowed to participate in the tender opening.
6. **Acceptance/Rejection of bids:** The Committee reserves the right to reject any or all offers without assigning any reason.
7. **Pre-qualification criteria:**
 - (i) Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) on the same and specific to the tender should be enclosed.
 - (ii) An undertaking from the OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend support for the warranty as well.
 - (iii) OEM should be internationally reputed Branded Company.
 - (iv) Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between bidder specification and supporting documents etc. may lead to rejection of the bid.
8. **Tender Fee/EMD:** Tender fee/EMD is to be obtained from the bidders except those who are registered with the Central Purchase Organisation, National Small Industries Corporation (NSIC) or the concerned Ministry or Department. The tenderer should submit Tender Fee/EMD amount as per tender ref. no. through NEFT/RTGS in INST Account. Account Details are as follows:
 - a. Name of Beneficiary: Institute of Nano Science and Technology (INST)
 - b. Account No. **2452201001102**
 - c. Name of Bank: **Canara Bank, Sector 34, Chandigarh**
 - d. IFS Code: **CNRB0002452**
 - e. MICR Code: **160015003**
 - f. Swift Code: **CNRBINBBFFC**

The details of transaction for Tender Fee/EMD viz. Name of bidder firm, Tender Description, Transaction ID/No. of Transfer, Transaction date, Amount of Transaction, Name of Bank, Address of Bank shall be furnished by the tenderer on their letterhead separately along with their tender.
9. **Refund of EMD:** The EMD will be returned to unsuccessful Tenderer only after the Tenders are finalized. In case of successful Tenderer, it will be retained till the successful and complete installation of the equipment.
10. **REASONABILITY OF PRICES :**

Please quote best minimum prices applicable for a premier Research Institution, **leaving no scope for any further negotiations on prices.** **The quoting party should give a certificate to the effect that** the quoted prices are the minimum and they have not quoted the same item on lesser rates than those being offered to INST to any other customer nor they will do so till the validity of offer or execution of the purchase order, whichever is later. We request you to fill the price reasonability certificate format in the enclosed file (Annexure "1")

The party must give details of identical or similar equipment, if any, supplied to any CSIR labs/DBT/DST Institutes during last three years along with the final price paid and Performance certificate from them.

11. **Performance Security:** The supplier shall require to submit the performance security in the form of irrevocable bank guarantee issued by any Indian Nationalized Bank for an amount which is equal to the 10% of Purchase Order value within 15 days after the final installation cum acceptance of the equipment at INST and Performance Security should be valid for a period of 60 days beyond the date of completion of warranty period of the equipment.
12. **Force Majeure:** The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
 - For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
 - If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
13. **Risk Purchase Clause:** In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause.
14. **Packing Instructions:** Each package will be marked on three sides with proper paint/indelible ink, the following:
 - i. Item Nomenclature
 - ii. Order/Contract No.
 - iii. Country of Origin of Goods
 - iv. Supplier's Name and Address
 - v. Consignee details
 - vi. Packing list reference number
15. **Delivery and Documents:**
 Delivery of the goods should be made within a maximum of 12 weeks from the date of placement of purchase order and the opening of LC. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:
 - i. 4 Copies of the Supplier invoice showing contract number, goods' description, quantity unit price, total amount;
 - ii. Acknowledgment of receipt of goods from the consignee(s) by the transporter;
 - iii. Insurance Certificate if applicable;
 - iv. Manufacturer's/Supplier's warranty certificate;
 - v. Inspection Certificate issued by the nominated inspection agency, if any, and the Supplier's factory inspection report; and
 - vi. Certificate of Origin.
 - vii. Two copies of the packing list identifying the contents of each package.
 - viii. The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents)



and, if not received, the Supplier will be responsible for any consequent expenses.

16. **Delayed delivery:** If the delivery is not made within the due date for any reason, the institute will have the right to impose penalty 0.5% per week and the maximum deduction is 10% of the contract value / price.
17. **Prices:** The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of taxes & duties shall be clearly indicated. The price should be quoted without custom duty and excise duty, since INST is exempted from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand.
In case of import supply the price should be quoted on FOB Basis. Also please indicate CIF charges separately upto New Delhi indicating the mode of shipment. INST will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
18. **Notices:** For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.
 - i. **Purchaser:** The Director,
Institute of Nano Science and Technology,
Habitat Centre, Sector – 64, Phase X, Mohali – 160064.
 - ii. **Supplier:** (To be filled in by the supplier)
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19. **Progress of Supply:** Wherever applicable, supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:
 - i. Quantity offered for inspection and date;
 - ii. Quantity accepted/rejected by inspecting agency and date;
 - iii. Quantity dispatched/delivered to consignees and date;
 - iv. Quantity where incidental services have been satisfactorily completed with date;
 - v. Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date;
 - vi. Date of completion of entire Contract including incidental services, if any; and
 - vii. Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified).
20. **Inspection and Tests:** Inspection and tests prior to shipment of Goods and at final acceptance are as follows:
 - After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications attached to the purchase order. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser shall be present at the supplier's premises during such inspection and testing if need is felt. The location where the inspection is required to be conducted should be clearly indicated. The supplier shall inform the purchaser about the site preparation, if any, needed for installation of the goods at the purchaser's site at the time of submission of order acceptance.
 - The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at purchaser's site in the presence of



supplier's representatives. The acceptance will involve trouble free operation and ascertaining conformity with the ordered specifications and quality. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified.

- In the event of the ordered item failing to pass the acceptance test, a period not exceeding one weeks will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser.
- Successful conduct and conclusion of the acceptance test for the installed goods and equipments shall also be the responsibility and at the cost of the Supplier.

21. **Resolution of Disputes:** The dispute resolution mechanism to be applied pursuant shall be as follows:

- i. In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Executive Director, Institute of Nano Science and Technology (INST) Mohali and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
- ii. In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.
- iii. The venue of the arbitration shall be the place from where the order is issued.

22. **Applicable Law:** The place of jurisdiction would be Mohali (Punjab) INDIA.

23. **Right to Use Defective Goods**

If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

24. **Supplier Integrity**

The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

25. **Training**

The Supplier is required to train the designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment.

26. **Installation & Demonstration**

The supplier is required to done the installation and demonstration of the equipment within one month of the arrival of materials at the INST site of installation, otherwise the penalty clause will be the same as per the supply of materials.

27. **Insurance:** For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. ***In case of orders placed on FOB/FCA basis, the purchaser shall arrange Insurance.***

28. **Incidental services:** The incidental services also include:

- Furnishing of 01 set of detailed operations & maintenance manual.
- Arranging the shifting/moving of the item to their location of final installation within INST premises at the cost of Supplier through their Indian representatives.

29. **Warranty:** 1. Warranty period shall be 12 months from date of installation of Goods at the INST site of installation. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. **The warranty should be comprehensive on site.**

Note: If a different period of warranty has been specified in the 'Technical Specifications of the equipment' then the period mentioned above shall stand modified to that extent.

2. The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall immediately within in 02 days arrange to repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 02 days. If the supplier having been notified fails to remedy the defects within 02 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.

3. The maintenance charges (AMC) under different schemes after the expiry of the warranty should also be mentioned. The tender must be quoted with one year on-site comprehensive warranty/guarantee which will commence from the date of the satisfactory installation /commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components. After the warranty period is over, Annual Maintenance Contract (AMC)/Comprehensive Maintenance Contract (CMC) up to next two years should be started. The AMC/CMC charges will be mentioned separately in the tender.

30. **Delivery Schedule:** The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.

31. **Governing Language**

The contract shall be written in English language. English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.

32. **Applicable Law**

The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction.



33. **Notices**

- Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX or e mail and confirmed in writing to the other party's address.
- A notice shall be effective when delivered or on the notice's effective date, whichever is later.

34. **Taxes and Duties**

Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, VAT in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order.

35. **Agency Commission:** Agency commission if any will be paid to the Indian agent in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in case of Nil commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent.

36. **Payment:**

- a. Payment will be made through irrevocable Letter of Credit (LC). Letter of Credit (LC) will be established in the favour of foreign Supplier after the submission of performance security. The letter of credit (LC) will be established on the exchange rates as applicable on the date of establishment.
 - i. For Imports, LC will be opened for 100% FOB/CIF value. 80% of the LC amount shall be released on presentation of complete and clear shipping documents and 20% of the LC amount shall be released after the installation and demonstration of the equipment at the INST site of installation in faultless working condition for period of 60 days from the date of the satisfactory installation and subject to the production of unconditional performance bank guarantee as specified in Clause 9 of tender terms and conditions.
 - ii. Indian Agency commission (IAC), if any shall be paid after satisfactory installation & commissioning of the goods at the destination at the exchange rate prevailing on the date of negotiation of LC documents, subject to DGS&D registration for restricted items.
 - iii. All the bank charges within India will be borne by the Institute and outside India will be borne by the Supplier.
- b. For Indigenous supplies, 100% payment shall be made by the Purchaser after delivery, inspection, successful installation, commissioning and acceptance of the equipment at INST in good condition and to the entire satisfaction of the Purchaser and on production of unconditional performance bank guarantee as specified in Clause 11 of tender terms and conditions. In case of indigenous supply the 100% payment will be made through bank transfer after receipt & installation of the equipment. The following bank details to be submitted along with tender:
 - Name of Beneficiary:
 - Account No.
 - Name of Bank:
 - IFS Code:
 - MICR Code:
 - Swift Code:



37. **User list:** Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided.
38. **Manuals and Drawings**
- Before the goods and equipments are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications.
 - The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract.
 - Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.
39. **Application Specialist:** The Tenderer should mention in the *Techno-Commercial bid* the availability and *names* of *Application Specialist* and *Service Engineers* in the nearest regional office.
40. **Terms of Delivery:** The item should be supplied to our destination in case of local supply. In case of import supply, the item should be shipped upto New Delhi Airport. The Installation/Commissioning should be completed as specified.
41. **Site Preparation:** The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter.
- The supplier shall visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements.
42. **Installation:** The equipment or machinery has to be installed or commissioned by the successful bidder within 30 days from the date of receipt of the item at INST. In case of any mishappening/damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. INST will not be liable to any type of losses in any form.
43. **Spare Parts:** The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:
- i. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
 - ii. In the event of termination of production of the spare parts:
 - iii. Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - iv. Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.
- Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.
44. **Defective Equipment:** If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, unmerchantable or not in accordance with the description/specification or otherwise

faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges.

45. Termination for Default

The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

- i. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser; or
 - ii. If the Supplier fails to perform any other obligation(s) under the Contract.
 - iii. If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- For the purpose of this Clause:
 - i. “**Corrupt practice**” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
 - ii. “**Fraudulent practice**” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;”
 - In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.
46. **Shifting:** After 3-4 years once our new building is ready, the supplier has to shift and reinstall the instrument free of cost.
47. **Downtime:** During the warranty period not more than 5% downtime will be permissible. For every day exceeding permissible downtime, penalty of 1/365 of the 5% FOB value will be imposed. Downtime will be counted from the date and time of the filing of complaint with in the business hours.
48. **Training of Personnel:** The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment for a minimum period of one week at the supplier’s cost.
49. **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 Mohali.
50. **Compliance certificate:** This certificate must be provided indicating conformity to the technical specifications.
51. **Acknowledgement:** It is hereby acknowledged that we have gone through all the conditions mentioned above and we agree to abide by them.

SIGNATURE OF TENDERER



ALONG WITH SEAL OF THE COMPANY WITH DATE



BID PARTICULARS

1. Name of the Supplier :
2. Address of the Supplier :
3. Availability of demonstration of equipment : Yes / No
4. Tender cost enclosed: : Yes/No if yes
5. Online Tender Fee/EMD submission information enclosed : Yes / No if Yes
Transaction ID/No. of Transfer_____
- Transaction date: _____
- Amount of Transaction_____
- Name of Bank_____
- Address of Bank_____
6. Name and address of the Officer/contact person to whom all references shall be made regarding this tender enquiry
Name:
Address:
Ph:
Fax:
Mobile:
Email:
Web:

Compliance statement for the tender specifications

Tender Ref No.: _____

S.No.	Check list of documents/Undertakings	Yes/No	Remarks (give explanation if the answer is No)
1.	Is EMD details attached? (if applicable)		
2.	Is the bidder original equipment manufacturer (OEM)/authorised dealer?		
3.	If authorised dealer, recent dated certificate to this effect from OEM, attached or not?		
4.	Undertaking from OEM regarding technical support & extended warranty period		
5.	Validity of 180 days or not?		
6.	Price Reasonability Certificate enclosed as per format??		
7.	Undertaking from bidder regarding acceptance of tender terms & conditions		
8.	Whether list of reputed users (along with telephone numbers of contact persons) for the past three years specific to the instrument attached?		
9.	Does the instrument comply with all the specifications detailed? Attach a separate sheet showing compliance with the specifications and explanations thereto if the equipment varies from the requested specifications.		
10.	Whether free Installation, Commissioning and Application Training offered?		
11.	Whether comprehensive onsite warranty offered?		
12.	Whether Annual maintenance after expiry of comprehensive onsite warranty quoted separately?		
13.	Whether free of cost shifting of instrument from transit campus to main campus offered?		



Annexure – 1

PRICE REASONABILITY CERTIFICATE (to be submitted in financial bid envelope)

This is to certify that we have offered the maximum possible discount to you in our Quotation No. _____ dated _____ for (Value Rs.) _____.

We would like to certify that the quoted price are the minimum and we have not quoted the same item on lesser rates than those being offered to INST to any other customer nor we will do so till the validity of offer or execution of purchase order, whichever is later.

Seal and Signature of the tenderer



TECHNICAL SPECIFICATION FOR
CONFOCAL LASER SCANNING SUPER RESOLUTION MICROSCOPE
FOR FIXED AND LIVE CELL IMAGING

Tender is invited from the qualified vendors for the supply of fully motorised inverted microscope based High Resolution and Sensitive spectral confocal workstation. The system should be of latest state of the art technology capable of high sensitive spectral confocal imaging of fixed & Live Cell samples. The system should include multichannel fluorescence imaging with Z-stack, time-lapse including colocalization, FRET and FRAP analysis. The system should be capable of carrying out Multi-photon imaging with IR femtopulsed Laser.

The system should also have provisions to be upgraded to the following modules on site

FCS/FCCS measurements in cells as well as solutions for Biophysical kinetic/diffusion experiments.

FLIM and FRET based studies at single molecule level.

The details of the required specifications are given below.

The following should be the minimum required features of the

A. Motorized Inverted Fluorescence Research Microscope

1. Modular Microscope stand with multiple ports for onsite upgradation of microscope configuration to suit various imaging applications.
2. System should have Bright field, Fluorescence and DIC, imaging capability.
3. Programmable motorized X-Y scanning stage with smallest increment of 0.2 μm or better, universal sample holders for slides, 35/60 mm Petri dish, 96 well plates, labtek chambers with multipoint, tile and mosaic imaging software.
4. System should include a minimum of 12v/100w halogen illumination source for Bright field and DIC imaging. Two or more extra lamps should also be supplied.
5. Fully motorised long working distance universal system condenser with 6/7 position dedicated slots for BF/DF/Ph/DIC optics. It should include a motorised aperture and polariser for fully automated DIC imaging.
6. System should have motorized beam path selection for visual and confocal imaging
7. System should have motorized Peizo Z-axis focus drive. The system should have X-Y piezo drive.
8. High precision built-in Z-focus drive with minimum step resolution of 15 nm or better.
9. System should have online display screen on microscope body for the motorised functions to ease the clarity of operations.
10. System should have 6 position or higher motorized FL filter wheel, 6 position or higher motorized DIC nosepiece.
11. Motorised XY scanning stage for the movement of specimen using ergo joy-stick as well as total control by the software.

High resolution plan apochromat confocal objectives 4x, 10x, 20x, 40x (N.A 0.95), 60x/63x Oil (N.A 1.40) and 60x/63x water (N.A 1.20 or better) and 100x oil (N.A 1.40) along with DIC accessories with analyzer and polarizer attachment, sliders and modules

- for the respective objectives. Live cell specific 20x/0.8 objective with oil, water and glycerol immersion. DIC Optics for all the objectives should be included.
12. Suitable dark field module in the condenser (N.A <1.0) for camera based dark field imaging with suitable objectives.
 13. A digital peltier cooled sCMOS/CCD camera system with quantum efficiency $\geq 75\%$, ≥ 2.5 megapixel with pixel size $4\mu\text{m}^2$ or better and ≥ 35 frames per second or better at full resolution, Necessary accessories should be included. Camera should be seamlessly controlled by confocal microscopy software.
 14. System should have a minimum of 120w/130w metal halide or mercury lamp with 2000 hours of lamp life for fluorescence observation with automatic shutter having DC (direct current) to provide constant and non-fluctuating light. Bandpass fluorescent filters for CFP, YFP, DAPI, GFP, FITC, Cy3, Cy5, rhodamine, ATTO 550 and ATTO 590 with automatic identification facility. Most importantly the microscope should be capable of conducting long time live cell imaging applications without focus drift. Additional two 120/130W metal halide or mercury lamps for fluorescence observation should be offered.
 15. System should be equipped with Onstage CO₂, O₂, temperature and humidity control incubator for live cell imaging for long hours (72 hours or more), which can hold multiple petriplates & multiwell plates of standard size and dimension. Automatic, software controlled incubation system, active CO₂ and temperature control with sensors, capable of operation with 100% CO₂ gas supply. Chambers should be compatible with operation with the piezo/galvo stage.
 16. DIC attachment motorized for 10x to 100x objectives with analyzer and polarizer attachment, sliders and modules for the respective objectives
 17. The manufacturer/supplier should provide a suitable imported active anti-vibration and clean table with HEPA filters along with the system.

B. Confocal scan head and detection system

1. High transmission efficiency optics for confocal and two photon imaging system.
2. Scan head with dual imaging capability with conventional fluorescence imaging (filter/prism based) and real time Confocal imaging
3. Completely motorized Point scanning laser based confocal detection unit for four spectral channels with Spectral PMT and HyD/GaAsP Spectral detectors [at least a minimum of 2GaAsP (The detectors should have a QE of 45% or more at 500 to 550 nm) and 2 PMT]. Confocal with spectral detection, should include simultaneous imaging and separation of at least 4 fluorophores or better based on above detectors and sequential imaging. System should be able to perform spectral unmixing. Scanner unit should have laser ports (minimum 3 or more) for Vis, UV and IR lasers. Spectral detectors should have minimum detection range of 10 nm or above.
4. Scan Head should be equipped with NLO/Multiphoton Optics.
5. Computer controlled continuously variable single pinhole system, which should cover wider area for higher brightness and without affecting sectioning performance.
6. High speed fiber-optic communication data transfer system which should be able to transfer up to 4 or better giga bytes per second or more to avoid any data loss.
7. High speed laser scanning system with the speed of 10 fps or better @ 512x 512. System should be able to provide maximum speed of 200fps or better @ 512x32.

8. System should have capability of having mode for Photoactivation & Imaging experiments & FRAP.
9. System should possess efficient dichroic mirror with high transmission efficiency.
10. Scan resolution should be at least 4Kx4K or higher for all the channels and should be freely selectable scan frame resolution to suit experimental needs. The scan field of at least 18 mm or higher.
11. Scan zoom of 1-40X or more continuous variable (with minimum increments of 0.1 X). Multi step scanning zoom preferred.
12. Transmitted light detector to be provided for capturing bright field and DIC images.
13. Scanner should have free scan flexibility with ROI scan to suit various specimen geometry scan requirements. It should have minimum 180deg scan rotation.
14. Scanner should be capable of Scanning Modes of PT (point over time), XT, XZ, XY, XZT, XYT, XYZ, XYλ, XYZT, XYλT, XYλZ, XYλZT.
15. Scan head should have motorised computer controlled spectral scanning capability for λ scan stacking with a minimum spectral scan resolution of 5nm or better. Systems with higher spectral scan resolution shall be preferred.
16. The system should include a transmitted light PMT detector for DIC imaging.
17. Dedicated attachment for converting Inverted Microscope to Upright Microscope for Deep Tissue Imaging applications with depth imaging up to 300 microns or better deep in the sample depending on transparency of samples with a dedicated Water Dipping Long working distance objective of 20X/1.0 Water or better.

C. Laser module with AOTF control:

All lasers should be pre aligned having AOTF control with following lines:

- 405 nm with 30 mW or better power
- 445/458 nm 25 mW or better
- 488 nm 25 mW or better
- 514/532 nm 25 mW or better
- 561 nm 15 mW or better
- 594 nm 2 mW or better
- 647/640/633 nm 5/10 mW or better

*All the lasers should have minimum working of 18,000 hours of operation irrespective of system warranty. Systems that are configured with solid state and gas laser combinations should cover complete 20,000 hours operation including free replacement warranty.

D. Computer Workstation (To be supplied from principal company)

1. Latest 64 bit control computer with Intel Xeon 6 Core processor, 2.4GHz or better with at least 4 MB SLC, 1066 MHz FSB, RAM 8 GB DDR3 (upgradable to 16 GB or more).
2. Hard Disc: 2X250 GB SATA II, 1 TB Back-up HDD, DVD super multi SATA R/RW/DL.
3. Graphics: ATi Fire GL V5200 1024 MB DH DVI or higher.
4. 6 or more USB (USB 3.0 and 2.0), Fire wire 1394, Gigabit Ethernet, Windows 10/Windows 7 Professional.
5. 30inch LCD TFT wide aspect true color monitor 2 no. for connection to workstation to enable 2560 x 1600 pixel resolution.
6. A suitable online UPS to support the complete system (not less than 10 KVA).

7. Offline line workstation with license with all features as in the main system should be included.

E. Control and Analysis Software

1. It should be capable of controlling all motorized functions of microscope, scan head, LASERS, AOTF including imaging acquisition and processing. Same software should be capable to control Super-Resolution microscope and confocal system.
2. Saving of all instrument parameters along with the image for repeatable/reproducible imaging
3. Frame/line/lambda capturing, Z-Stack, Time series imaging capabilities
4. Multipoint Time Lapse Imaging.
5. FRET/FRAP capability. Suitable software should be provided for data analysis.
6. The FRAP Software should be capable of imaging and data analysis using the acquired time series data to understand diffusion, half life time, dissociation constants for proteins in bleached as well control region. Also the software should be capable of analyzing original FRAP curve and fitted curve according to the parameters provided by the original curve. The FRET software should be capable of imaging and data analysis based on acceptor photo bleaching, sensitized emissions, Spectral FRET methods. The FRET software on the Confocal should be capable of providing Pixel wise colour-coded FRET efficiency image, Froster distance image and delta donor (in case of AP method) image along with the corresponding numeric values.
7. Colocalization with histogram analysis and volume rendering with intensity profiles for quantification.
8. Real time ratio-display
9. 2 D and 3D image deconvolution
10. Diverse measurement and statistical processing
11. Offline software with all features with offline PC system.
12. Image editing, processing and analysis functions.

F. Multiphoton Attachment with femto pulsed IR Laser

Multiphoton attachment for deep Tissue imaging with fully integrated and software controlled femtopulsed **Ti-Sapphire laser system** for Multiphoton imaging with the following specs should be offered.

Tuning range: 690 to 1040 nm.

Pulse width: < 100 femto seconds or better.

Average power: > 2.5 watt @ 800nm or higher.

Repetition rate: 80 MHz or better.

All direct coupling optics of the laser to the scan head as well microscope should be quoted. Laser attenuation device should be through AOM. Also quote for suitable NDD detectors for better sensitivity deep tissue imaging using IR laser. The detectors should have user selectable and changeable filter combination for optimizing to various fluorochromes under observation. The detectors should have filter combinations for blue/green, green/red, CFP/YFP pairs.

G. Super resolution techniques: The system should have a hardware based super resolution attachment capable of acquiring images with optical resolution: XY resolution

150nm or better & Z resolution 400 nm or better in real time. Depth of imaging should be more than 50 microns. All the samples with fluorophores used for confocal system should be compatible for high resolution imaging also. The super resolution should be capable of fixed sample imaging as well as live cell imaging with frame rates of 4 fps @ 512 X 512.

H. Installation and conditions

1. The part number of each part should be indicated along with the page number in the catalog. The bidders should clearly specify the after sales/service/application support capabilities.
2. Provide all information as regards to pre-installation requirements (i.e. room, environment) for system installation.
3. Online UPS for the complete system including lasers should be included in the supply.
4. Provide a detailed list of users of the system in India/abroad with contact details.
5. Free of cost at the site training for minimum 10 working days for a group of faculty members, students and staff from operating the instrument, data collection and detail data analysis at our laboratory
6. Future support as and when required must be provided at our institute.
7. Demonstration of the claimed parameters like resolution etc should be done on a standard sample.
8. All the necessary items required to install the above system, other than power and water supply, should be included in the offer. Supply of all the relevant manuals and documents in printed format.
9. Dedicated support staff will be needed for at least 1 year and the staff should be available for multiple training during the period of 1 year.
10. Reinstallation in INST new campus should be free of charge.
11. The supplier should mention the after sales/service/application support capabilities.
12. All specifications to be supported by documentary proof from principal.
13. The principal has to demonstrate and prove experimentally the technical specifications asked.

I. Training:

Faculty and all Ph.D students should be trained properly with proper demonstration with a minimum of one month or more for the applications and use of software and instrument.

J. Warranty:

Comprehensive on-site warranty for the total setup for 3 years after completion of standard two year warranty including:



- (a) All parts including accessories and labor.
 - (b) Free maintenance and services, in case of downtime, system to be attended within hours of complaint.
 - (c) Regular upgrades to all softwares during the entire warranty period.
 - (d) Vendor should provide insurance upto the delivery point (on-site not up to the nearest international airport) and until the time of installation.
 - (e) UPS quoted should be warranted for a period of 3 years from the date of installation.
 - (f) A warranty of 5 years should be provided on the lasers.
- A separate AMC for 3 years (instrument) after warranty period should be quoted as optional.

K. General and important

- a) Vendor should have at least 3 installations in India for the proposed system.
- b) Any additional advanced features of the equipment and accessories can be quoted with full details and specifications as optional.
- c) All essential and recommended spares should be informed and should be quoted.

Note- Bidders must mention clearly the Room conditions required to install the above set-up.



TECHNICAL SPECIFICATION FOR

FLOW CYTOMETER ANALYZER AND HIGH SPEED CELL SORTER SPECIFICATIONS

- 1 High End flow cytometer cell sorter required with 5 lasers: Blue laser, Red laser, Violet laser, Yellow green laser and True UV Laser with minimum lifespan of 3000 hr or more of lasers.
- 2 The system should be based on jet-in air/stream-in air with automated and easy alignment or cuvette based fixed aligned cell sorting.
- 3 Each laser must have strictly its own individual beam spot/pin hole for simultaneous excitation and there should not be any shared lasers or co-linear arrangement.
- 4 The system must have the capability of simultaneous measurement of 12 fluorescent colors and 14 parameters, which could be upgraded later to add more colors & lasers.
- 5 System should have an option of fully compatible & integrated Biosafety hood from the source (Class II Type A2). Essentially to be quoted as an option.
- 6 The system must have fixed pre-aligned lasers or minimal/automated laser alignment.
- 7 System must have minimum four or more beam spots without any need of customization with the base instrument.
- 8 The quoted system must not be open architecture & all electronics, optical fibers, lasers should be cabinet enclosed.
- 9 The system should have provision to accommodate different nozzle sizes: 70 microns, 85 microns, 100 microns and 130 microns. Insertion and removal of nozzles should be possible without realigning the optics or the fluidics of the instrument.
- 10 The system should have automation for drop delay determination while sorting. System must be equipped with all accessories required for calibration, including drop delay measurement.
- 11 The system should have vibration free fluidics cart which includes sheath, waste, and cleaning containers.
- 12 The system should be capable of sample input from 5 ml and 15 ml tubes. Sample handling features like automatic agitation, temperature control, automatic cleaning, bubble detection etc. should be part of the system. The system must be able to sort cells onto tubes or multi-well (6, 24, 48, 96, 384 etc.) plates.
- 13 System should come with temperature control option for sample inputs (4°C, 30°C, 37°C & 42 °C) and for sort tubes and plates by recirculating water bath.
- 14 Aerosol Management option should be provided along with the system with 0.01 micron ultra-low penetrating air filters to trap aerosol particles.
- 15 The system must be able to acquire at least 50,000 -70,000 events/second.
- 16 The system must have built-in sorter capable of sorting 4 ways with speeds up to 70,000 events/ second.
- 17 The system must be able to provide various sheath pressure options upto 75 psi.



- 18 The system must have an option of automatic cell deposition unit which allows slide and plate sorting.
- 19 Purity of sorted cells should be 98% or more at all sorting speeds.
- 20 Viability & yield must be more than 90% in routine applications.
- 21 System must have a bubble detector.
- 22 Data Management system: Latest PC Workstation from source only (NO LOCAL SUPPLY), with compatible monitors (2X19”).
- 23 System must be quoted with all required acquisition & analysis software.
- 24 The company must offer the latest and updated model and should have a dedicated training center with documented proof of conducting regular training for research applications.
- 25 User lists & performance certificates must be quoted preferably from Govt. & related institution/University of repute (Minimum 3).
- 26 Starter Kits (Tubes, Sheath Fluid, QC beads, calibration bead for 100 tests), Online Compatible Branded UPS & Color Laser printer to be quoted.
- 27 Five years warranty with one manpower technical support for one year.