

INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036

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Date: 22.05.2024

The Senior Manager (Project Purchase)

Global Tender Reference No: GTB24/MADU/2024/04/INFLUMICRO

GEM NAR ID: GEM/GARPTS/15052024/N38PXAULM0C2 Due Date/Time: 20.06.2024 @ 3:00 PM

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, digitally signed online bids are invited in two bid system from Class-I & Class II and Non local suppliers, for the supply of: "INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA" Conforming to the specifications given in Annexure -A.

Tender Documents may be downloaded from Central Public Procurement Portal https://etenders.gov.in/eprocure/app. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website https://etenders.gov.in/eprocure/app. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at "Help for Vendors". [Special Instructions to the Vendors / Bidders for the e-submission of the bids online through this eProcurement Portal"]

Bidders can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT' Madras. Thereafter, click on "GO" button to view all IIT Madras tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website https://etenders.gov.in/eprocure/app as per the schedule attached.

1)	Pre-bid Meeting	:	If required will be intimated
	Details		
•	TOOR TI		
2)	ICSR Vendor	:	<u>Vendor registration</u> : Vendor registration with IC&SR (IITM) is mandatory for
	Registration		bidders to participate in tenders.
			** For Vendor Registration & Guidelines, Please follow the website:
			https://icandsr.iitm.ac.in/vendorportal;
			Helpdesk: vendorhelpdesk@icsrpis.iitm.ac.in
			1 - 1

<u>No manual bids will be accepted.</u> All tender documents including Technical and Financial bids should be submitted in the E-procurement portal.

Last date for receipt of tender	:	20.06.2024 @ 3:00 PM
Date & time of opening of tender	:	21.06.2024 @ 3:00 PM

3. Instructions to the Bidder:

A)	Searching for tender documents	:	• There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
			 Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective "My Tender" folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document.
			• The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
B)	Assistance to bidders	:	 Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is [0120-4200462, 0120-4001002, 0120-4001005]
C)	Enrollment Process	:	REGISTRATION
	to Bidders		 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal URL:https://etenders.gov.in/eprocure/app by clicking on "Online Bidder Enrollment". Enrollment on the CPP Portal is free of charge. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse. Bidder then may log in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken. Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name

			is a prerequisite for registration and participating in the bid submission activities through https://etenders.gov.in/eprocure/app • Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://etenders.gov.in/eprocure/app under the "Information about DSC".				
D)	D) Preparation of bids : Bidder should take into account any corrigendum publi tender document before submitting their bids.						
	 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid. 						
			 Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender document / schedule an generally shall be in PDF / XLS formats as the case may be. Bid documents may be scanned with 100 dpi with black and whit option. 				
			• To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GSTIN Details, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.				
E)	Submission of bids	:	Bidder should log into the site well in advance for bid submission so that he/she can upload the bid in time i.e. on or before the bid submission date and time. Bidder will be responsible for any delay due to other issues.				
		The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.					
			Bidder has to select the bid security declaration. Otherwise, the tender will be summarily rejected.				
			 A standard BOQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the detail with their respective financial quotes and other details (such as name of the bidder). If the BOQ file is found to be modified by the bidder, the bid will be rejected. 				
			 The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission. 				

			• The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
			• The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
			• Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
			 Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet. More information useful for submitting online bids on the CPP Portal may be obtained at: https://etenders.gov.in/eprocure/app. All tender documents including pre-qualification bid, Technical Bid &Financial Bid should be submitted separately in online CPP portal as per the specified format only. Right is reserved to ignore any tender which fails to comply with the above instructions. No manual bid submission will be entertained.
F)	Marking on Technical Bid		• The bidder eligibility criteria, technical specification and supply of item for this tender is given in Annexure A.
			• The Bidders shall go through the specification and submit the technical bid.
			• The Technical bid should be submitted in the proforma as per Annexure-B in pdf format only through online (e-tender). No manual submission of bid will be entertained.
			• The technical bid should have a page-wise heading as "Technical Bid" and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents.
			• The technical bid should consist of bidder eligibility criteria details and all technical details along with catalogue/ pamphlet which will give a detailed description of product with technical data sheet so that technical compliance can be verified.
G)	Marking on Price Bid		• Financial bid (BoQ) should be submitted in the prescribed proforma format as per Annexure-C in xls format through e-tender only. No manual or other form of submission of Financial Bid will be entertained

4) **Preparation of Tender**: The bidders should submit the bids in two bid system as detailed below.

Bid I Technical Bid

Technical Bid and Annexures dully filled in, signed, and stamped on each page by the tenderer/ authorized representative of the tenderer.

The technical bid should consist of bidder eligibility criteria and technical specification compliance sheet as per Annexure-B.

Bid II Price Bid

The price bid should be submitted in the Tabular format (BoQ) as per the proforma (Annexure C) uploaded in the e-Tender web site. The Quoted price should be for supply and installation of the item and inclusive of all cost and statutory levies at IIT Madras.

5) Price:

- a) The price should be quoted in net per unit (after breakup) and must include all packing, transit insurance and delivery charges to the **Department of Bio Technology, IIT Madras.**
- **b**) The offer/bid should be exclusive of taxes and duties. The percentage of tax & duties should be clearly indicated separately.
- c) In the case of import supply, the price should be quoted without custom duty. IIT Madras is eligible for concessional custom duty (not exceeding 5.5%) and the price should be quoted with detailed break up on EX-WORKS and CIP (stating the Cost, Insurance, Freight separately and other charges in detail etc.,) and indicating the mode of shipment. IIT M ICSR will provide all necessary documents for customs clearance of consignment including Customs Duty Exemption certificate etc.
- d) The rate quoted shall be all inclusive of all taxes and no extra payment will be made other than statutory revisions as per the terms and conditions stipulated in this contract document.
- e) The offer/bids should be submitted through online only through Single Stage Two Envelops System (Two Bid System). i.e. Technical Bid and Financial Bid separately.

6) Agency Commission:

Agency commission, if any, will be paid to the Indian agents in rupees after receipt of the equipment and its satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in the tender document even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The Foreign Principal should indicate the percentage of payment and it should be included in the basic price quoted originally (if any).

7) Tenderer shall submit along with this tender:

- (i) Proof of having ISO or other equivalent certification given by appropriate authorities.
- (ii) Name and full address of the Banker and their swift code and PAN No. and GSTIN number.
- (iii) GST registration proof showing registration number, area of registration etc.
- (iv) All of your future correspondences including Invoices should bear the GST No. and Area Code.

8) Terms of Delivery:

Import Purchase – Responsibility of carriage of goods will be governed by Incoterms.

Domestic Purchase –Supplier will be fully responsible for the safe carriage, Installation/Commissioning of goods up to the **Department of Bio Technology, IIT Madras**, or named place as per PO, Insurance coverage will be in the scope of the supplier.

The tenderer should indicate clearly the time required for delivery of the item (subject to the approval of the Exclusive Purchase Committee-IIT-Madras). 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.

In the event of **delay or non-supply of materials/execution of Contract** beyond the date of delivery/completion of job. The penalty will be levied @1% per week of delay subject to a max of 10% of the value of purchase order and if the delay is more than accepted time frame by IIT M, the PO would be partially or fully cancelled and liquidated damages will be enforced accordingly.

9) Period for which the offer will remain open:

The Tender shall remain open for acceptance/validity till: 120 days from the date of opening of the tender. However, the day up to which the offer is to remain open being declared closed holiday for the Indian Institute of Technology Madras, the offer shall remain open for acceptance till the next working day.

10) EMD:

The EMD of **Rs.1,00,000** to be transferred to the account details mentioned in Annexure I and proof should be enclosed in the Technical Bid. Any offer not accompanied with the EMD shall be rejected summarily as non-responsive.

As per rule no. 5.1.4 (vi) of the Manual of Procurement of Goods, no bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity. Withdrawal of a bid during this period will result in forfeiture of the bidder's bid security (EMD) and other sanctions.

The Institute shall not be liable for payment of any interest on EMD.

As per the Public Procurement Policy for MSEs, Order 2012 dated 25.03.2022, EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by the Department of Micro, Small and Medium Enterprises (MSME) and Startups as recognized by the Department of Industrial Policy & Dipperson (DIPP). (MSE/MSME/DIPP PROOF should be enclosed in the cover containing the technical bid).

Any vendor furnishing MSME (Trading) certificate is not eligible for EMD Exemption and as well not entitled for any relaxation in the tender conditions.

11) Performance Security: -

The successful bidder should submit Performance Security for an amount of 5% (As per Dept. of Expenditure OM No. F.1/2/2023-PPD dated 03.04.2023) of the basic invoice value of the contract/supply. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt in the name of "The Registrar, IIT Madras" from any scheduled commercial bank or Bank Guarantee from any scheduled commercial bank in India. The performance security should be furnished within 14 days from the date of the purchase order.

Performance Security in the form of Bank Guarantee: - In case the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed directly to IIT Madras from the Bank.

The Bank Guarantee should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

12)	Indian agent: If an Indian agent is involved, the following documents must be enclosed.
14)	(i) Foreign Principal's pro-forma invoice indicating the commission payable to the Indian Agent
	and nature of after-sales service to be rendered by the Indian Agent.
	(ii) A Copy of the agency agreement with the foreign principal and the precise relationship between them.
	(iii) For the same tender, either the OEM or the authorized dealer/service provider can only quote.
	But both of them cannot quote separately for the same tender.
13)	The offers/bids should be submitted only for an item/Equipment of the exact standard that is acceptable to IIT Madras without Prejudice. The details of a list of customers in India for whom the item is already supplied with must accompany the quotations. Quotations for a prototype machine will not be accepted
14)	Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid.
15)	Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the Principal/OEM.
16)	Risk Purchase Clause
	In the 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 other sources on the total risk of the supplier under risk purchase clause.
17)	Payment:
	 (i) As per GFR 2017 Terms: 90% Payment after supply and 10% after installation are agreed to wherever the installation is involved. In the case of import supplies, the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done) (ii) Advance Payment: No advance payment is generally admissible. In case a specific
	percentage of advance payment (not more than 30%) is required, the Vendor has to submit a Bank Guarantee from a scheduled commercial bank in India equivalent to the amount of advance payment.
18)	On-site Installation:
	The Equipment/Item or Machinery has to be installed or commissioned by the successful bidder within the number of days (as prescribed by PI) from the date of receipt of the item at the site of IIT Madras.
19)	Warranty:
	The offer should clearly specify the warranty period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately (For more details please refer our Technical Specifications).
	** Note: PO which involves Installation, Warranty shall be applicable from the date of Installation.
20)	Acceptance and Rejection:
	Failure to comply with any of the instructions stated in this document or offering unsatisfactory explanations for non-compliance will likely to lead to rejection of offers.
	I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

21) Debarment from Bidding:

In case of breach of Terms & Conditions, Bidder may be suspended from being eligible for bidding in any contract with the IIT Madras up to 2 Years [as per Rule 151(iii) of GFR] from the date as fixed by IIT Madras.

22) Disputes and Jurisdiction:

Settlement of Disputes: Any dispute, controversy or claim arising out of or in connection with this PO including any question regarding its existence, validity, breach or termination, shall in the first instance be attempted to be resolved amicably by both the Parties. If attempts for such amicable resolution fails or no decision is reached within 30 days whichever is earlier, then such disputes shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996. Unless the Parties agree on a sole arbitrator, within 30 days from the receipt of a written request by one Party from the other Party to so agree, the arbitral panel shall comprise of three arbitrators. In that event, the supplier will nominate one arbitrator and the Project Coordinator of IITM shall nominate on arbitrator. The Dean IC&SR will nominate the Presiding Arbitrator of the arbitral tribunal. The arbitration proceeding shall be carried out in English language. The cost of arbitration and fees of the arbitrator(s) shall be shared equally by the Parties. The seat of arbitration shall be at IC&SR IIT Madras, Chennai.

- a. **The Applicable Law:** The Purchase Order shall be construed, interpreted and governed by the Laws of India. Court at Chennai shall have exclusive jurisdiction subject to the arbitration clause.
- b. Any legal disputes arising out of any breach of contact pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.

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.

24) Eligibility Criteria:

- As per the Government of India Order, only "Class I & II" and "Non Local suppliers" can also participate in this tender.
- Bidder should confirm their acceptance that they comply with the provisions with report to "Guidelines for eligibility of a bidder from a country which shares a land border with India as detailed at Annexure-E. The bidder should submit Certificate for "Bidder from/
 Not from Country sharing Land border with India & Registration of Bidder with Competent Authority" as per Order of DoE F.No.6/18/2019-PPD dated 23.07.2020 and No.F.7/10/2021-PPD(1) dated 23.02.2023.
- > Selection of Successful bidder and Award of Order Evaluation and Award of contract will be done as per GOI MOCI Order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P- 45021/102/2019-BE-II-Part(1) (E-50310) Dt.4th March 2021 and any subsequent Modifications/Amendments and latest orders if any issued by Govt. of India.
- Any vendor furnishing MSME (Trading) certificate is not eligible for EMD Exemption and as well not entitled for any relaxation in the tender conditions.

- Preference to "class I Local Suppliers": preference will be given to "class 1 local suppliers" (subject to class -I local supplier's quoted price falling within the margin of purchase preference) as per public procurement (preference to make in India) order 2017 .O.M No P- 45021/2/2017 pp(BE 11) dt 04/06/2020 subject to the conditions that the "class 1 Local Supplier" should agree to supply goods / provide service at L1 rate and furnish a certificate with the technical bid document that the goods/service provided by them consists local content equal to or more than 50%.(certificate from Chartered Accountant in case value of contract exceeds Rs 10 crore).
 - ➤ 'Class I local supplier' means a supplier or service provider whose goods, services or works offered for procurement consists of local content equal to or more than 50% as defined under the above said order. Declaration to be provided as per Annexure-D per item/service/work.
 - > 'Class II local supplier' means a supplier or service provider whose goods, services or works offered for procurement consists of local content equal to 20% but less than 50% as defined under the above said order. Declaration to be provided as per Annexure-D per item/service/work.
 - ➤ 'Non local supplier' means a supplier or service provider whose goods, services or works offered for procurement consists of local content less than 20% as defined under the above said order.
 - ➤ 'Margin of purchase preference': The margin of purchase preference shall be 20%. The Definition of the margin of purchase preference is defined in the Govt. of India Order No: P-45021/12/2017-PP (BE-II) Dt.4th June, 2020) Order 2017. As per the Government of India Order "Margin of Purchase Preference" means the maximum extent to which the price quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase preference.

**Note: Local content percentage to be calculated in accordance with the definition provided at clause 2 of revised public procurement preference to Make in India Policy vide GoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019and 04.06.2020) MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P-45021/102/2019-BE-II-Part(1) (E-50310) Dt.4th March 2021

Evaluation of Bids

27)

28)

Bid evaluation will take place in two stages.

Stage I Technical Bid evaluation

All bidders who have fully complied with bidder eligibility criteria I, II and technical evaluation (Annexure A) will only be considered for opening of price bid.

Stage II: Price Bid Evaluation

The price bid evaluation will be based on price quoted by the bidder. The rate quoted for **INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA** unit will alone be taken up for arrival of Lowest Bid (L1) value.

Bid prices expressed in different currencies shall be converted to INR as per the prevailing **Central Board of Indirect Taxes & Customs(CBIC)** exchange rate on the date of opening of price bid.

In accordance to the Rule 173 of GFR,2017 and relevant provisions thereof in Procurement Manuals, 2022, IC&SR, IITM reserves the right to carry out the negotiation process through its purchase/technical committee with L1/H1 (as applicable) vendor to ensure price reasonability before final recommendation to the Competent Authority. The negotiation details, if any, on case to case basis shall be recorded in minutes of meetings suitably for records.

Selection of successful bidder and Award of Order

The order will be directly awarded to the technically qualified bidder as per the condition in para 3A of DIPP, MoCI Order No. 45021/2/2017-PP (BE II) dated 16th September 2020.

29)	All information including selection and rejection of technical or financial bids of the prospective bidders
2)	will be communicated through e-Tender portal. In terms of Rule 173(iv) of General Financial Rule 2017,
	the bidder shall be at liberty to question the bidding conditions, bidding process and/or rejection of bids.
30)	The tenderer shall certify that the tender document submitted by him / her are of the same replica of the
30)	tender document as published by IIT Madras and no corrections, additions and alterations made to the
	same. If any deviation found in the same at any stage and date, the bid / contract will be rejected /
	terminated and actions will be initiated as per the terms and conditions of the contract.
31)	Clarification to the queries and doubts raised by the bidders will be issued as a corrigendum/addendum,
31)	if required in the e-tenders portal.
32)	In the e-tender process, participation of bidders after the due date is not possible. The eligible bidders can
34)	login to the e-Procurement portal to ascertain the tender status.

Tender No. GTB24/MADU/2024/04/INFLUMICRO

Item Name: INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA

ACKNOWLEDGEMENT

It is hereby acknowledged that I/We have gone through all the points listed under "Specification, Guidelines, Terms and Conditions" of tender document. I/We totally understand the terms and conditions and agree to abide by the same.

SIGNATURE OF TENDERER ALONG WITH SEAL OF THE COMPANY WITH DATE

Bidder Eligibility Criteria and Technical Specification for INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA

Tender No. GTB24/MADU/2024/04/INFLUMICRO

Bidder Eligibility Criteria – I (Public Procurement – Preference to Make in India)

Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE-II) dated 16th September 2020 and other subsequent orders issued therein.

Participation of Non-local supplier may be subject to the limitation provided in para 4 (Exemption of Small Purchases) of DPIIT circular No. P-45021/2/2017-PP(BE-II) Dt 16.Sep.2020 (ANNEXURE – D)

Bidder Eligibility Criteria – II

- 1. Vendor Registration ID/Proof.
- 2. Land Border Certificate (ANNEXURE E)
- 3. **OEM Certificate Form**-The Participating Bidder's firm shall be the Original Equipment Manufacturer (OEM) or OEM Certified authorized firm (**ANNEXURE F**)
- 4. Non- Debarment Declaration (ANNEXURE H)
- 5. Mandate Form (ANNEXURE J)
- 6. EMD as per Tender to be remitted in the Account number as given in the **ANNEXURE I** or EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) and Startups as recognized by Department of Industrial Policy & Promotion (DIPP). (MSE/MSME/DIPP PROOF should be enclosed in the cover containing technical bid).
- 7. Any vendor furnishing MSME (Trading) certificate is not eligible for EMD Exemption and as well not entitled for any relaxation in the tender conditions.
- 8. Vendor should have a good track record of selling similar systems with at least 5 installations across India especially in centrally funded technical institutes, Central and State Universities and Central Research laboratories
- 9. Vendors should provide users list and contact details.
- 10. Vendor should submit at least 3 performance certificates/service reports/installation certificates/installation reports for similar systems preferably from TN.
- 11. Vendor should have a local presence with good track record of after-sales maintenance support in Chennai.
- 12. Purchase committee reserves the right to reject bids based on adverse feedbacks received from past users.
- 13. The bidder should be able to demonstrate the technical capability of any of the quoted items when asked by the Exclusive Purchase Committee (EPC).

III. Technical Specification for INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH

S. No.	Technical Specifications				
1.	Microscope frame:				
	• Fully motorized active multi-port (stratum structure/double deck/infinity port or equivalent All) inverted fluorescence microscope with Bright Field (BF), Differential Interference contrast (DIC), Phase Contrast (PH), and Fluorescence imaging capabilities.				
	The system should have an inbuilt free second deck/stratum with infinity port as part of the				

	system for future customization.
	Motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 nm z-step
	size.
	Digital controller for microscope system.
	All the motorised function of the microscope including XY stage and drift compensation
	device should be controlled by remote touch panel/tab/joy stick & computer for vibration
	free imaging and equivalent hardware for seamless manoeuvring of samples in all
	directions.
	 Equipped with side port adapters, side port caps, covers for blocking the stray light.
	Minimum light distribution: 100% both side ports, 100% eye port
	Tool set necessary for manual adjustments and replacement of accessories
	Water-proof and static-proof microscope cover
	Water proof body with drainage facility to avoid any leakage into microscope body
	(preferable)
	The frame should be compatible for future upgrades to spinning disk, TIRF and super
	resolution modality
	All cabling and controls required for integration and operation of the microscope through
	the computer and control panels to be included.
2.	Eye Piece Unit:
	Binocular eye piece tube with base unit
	• Focusable 10X or better eyepiece with eyepiece guard with minimum field of view 22 mm (2
	nos.)
3.	Motorized Stage:
	Motorized XY scanning stage (linear optically encoded) with frictionless, wear free motor
	drives controlled by both touch panel and software.
	• X-direction stroke: minimum 114 mm or higher; Y-direction stroke: minimum 75/73 mm or
	higher (sufficient travelling range available for well plates) with position lock function
	• Speed: 25 mm/s or above and step size resolution of 0.01micron/10nm (with closed loop
	control)
	Controllable joystick for motorized stage with coarse and fine movement (Extra-fine)
	movement is preferrable)
	Magnetic sample holder
	• Stage inserts for slides, glass chamber slides, petri dishes (30mm/60mm tissue culture dish),
	petri dishes with glass bottom cover slips, multi well plates (6 well- to 96 well-plate) etc.
	A stage insert for on-stage CO ₂ incubator
	The imaging software should have modules to drive the stage for multipoint imaging,
	stitching/mosaic imaging and multi-well plate imaging.
4.	Transmitted Light Illumination System:
	Tiltable pillar with condenser holder
	• Pre-centred bright LED transmitted white light for BF, DIC and phase contrast with intensity
	control through touch panel and imaging software
	Condenser focusing system
	Minimum 2 filter holders
	Adjustable field iris diaphragm
	ND filter
	• An automated bright field shutter in the transmitted light path to block 100% light while
	imaging with Fluorescence automatically, and open while imaging with BF techniques such as
	Phase or DIC.
5.	Condenser: Metarized universal condenser turnet with long units commetible for RE DIC and Phase
	Motorized universal condenser turret with lens units compatible for BF, DIC and Phase imaging with at least 6 positions.
	imaging with at least 6 positions.
	Condenser focusing mechanism Metarized (intelligent relegions
	Motorized/intelligent polarizer Long working distance long
	Long working distance lens

- ND filter
- Motorized aperture, adjustable field iris diaphragm with provision for shutter
- Phase contrast module with phase rings for 4X, 10X and 20X objectives
- DIC cube and slider
- DIC prism set for 40X, 60X and 100X objectives
- Interference green contrast filter

6. Nosepiece:

- Motorized DIC and phase contrast compatible sextuple revolving nosepiece
- Nosepiece cap (2 nos.)
- Nose piece should be compatible with IR LED/Laser based autofocus/drift compensator for long term drift free live cell imaging.

7. Infinity Objectives for Fluorescence, DIC and Phase contrast Applications in Tissue culture (Third party objectives are NOT acceptable):

- 4X Phase Plan objective with N.A. 0.10 or above
- 10X Phase Plan objective with N.A. 0.30 or above
- 20X Phase Plan Semi Apochromat objective with N.A. 0.40 or above, (LWD/ELWD) with cover glass correction
- 40X Plan Semi Apochromat DIC compatible objective with N.A. 0.60-0.90 or above, (LWD/ELWD) with cover glass correction
- 60X/63X Plan Apochromat oil immersion DIC compatible spring-loaded objective with N.A. 1.4 or above, with cover glass correction. Lens should have high transmission and chromatic aberration correction capability (400-1000nm).
- Immersion oil and objective cleaning tissue paper set
- 40X and 60X/63X lenses should come with their respective storage cases

8. LED Fluorescence light source for regular fluorescence, ratio-metric and live-cell imaging:

- Stable bright multi-spectral long lasting eight channel LED light source with guaranteed lifetime of minimum 20, 000 hrs/10 plus years.
- The light source should have independent LEDs offering broad spectral coverage from UV to IR for use of fluorophores ranging from DAPI to Cy7.
- The light source should have independent LEDs with spectral peaks at 400nm (for UV), 435nm, 470nm, 500m, 550nm, 580nm, 635nm and 740nm.
- The light source should have removable inline excitation filter holder for eight LED slots.
- Suitable Microscope adapter for Liquid light guide/Direct fit of LED light source to the microscope. (Direct fit of the LED light source for higher irradiance would be preferrable.)
- The light source should have a built-in graphical user interphase software/program for individual as well as sequential triggering of LED lines with precision in microseconds during fast sequential imaging with AD DAQ card.
- The system should be equipped with an appropriate DAQ card to digitally control the light source with TTL Digital I/O port.
- The DAQ card should have at least 8 Digital I/O and 8 Analog I/O ports with suitable BNC/SMB connections to control light source, perfusion system and other third-party hardware such microfluidic devices. Quote for DAQ card with at least 8 A/D I/O TTL ports to control the light source. The I/O card should be controlled by imaging software for seamless integration of multidimensional image acquisition.
- The light source control program should be compatible with third party (camera, imaging software, perfusion set-up etc) hardware through AD DAQ card.
- Light source should be compatible with image acquisition software as well as the camera for integrated control of sequence runner and irradiance control programs of the imaging set-up.
- USB 2.0 connector for light source control through computer with following control options: On/Off control, Real time irradiance control, sequence runner with microseconds precision, LED selection, save and load previous settings.
- The real time light source control as well as the control of the light source through the imaging/camera software should be able to trigger the required LED lines and camera in

parallel mode. They should send out individual TTL triggers to these LED array modules with microseconds precision. The microsecond real time precision control should synchronize camera exposure with fast and precise switching of the LEDs for minimal photobleaching and phototoxicity. The imaging software should have necessary modules for "Triggered device control" and DAQ(TTL/Analog) control module. Each LED line should automatically be selected by the imaging software for the respective filter cube selected and the electronic shutter synchronized for time lapse imaging. The light source should have a dedicated TTL signal input for fast sequential imaging with a hardware-based breakout box. The Sequence runner program such Jobs/Journals/experiment designer/manager or equivalent should be offered. It should be capable of synchronized triggering through global TTL-in of the light source and TTL-out from camera and other external hardware. The imaging software must have a driver to control the full function of the DAO card and should be able to send and receive signal from the card. Breakout cables for connecting to analogue signal generating hardware BNC/SMB connectors. Appropriate software and hardware modules to be offered as a part of the system. All the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compatible computer to be included. 9. **Filter Turret Assembly:** Motorized Epi Filter Turret with fast, smooth switching with six positions or more and builtin shutter Field Stop ND filter Fluorescence Filters: 10. Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED compatible/MB filter), 2) FITC/GFP, 3) TRITC/RFP, 4) Texas Red/mCherry, 5) Cy5, 6) CFP and 7) YFP 2 extra empty filter cubes Camera: 11. sCMOS monochrome camera Peltier cooling Cooling temperature: -10°C below ambient temperature (20°C) Quantum efficiency: minimum 80% Effective number of pixels: 2048 (H) x 2048 (V) Pixel size: 6.5 micron Sensor size: 13.3mm x 13.3mm Readout noise: 0.8 electrons median Frame rate at full resolution: 100 fps at 8/12/16 bit Pixel binning: 2 x 2, 3 x 3, 4 x 4, 8 x 8, with 8,12, and 16 bit depth Dynamic range: 37000:1 Digital output: 16 bit support Interface USB 3.0 and camera link option Lens mount: C mount **Image Analysis Software:** 12. Standard research imaging software for full automated acquisition, device control with experimental manager/planner, online and offline analysis. Full six-dimensional image acquisition and analysis (XYZ, Time, multi-channel and multi-

Capable of multi-channel, multi-well & multi-point/position imaging

Online & offline 2D deconvolution and 2D deconvolution tools, online ratio measurement, co-localisation analysis, interactive measurement, 2D/3D view, slice view, volume view,

intensity measurement over time and over depth, kymograph, dynamic ROI, back ground subtraction, Z-projection over time and Z-intensity measurement. Dynamic ROI/Moving ROI to study intensity of motile cells, Kymograph analysis to study the mobile and immobile fractions/vesicles etc. Software module for ratio-metric imaging and calibrations, Colocalization/ Spectral unmixing/3D online ratio analysis, display and intensity plot function, Image arithmetic and averaging, ROI stat. Automated threshold-based count and measurement modules Advanced modules to perform complicated workflow of different permutations and combinations through Journals, Experimental manager/designer or through jobs or equivalent modules Software autofocus module for drift-free imaging Ability to support third party hardware such as confocal, TIRF super resolution modules for future upgradation. Ability to control third party hardware like Camera, (SCMOS/EMCCD), filter wheel, XYZ Stage, light sources like Lambda DG 4 and other LED light sources, fast shutters etc. Ability to programme various experimental approaches by drag and drop methods (Experimental designer, Experiment Manager/Jobs aquisition/Journals.) Software module to triggering devices, DAQ (TTL/Analog) control Simultaneous dual/triple /quad camera control module for imaging two/three colour simultaneously using splitters/dual or triple camera Should have inbuilt real time EDF and HDR imaging capability. Should have real time deconvolution capabilities. FRET, FRAP, RATIO and colocalization analysis modules to be offered. The raw image format should be Bioformat compatible/ Open Microscopy Environment (OME) compatible to export and import images from other formats and for image analysis with open-source software like imageJ and Fiji. One additional software for offline analysis to be included. Image acquisition, processing, and analysis system: Branded computer with the following specs should be offered. Original windows 10 operating system (64-Bit) Windows 10 Profession Intel Xeon Quad core i7 10th generation processor 64GB or more RAM 2X 1 TB SATA Hard disk NIVIDIA high resolution 8 GB Graphics Card 32" or higher LED Monitor DVD writer, mouse and key board High speed USB port for the camera UPS with minimum 1-hour backup power **System Integration:** All components including light sources, microscope, camera, computer and software should be fully integrated. All the cablings and controls required to integrate all parts of the microscope including the

14.

light sources and the camera setup as well as their operation through the compatible computer and software to be included.

15. Warranty:

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Warranty period of minimum 3 years on all components and AMC for additional 2 years to be provided.

Upgradability: 16.

- System should be upgradable to live cell imaging applications such as TIRF and confocal imaging.
- Nosepiece should be compatible and upgradable for live cell imaging with IR LED/LASER based automated focus drift compensation

Optional items: 17.

40X Plan Apochromat DIC compatible objective with N.A. 1.15 or above, with cover glass

	correction and storage case, objective should have high transmission capability (400-1000nm).				
	• 60X/63X Plan Apochromat DIC compatible spring-loaded air objective with N.A. 0.9 or				
	above with cover glass correction. Objective should have high transmission capability (400-1000nm).				
	• 100X Plan Apochromat oil immersion DIC compatible spring-loaded objective with N.A.				
	1.45 or above with cover glass correction. Objective should have high transmission and chromatic aberration correction capability from 400-1000 nm.				
	Pixel shift corrected fluorescence dual filter cube set for EGFP/mCherry				
	Pixel shift corrected fluorescence CFP-YFP dual filter cube set for FRET analysis				
	• Anti-vibration table (1200mm x 900mm) with air compressor, Thickness 150 mm,				
	Honeycomb core made of 0.3mm aluminium sheet. Vibration Isolated support for table top				
	(interconnecting legs), Air Compressor for active vibration table. Side walls to dampen				
	acoustic vibrations, Mounting holes.				
Other Te	rms and Conditions				
1	Third party objectives will NOT be accepted.				
2	Full payment will be done after complete installation and free onsite training of research personal				
3	Any optional hardware/software modules listed in the website/technical brochure (online/offline)				
	must be quoted with a dedicated product code/part number for unbiased technical evaluation and				
	vendor should be able to demonstrate it, if required, at the time of technical evaluation.				
4	Software modules should be quoted with appropriate catalogue code for better clarity and fair				
	evaluation.				

Vendors must fill in the compliance statement as mentioned in Annexure. If the compliance statement (Complied / Not Complied) is not furnished for the evaluation, bidders will be disqualified.

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TECHNICAL BID PROFORMA

Tender No. GTB24/MADU/2024/04/INFLUMICRO

Item Name: INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA

1.0 Bidder Eligibility Criteria:

I	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II and Non- Local Suppliers	Local Content Percentage	Ref. Page No.
1	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16th September 2020 and other subsequent orders issued therein. Participation of Non local supplier may be subject to the limitation provided in para 4 (Exemption of Small Purchases) of DPIIT circular No.P-45021/2/2017-PP(BE-II) Dt 16.Sep.2020 (ANNEXURE – D)			

2.0 Bidder Eligibility Criteria:

II	Bidder Eligibility Criteria-II	Complied/Not Complied	Ref Page No.
1.	Vendor Registration ID/Proof		
2.	Land Border Certificate (ANNEXURE – E)		
3.	OEM Certificate Form- The Participating Bidder's firm shall be the Original Equipment Manufacturer (OEM) or OEM Certified authorized firm (ANNEXURE – F)		
4.	Non- Debarment Declaration (ANNEXURE – H).		
5.	Mandate Form (ANNEXURE – J)		
6.	EMD as per Tender to be remitted in the Account number as given in the ANNEXURE I or EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) and Startups as recognized by Department of Industrial Policy & Promotion (DIPP). (MSE/MSME/DIPP PROOF should be enclosed in the cover containing technical bid).		
7.	Any vendor furnishing MSME (Trading) certificate is not eligible for EMD Exemption and as well not entitled for any relaxation in the tender conditions.		
8.	Vendor should have a good track record of selling similar systems with at least 5 installations across India especially in centrally funded technical institutes, Central and State Universities and Central Research laboratories		
9.	Vendors should provide users list and contact details		_
10.	Vendor should submit at least 3 performance certificates/service reports/installation certificates/installation reports for similar systems preferably from TN.		_

11.	Vendor should have a local presence with good track record of after-sales maintenance support in Chennai.	
12.	Purchase committee reserves the right to reject bids based on adverse feedbacks received from past users.	
	The bidder should be able to demonstrate the technical capability of	
13.	any of the quoted items when asked by the Exclusive Purchase	
	Committee (EPC).	

3. Technical Compliance Statement to accompany with Unquoted offer to be enclosed with technical bid in detail mentioning Model number, Description of the goods / service if any, for the supply with terms and conditions in conformity with the Tender requirement.

S. NO.	Technical Specifications		Make and Model Offered to Supply	OEM/ Authorized Dealer Certificate Attached Yes/No	Complied/Not Complied	Ref. Page No.
1.	Microscope Frame	Fully motorized active multi-port (stratum structure/double deck/infinity port or equivalent to introduce/receive two independent collimated beams of light or lasers into two ports simultaneously) inverted fluorescence microscope with BF, DIC, Phase Contrast and Fluorescence imaging capabilities Inbuilt free second deck/stratum with infinity port as part of the system for future customization Motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 nm z-step size Digital controller for microscope system All motorized functions including XY stage and drift compensation device can be controlled by remote touch panel/tab/joy stick and computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions. Side port adapters, side port caps, covers for blocking the stray light Minimum light distribution: 100% both side ports, 100% eye port Tool set necessary for manual adjustments and replacement of accessories Water-proof and static-proof microscope cover Water proof body with drainage facility to avoid any leakage into microscope body		1 es/NO		
		Microscope frame is compatible for future upgrades to spinning				

disk, TIRF and super-resolution	
modality	
All cabling and controls required	
for complete integration and	
operation of the microscope	
through the computer and control	
panels included 2 Fine Piece Pinegular ava piece tube with	
2. Eye Piece Binocular eye piece tube with	
Unit base unit	
Focusable 10X or better eyepiece	
with eyepiece guard with	
minimum field of view 22 mm (2	
nos.)	
3. Motorized Motorized XY scanning stage	
Stage (linear optically encoded) with	
frictionless, wear free motor	
drives controlled by both touch	
panel and software. X-direction stroke: minimum 114	
mm or higher; Y-direction stroke:	
minimum 75/73 mm or higher (sufficient travelling range	
available for well plates) with	
position lock function	
Speed: 25 mm/s or above and	
step-size resolution of	
0.01micron/10nm (with closed	
loop control)	
Controllable joystick for	
motorized stage with coarse and	
fine movement. (Extra-fine	
movement is preferrable)	
Magnetic sample holder	
Stage inserts for slides, glass	
chamber slides, petri dishes	
(30mm/60mm tissue culture dish),	
petri dishes with glass bottom	
cover slips, multi well plates (6	
well- to 96 well-plate) etc.	
A stage insert for an on-stage	
CO2 incubator	
The imaging software should	
have modules to drive the stage	
for multi-point imaging,	
stitching/mosaic imaging and	
multi-well plate imaging.	
4. Transmitted Tiltable pillar with condenser	
Light holder	
Illumination Pre-centred bright LED	
System transmitted white light for BF,	
DIC and phase contrast with	
intensity control through touch	
panel and imaging software	
Condenser focusing system	
Minimum 2 filter holders	
Adjustable field iris diaphragm	
ND filter	
An automated bright filed shutter	
in the transmitted light path to	
block 100% light while imaging	
with Fluorescence automatically,	

		and open while imaging with BF		
5.	Condenser	techniques such as Phase or DIC. Motorized universal condenser		
		turret with lens units compatible		
		for BF, DIC and Phase imaging		
		with at least 6 positions		
		Condenser focusing mechanism		
		Motorized/intelligent polarizer		
		Long working distance lens ND filter		
		Motorized aperture, adjustable		
		field iris diaphragm with		
		provision for shutter		
		Phase contrast module with phase		
		rings for 4X, 10X and 20X		
		objectives		
		DIC cube and slider		
		DIC prism set for 40X, 60X and 100X objectives		
		Interference green contrast filter		
6.	Nosepiece	Motorized DIC and phase contrast		
	-	compatible sextuple revolving		
		nosepiece		
		Nosepiece cap (2 nos.)		
		Nose piece compatible with IR LED/Laser based autofocus/drift		
		compensator for long term drift		
		free live cell imaging.		
7.	Infinity	4X Phase Plan objective with		
	Objectives	N.A. 0.10 or above		
	for Fluorescence,	10X Phase Plan objective with		
	DIC and	N.A. 0.30 or above 20X Phase Plan Semi		
	Phase	Apochromat objective with N.A.		
	contrast	0.40 or above, (LWD/ELWD)		
	Applications	with cover glass correction		
	(Third party objectives	40X Plan Semi Apochromat DIC		
	unacceptable)	compatible objective with N.A. 0.60-0.90 or above,		
	,	(LWD/ELWD) with cover glass		
		correction		
		60X/63X Plan Apochromat oil		
		immersion DIC compatible spring-loaded objective with N.A.		
		1.4 or above, with cover glass		
		correction. Lens has high		
		transmission and chromatic		
		aberration correction capability		
		(400-1000nm). Immersion oil and objective		
		cleaning tissue paper se		
		storage cases for 40X and		
	LED	60X/63X objectives		
8.	LED	Stable bright multi-spectral long		
	Fluorescence light source	lasting eight channel LED light source with guaranteed lifetime of		
	ngiit source	minimum 20, 000 hrs/10 plus		
		years		
		Light source with LEDs covering		
		broad spectral range from UV to		
		IR for use of fluorophores ranging		

		1
from DAPI to Cy7		
Independent LEDs with spectral		
peaks at 400nm (for UV), 435nm,		
470nm, 500m, 550nm, 580nm,		
635nm and 740nm		
Light source contains removable		
inline excitation filter holders for		
eight LED slots		
Suitable Microscope adapter for		
Liquid light guide/Direct fit of		
LED light source to the		
microscope. (Specify the type of		
adapter quoted)		
Built-in graphical user interphase		
software/program for individual		
as well as sequential triggering of		
LED lines with precision in		
microseconds during fast		
sequential imaging with AD DAQ		
card		
System is equipped with an		
appropriate DAQ card to digitally		
control the light source with TTL		
Digital I/O port.		
DAQ card has 8 Digital I/O and 8		
Analog I/O ports with suitable		
BNC/SMB connections to control		
the light source, perfusion system		
and other third-party hardwares.		
The I/O card should be controlled		
by imaging software for seamless		
integration of multidimensional		
image acquisition.		
Light source control program is		
compatible with third party		
(camera, imaging software,		
perfusion set-up etc) hardware		
through AD DAQ card.		
Light source is compatible with		
image acquisition software as		
well as the camera for integrated		
control of sequence runner and		
irradiance control programs of the		
imaging set-up.		
USB 2.0 connector for light		
source control through computer		
with following control options is		
provided:		
On/Off control, Real time		
irradiance control, sequence		
runner with microseconds		
precision, LED selection, save		
and load previous settings		
Real time light source control as		+
well as the control of the light		
source through the		
imaging/camera software can		
trigger the required LED lines and		
camera in parallel mode. They		
can send out individual TTL		
triggers to these LED array		
modules with microseconds		
•	<u> </u>	

Microscond real time precision control is capable of synchronizing camera exposure with fast and precise switching of the LEDs for minimal photobleaching and phototoxicity. Imaging software has necessary modules for "Triggered device control" and DAQ (TTL/Analog) control module Each LED line can be automatically selected by the imaging software for the respective filter cube selected and the electronic shutter synchronized for time lapse imaging. Light source has a dedicated TTL signal input for fast sequential imaging with a hardware-based breakout box. Sequence runner program such Jobs Journals-experiment designer/manager or equivalent is offered. It is capable of synchronized triggering through global TTL-in of the light source and TTL-out from camera and other external hardware. Imaging software has a driver to control the full function of the DAQ card and can send and receive signal from the card. Breakout cables for connecting to managewe signal generating hardware BNCSMB connectors provided. Appropriate software and hardware modules are offered as a part of the system. All the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the control of the microscope including the light sources, the camera setup as well as their operation through the control of the microscope including the light sources, the camera setup as well as their operation through the compatible comparation through the compatible comparation with six positions or more and built-in setup. Filter Turret Assembly Price Step Step Step Step Step Step Step Ste			procision		
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Field Stop ND filter 10. Fluorescence Filters Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED compatible/MB filter), 2) FITC/GFP, 3) TRITC/RFP, 4) Texas Red/mCherry, 5) Cy5, 6) CFP and 7) YFP 2 extra empty filter cubes					
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(Corresponding LED compatible/MB filter), 2) FITC/GFP, 3) TRITC/RFP, 4) Texas Red/mCherry, 5) Cy5, 6) CFP and 7) YFP 2 extra empty filter cubes					
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Texas Red/mCherry, 5) Cy5, 6) CFP and 7) YFP 2 extra empty filter cubes					
CFP and 7) YFP 2 extra empty filter cubes					
2 extra empty filter cubes					
11. Camera SUMOS monochrome camera	11	C			
	11.	Camera	scivios monochrome camera		

	T	D 1.' 1'			
		Peltier cooling			
		Cooling temperature: -10°C			
		below ambient temperature			
		(20°C)			
		Quantum efficiency: minimum			
		80%			
		Effective number of pixels: 2048			
		(H) x 2048 (V)			
		Pixel size: 6.5 micron			
		Sensor size: 13.3mm x 13.3mm			
		Readout noise: 0.8 electrons			
		median			
		Frame rate at full resolution: 100			
		fps at 8/12/16 bit			
		Pixel binning: 2 x 2, 3 x 3, 4 x 4,			
		9 v 9 with 9 12 and 16 bit donth			
		8 x 8, with 8, 12 and 16 bit depth			
		Dynamic range: 37000:1			
		Digital output: 16 bit support	 		
		Interface USB 3.0 and camera			
		link option	 		
		Lens mount: C mount		<u> </u>	-
12.	Image	Standard research imaging			
	analysis	software for fully automated			
	software	acquisition, device control with			
		experimental manager/planner,			
		online and offline analysis			
		Full six-dimensional image			
		acquisition and analysis (XYZ,			
		Time, multi-channel and multi-			
		point)			
		Capable of multi-channel, multi-			
		well & multi-point/position			
		imaging			
		Online & offline 2D			
		deconvolution and 2D			
		deconvolution tools, online ratio			
		measurement, co-localisation			
		analysis, interactive measurement,			
		2D/3D view, slice view, volume			
		view, intensity measurement over			
		time and over depth, kymograph,			
		dynamic ROI, back ground			
		subtraction, Z-projection over			
		time and Z-intensity			
		measurement. Dynamic			
		ROI/Moving ROI to study			
		intensity of motile cells,			
		Kymograph analysis to study the			
		mobile and immobile			
		fractions/vesicles etc included			
		Software module for ratio-metric			
		imaging and calibrations,			
		Colocalization/ Spectral			
		unmixing/3D online ratio			
		analysis, display and intensity			
		plot function, Image arithmetic			
		and averaging, ROI stat.			
		Automated threshold-based count			
		and measurement modules			
		Advanced modules to perform			
		complicated workflow of			
	1	complicated working Of		<u>l</u>	

	I	different permutations and		
		different permutations and		
		combinations through Journals,		
		Experimental manager/designer		
		or through jobs or equivalent		
		modules		
		Software autofocus module for		
		drift-free imaging		
		Supports third party hardware		
		such as confocal, TIRF super		
		resolution modules for future		
		upgradation		
		Capable of controlling third party		
		hardware like Camera,		
		(SCMOS/EMCCD), filter wheel,		
		XYZ Stage, light sources, fast		
		shutters etc.		
		Capable of programming various		
		experimental approaches by drag		
		and drop methods (Experimental		
		and drop methods (Experimental		
1		designer, Experiment		
		Manager/Jobs		
1		acquisition/Journals.		
		Software module to triggering		
		devices, DAQ (TTL/Analog)		
		control		
		Simultaneous dual/triple/quad		
		camera control module for		
		imaging two/three colour		
		simultaneously using		
		splitters/dual or triple camera		
		Inbuilt real time EDF and HDR		
		imaging capability		
		Real time deconvolution		
		capabilities		
		FRET, FRAP, RATIO and		
		colocalization analysis modules		
		Raw images are Bioformat		
		compatible/ Open Microscopy		
		Environment (OME) compatible		
		for export and import of images		
		from other formats and for image		
		analysis with open-source		
		software like imageJ and Fiji		
1		One additional software for		
1				
<u> </u>		offline analysis		
13.	Image	Original windows 10 operating		
1	acquisition,	system (64-Bit)		
	processing,	Windows 10 Profession		
1	and analysis	Intel Xeon Quad core i7 10th		
1	system:			
	Branded	generation processor		
1		64GB or more RAM		
1	computer	2X 1 TB SATA Hard disk		
		NIVIDIA high resolution 8 GB		
1		Graphics Card		
1				
		32" or higher LED Monitor		
1		DVD writer, mouse and key		
1		board		
1		High speed USB port for the		
1		camera		
1				
		backup power		

				,
14.	System	All components including light		
	Integration	sources, microscope, camera,		
	8	computer and software are fully		
		integrated		
		All the cablings and controls		
		required to integrate all parts of the		
		microscope including the light		
		sources and the camera setup as		
		well as their operation through the		
		compatible computer and software		
		are included		
15.	Warranty	Warranty period of minimum 3		
	vv air aircy	years on all components		
		AMC for additional 2 years		
		provided provided		
1.0	TT 1 - 1-2124			
16.	Upgradability	System can be upgraded to live		
		cell imaging applications such as		
		TIRF and confocal imaging		
		Nosepiece compatible and		
		upgradable for live cell imaging		
		with IR LED/LASER based		
		automated focus drift		
		compensation		
17.	Optional	40X Plan Apochromat DIC		
17.	items			
	items	compatible objective with N.A.		
		1.15 or above, with cover glass		
		correction and storage case,		
		objective has high transmission		
		capability (400-1000nm)		
		60X/63X Plan Apochromat DIC		
		compatible spring-loaded air		
		objective with N.A. 0.9 or above		
		with cover glass correction.		
		Objective has high transmission		
		capability (400-1000nm)		
		100X Plan Apochromat oil		
		immersion DIC compatible		
		spring-loaded objective with N.A.		
		1.45 or above with cover glass		
		correction. Objective has high		
		transmission and chromatic		
		aberration correction capability		
		from 400-1000 nm		
		Pixel shift corrected fluorescence		
		dual filter cube set for		
		EGFP/mCherry		
		Pixel shift corrected fluorescence		
		CFP-YFP dual filter cube set for		
		FRET analysis		
		Anti-vibration table (1200mm x		
		900mm) with air compressor,		
		Thickness 150 mm, Honeycomb		
		core made of 0.3mm aluminium		
		sheet. Vibration Isolated support		
		for table top (interconnecting		
		legs), Air Compressor for active		
		vibration table. Side walls to		
10	041 75	Mounting holes		
18.	Other Terms	Third party objectives will NOT		
	and	be accepted.		
	Conditions	Optional hardware/software	 	<u> </u>

modules listed in the website/technical brochure (online/offline) quoted with a dedicated product code/part number and vendor agrees toS demonstrate it, if required, at the time of technical evaluation.		
Software modules quoted with appropriate catalogue code for better clarity.		
Full payment will be done after complete installation and free onsite training of research personal.		
Fully filled compliance statement as mentioned in Annexure is provided.		

Note:

- i) Technical Bid Should NOT Contain Price Bid/Financial Bid details (or) Indication. If the price Details are indicated, mentioned inside the technical bid, then bid will be disqualified and neither the Technical Bid nor the Price Bid/Financial Bid will be considered.
- ii) It is mandatory for the bidders to provide the compliance statement (Complied/Not Complied) for the above points with document proof as required). If the compliance statement (Complied/Not Complied) is not furnished for the evaluation Bidders will be disqualified.

SIGNATURE OF BIDDER ALONG WITH SEAL OF THE COMPANY WITH DATE

FINANCIAL BID (PROFORMA) - BILL OF QUANTITIES (BOQ)

Item Name: INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA

Tender No. GTB24/MADU/2024/04/INFLUMICRO

It. No	Description of work	Quantity	Currency	Unit Rate Ex- Works	CIP / GST charges in value	Total (A+B)
				(A)	(B)	
1	INVERTED WIDEFIELD EPI- FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA with 3 years Warranty	1 No.	INR/USD/EUR/CAD/ JPY/GBP/AUD/SGD/CHF			
2	AMC for additional 2 years after the Warranty period.	1 No.	INR/USD/EUR/CAD/ JPY/GBP/AUD/SGD/CHF			
3	40X Plan Apochromat DIC compatible objective with N.A. 1.15 or above, with cover glass correction and storage case, objective should have high transmission capability (400-1000nm) (Optional item)	1 No.	INR/USD/EUR/CAD/ JPY/GBP/AUD/SGD/CHF			
4	60X/63X Plan Apochromat DIC compatible spring-loaded air objective with N.A. 0.9 or above with cover glass correction. Objective should have high transmission capability (400-1000nm) (Optional item)	1 No.	INR/USD/EUR/CAD/ JPY/GBP/AUD/SGD/CHF			
5	100X Plan Apochromat oil immersion DIC compatible spring-loaded objective with N.A. 1.45 or above with cover glass correction. Objective should have high transmission and chromatic aberration correction capability from 400-1000 nm (Optional item)	1 No.	INR/USD/EUR/CAD/ JPY/GBP/AUD/SGD/CHF			
6	Pixel shift corrected fluorescence dual filter cube set for EGFP/mCherry (Optional item)	1 No.	INR/USD/EUR/CAD/ JPY/GBP/AUD/SGD/CHF			
7	Pixel shift corrected fluorescence CFP-YFP dual filter cube set for FRET analysis (Optional item)	1 No.	INR/USD/EUR/CAD/ JPY/GBP/AUD/SGD/CHF			
8	Anti-vibration table (1200mm x 900mm) with air compressor, Thickness 150 mm, Honeycomb core made of 0.3mm aluminium sheet. Vibration Isolated support for table top (interconnecting legs), Air Compressor for active vibration table. Side walls to dampen acoustic vibrations, Mounting holes (Optional item)	1 No.	INR/USD/EUR/CAD/ JPY/GBP/AUD/SGD/CHF			

	Grand Total					
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Note:

- 1. Price bid as per this format to be uploaded only at the financial document column in CPP Portal. Price disclosure at the technical bid will result in disqualification
- 2. Technical Bid Should NOT Contain Price Bid/Financial Bid details (or) Indication. If the price Details are indicated, mentioned inside the Technical bid, then bid will be disqualified and neither the Technical Bid nor the Price Bid/Financial Bid will be considered.
- 3. Unquoted offer to be enclosed with technical bid in detail mentioning Model number, Description of the goods / service if any, for the supply with terms and conditions in conformity with the Tender requirement.
- 4. Optional Items to be mandatorily quoted.
- 5. The Purchaser reserves the right to procure the optional items based on the budgetary provisions.
- 6. The Value mentioned for Optional items, if any, will not be considered for arriving L1 vendor.

I/We the bidder accept all the terms and conditions as per tender including all technical & commercial conditions.

Date:	Authorized Signatory
Place:	()
	Seal and signature

FORMAT FOR AFFIDAVIT OF SELF-CERTIFICATION UNDER PREFERENCE TO MAKE IN INDIA – PER ITEM

This letter should be on the letterhead of the quoting firm and should be signed by a competent authority. Non-submission of this will lead to Disqualification of bids.

Tender Reference Nui	mber:
Name of the item / Ser	vice:
Date: I/We Resident of	S/o, D/o, W/o,
That I will agree to a India) Policy vide C vide orders dated 25 Dt.16th September 2 subsequent modificat That the local content	arm and declare as under: abide by the terms and conditions of the Public Procurement (Preference to Make in GoI Order no. P-45021/2/2017-PP (B.EII) dated 15.06.2017 (subsequently revised 8.05.2018, 29.05.2019 and 04.06.2020) MOCI order No. 45021/2/2017-PP (BE II) 2020 & P- 45021/102/2019-BE-II-Part (1) (E-50310) Dt. 4th March 2021 and any tions/Amendments, if any and not for all inputs which constitute the said item/service/work has been verified by me for the correctness of the claims made therein.
	e Appropriate Category
that Local C	[name of the supplier] hereby confirm in respect of quoted items content is equal to or more than 50% and come under "Class-I Local Supplier"
I/We_that Local (
I/Wethat Local 0	[name of the manufacturer] hereby confirm in respect of quoted items Content is less than 20% come under 'Non – Local Supplier' category
The details of the local content in	he location (s) at which the local value addition is made and the proportionate value of percentage
Address	Percentage of Local content:% Country of Origin of Goods:
For and on behalf of	(Name of firm/entity)
	(To be duly authorized by the Board of Directors) nation and Contact No.>
_	rocurement for a value in excess of Rs. 10 Crores, the bidders shall provide this atory auditor or cost auditor of the company (in the case of companies) or from a

[Note: In case of procurement for a value in excess of Rs. 10 Crores, the bidders shall provide this certificate from statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

This letter should be on the letterhead of the quoting firm and should be signed by a competent authority. Non-submission of this will lead to Disqualification of bids.

Land Border Sharing Declaration

(To be given on the letter head of the bidder)

In-line with Department of Expenditure's (DoE) Public Procurement Division Order vide ref. $F. No. 6/18/2019-PPD\ dated\ 23.07.2020\ \&\ 24.7.2020$

Tender No	Dated:
	<u>CERTIFICATE</u>
	(Bidders from India)
Division Order (Public procurement n 24.7.2020) regarding restrictions on p	ng to Department of Expenditure's (DoE) Public Procurement to 1, 2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & procurement from a bidder of a country which shares a land by that I/we (Name of the bidder) is/are let to be considered for this tender.
	OR
(Bidders from Co	untry which shares a land border with India)
Country) and has been registered w	the bidder) is/are from (Name of the vith the Competent Authority. I also certify that I fulfil all the gible to be considered. (Copy/ evidence of valid registration by the
Place: Date:	Signature of the Bidder Name & Address of the Bidder with Office Stamp

OEM CERTIFICATION FORM (In Original Letter Head of OEM)

Tender No:						. [Dated:				
We are Origina	al Equipment	Manufacturers	(OEM) of					(N	\am	e of	
the company)	Ms				(Nar	ne	of the ve	ndor) is	one	
of our	Distributors/D	Dealers/Reselle	rs/Partners		(tick		one)	for		the	
					and	is	participa	iting	in	the	
above-menti	oned	tender	by	offe	ring		our		proc	duct	
model		(Name o	of the produ	uct w	ith mo	del	number)	١.			
				is	autho	rize	ed to bid	, sell	anc	d provi	de
		our product as						, -		•	
	t wanding ion	Jul Product do		aso	v O.						

Name and Signature of the authorized signatory of OEM along with seal of the company with Date

<u>TENDER CHECKLIST – Mandatory documents to be filled and attached along with technical bid document.</u>

(1) I have registered as a Vendor with IC&SR. (Proof to be enclosed)	
(ISO certificate, Active GSTIN certificate, valid PAN details)	
(2) Technical Bid details and Financial Bid details have to be provided in a separate folder.	
(3) Completed and Signed the Tender Form . The Form of Tender document was signed by a legally authorized person. (Proof of Authorization to be enclosed)	
(4) Evidence for similar contracts completed/Products supplied is submitted.(If the details are requested in Annexure – A)	
(5) Certification of Class I / Class II Supplier (Goods, Services, or Works) is submitted as part of the Technical bid (Annexure – D)	
(6) EMD as per tender norms is deposited and the proof is enclosed (Annexure – I)	
(7) Land Border sharing declaration document is submitted (Annexure – E)	
(8) Non- Debarment Declaration Form (Annexure – H)	
(9) An authorized agent certificate from OEM is filled and submitted. (It is	
mandatory if an Indian agent/Indian office of OEM is participating in this tender on behalf of OEM (Annexure F)	
The bid will be valid if all the above documents are provided. Bidders are asked to supply and tick off the required information. Failure to provide any of the stated documents as per tender norms may result in the bid being	

considered non-compliant and rejected.

esult in the bid being

Signature of the Bidder

FORM - A NON- DEBARMENT DECLARATION

Date: XXXX

To,

The Indian Institute of Technology Madras,

Sardar Patel road,

Guindy, Chennai - 600036

Dear Sir,

- a. We are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment.
- b. We are not debarred by any Central/ State Government/ agency of Central/ State Government of India or any other country in the world/ Public Sector Undertaking/ any Regulatory Authorities in India or any other country in the world for any kind of fraudulent activities in last XX years.

Sincerely,

[BIDDERS NAME]

Name

Title Signature



CENTRE FOR INDUSTRIAL CONSULTANCY & SPONSORED RESEARCH (IC&SR) INDIAN INSTITUTE OF TECHNOLOGY MADRAS **CHENNAI 600 036**



ELECTRONIC CLEARING SERVICE (Credit Clearing)/ REAL TIME GROSS SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS

A. Details of Account Holder

Name of the Institution	Indian Institute of Technology - Madras
Complete Contact Address	Industrial Consultancy and Sponsored Research Indian Institute of Technology-Madras, IIT- Madras Campus Post Office, Sardar Patel Road, Guindy, CHENNAI - 600 036
Permanent Account Number	· · · · · · · · · · · · · · · · · · ·
(PAN)*	AAAAI3615G
GST REGISTERATION NO.	33AAAAI3615G1Z6
Telephone No./ Fax No.	Tel - 044-2257 8356
E- mail ID of the FO/AO/REG/DIR	dricsr@iitm.ac.in

B. Bank Account Details:

Institution Account Name (As per Bank	The Registrar, Indian Institute of
Record)	Technology - Madras
Account No.	2722101003872
IFSC CODE	CNRB0002722
SWIFT CODE	CNRBINBBIIT
Bank Name (in full)	Canara Bank
Branch Name	IIT-Madras Branch
Complete Branch Address	Canara Bank,
	IIT-Madras Branch,
	IIT- Madras Campus Post Office,
	Sardar Patel Road,
	Guindy, CHENNAI - 600 036
MICR No.	600015085
Account Type	Savings Account

Certified that the Institute's account is in an RTGS enabled branch. I hereby declare that the particulars given above are correct and complete.

Date: 04/08/2023

कृते केनरा बैक / For CANARA BANK Armi

সাঁধৰনেই / Officer স্বৰ্ভ সূত্ৰ স্বা ঘদনাই গাংলা / IIT Chennal Branch ঘদনাই / Chennal - 600 036

करालिन लेमिना.म M. KAROLINE LEMINA अधिकारी OFFICER S.P. No:64356

Signature of the Competent Authority of the Institution with seal.

> उप कुलसचिव (आईसी एवं एसआर) **DEPUTY REGISTRAR (IC & SR)** अर्° आईआईटी **मदास** I.I.T. MADRAS

Phone: +91 (0) 44 2257 8062 / 8061 / 8060 Fax: +91 (0) 44 2257 0545 / 2257 8366

email : deanicsr@iitm.ac.in website : http://www.iitm.ac.in

MANDATE FORM

ELECTRONICS CLEARING SERVICE (CREDIT CLEARING)/REAL TIME GROSS SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS.

NAME OF ACCOUNT HOLDER	
NAME OF ACCOUNT HOLDER	
COMPLETE CONTACT ADDRESS	
TELEPHONE NUMBER/FAX/E MAIL	
BANK ACCOUNT DETAILS: -	
BANK NAME	
BRANCH NAME WITH COMPLETE ADDRESS,	
TELEPHONE NUMBER AND EMAIL	
WHETHER THE BRANCH IS COMPUTERISED?	
WHETHER THE BRANCH IS RTGS ENABLED? IF YES,	
THEN WHAT IS THE BRANCH <u>IFSC CODE</u>	
IS THE BRANCH ALSO NEFT ENABLED?	
TYPE OF BANK ACCOUNT(SB/CURRENT/CASH CREDIT)	
COMPLETE BANK ACCOUNT NUMBER(LATEST)	
MICR CODE OF BANK	
DATE OF EFFECT: I hereby declare that the particulars given above are correct and complete. If reasons of incomplete or incorrect information I would not hold the user instilletter and agree to discharge the responsibility expected of me as a participant	tution responsible. I have read the option i
Date:	(Signature o
Date:	
Certified that the particulars furnished above are correct as per our records. (Bank's Stamp)	

- 1. Please attach a photocopy of the cheque along with the verification obtained from the bank.
- ${\bf 2.} \quad \hbox{In case your Bank Branch is presently not "RTGS enabled", then upon its upgradation to}\\$ $"RTGS\ Enabled"\ branch,\ please\ submit\ the\ information\ again\ in\ the\ above\ pro-forma\ to\ the\ Department\ at\ the\ earliest.$