

INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036

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Date: 28.05.2024

The Senior Manager (Project Purchase)

Open Tender Reference No: BT/KRIT/027/2024/INSTEFER

GEM NAR ID: GEM/GARPTS/28052024/IJJ5UIDN5HCR Due Date/Time: 18.06.2024@ 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 Local Suppliers and Class II Local Suppliers, for the supply of: "Insitu Sterilizable Fermentor" 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.

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

1)	Pre-bid Meeting Details	:	If required will be intimated
2)	ICSR Vendor Registration	:	<u>Vendor registration:</u> Vendor registration with IC&SR (IITM) is mandatory for 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

Last date for receipt of tender	:	18.06.2024@ 3:00 PM
Date & time of opening of tender	:	19.06.2024@ 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 to Bidders Process	:	 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)	Preparation of bids	•	Bidder should take into account any corrigendum published on the tender document before submitting their bids.			
		 Please go through the tender advertisement and the tender document carefully to understand the documents required to submitted as part of the bid. Please note the number of cover which the bid documents have to be submitted, the number documents including the names and content of each of document that need to be submitted. Any deviations from these lead to rejection of the bid. 				
			Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender document / schedule and generally shall be in PDF / XLS formats as the case may be. Bid documents may be scanned with 100 dpi with black and white 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 3 P a g e			

		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

The technical bid should consist of bidder eligibility criteria and technical specification compliance sheet as per the **Technical Bid Proforma** (**Annexure-B**).

Bid II _Price Bid

The price bid should be submitted in the Tabular format (BoQ) as per the **Financial Bid 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 only in INR net per unit (after breakup) and must include all packing, transit insurance and delivery charges to the **Department of Biotechnology**, IIT Madras.
- b) 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.
- c) The percentage of tax & duties should be clearly indicated separately. IIT Madras is eligible for custom duty at a concessional rate, i.e., 5.5%. Relevant certificates will be issued by IIT Madras wherever necessary.
- d) The offer/bids should be submitted through online only in two bid system i.e. Technical Bid and Financial Bid separately.

6) 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.

7) Terms of Delivery:

Supplier will be fully responsible for the safe carriage, Installation/Commissioning of goods up to the **Department of Biotechnology, 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.

8) Period for which the offer will remain open:

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

9) **EMD**:

The EMD of **Rs.32,000/-** 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 & Promotion (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.

10) Performance Security: -

The successful bidder should submit Performance Security for an amount of 5% of the basic invoice value of the contract/supply. The Performance Security may be furnished in the form of an Insurance Surety Bond, 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 or online payment in an acceptable form. 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 Performance Security Deposit should remain valid for a period of sixty days beyond the date of completion of all contractual obligations.

- 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.
- 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
- Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the technical bid.
- Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal/OEM.

15) Risk Purchase Clause

In the event of failure of contractual obligation during the schedule, the Office of Industrial Consultancy and Sponsored Research, Indian Institute of Technology Madras has all the right to engage other sources on the total risk of the sanctioned vendor under risk purchase clause.

16) Payment:

- (i) As per GFR 2017 Terms: 90% Payment after supply and 10% after installation are agreed to wherever the installation is involved.
- (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.

17) 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.

18) 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 date of installation.

19) 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.

20) 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.

21) 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.

23) Eligibility Criteria:

- As per the Government of India Order, only "Class I Local Suppliers" and "Class II Local Suppliers" can 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 and No.F.7/10/2021-PPD(1) dated 23.02.2023.
- 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.
 - ➤ '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.EII) 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
25)	Bid evaluation will take place in two stages. Stage I Technical Bid evaluation All bids received within due date and time will be opened for technical evaluation as per scheduled time. All bidders who have fully complied with bidder eligibility criteria I, II and technical Specification (Annexure B) will only be considered for opening of financial bid. Stage II: Financial Bid Evaluation
	The Financial bid evaluation will be based on price quoted by the bidder. The rate quoted for Insitu Sterilizable Fermentor unit will alone be taken up for arrival of Lowest Bid (L1) value.
26)	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.
27)	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.
28)	All information including selection and rejection of technical or financial bids of the prospective bidders 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.
29)	The tenderer shall certify that the tender document submitted by him / her are of the same replica of the 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.
30)	Clarification to the queries and doubts raised by the bidders will be issued as a corrigendum/addendum in the e-tenders portal.
31)	In the e-tender process, participation of bidders after the due date is not possible. The eligible bidders can login to the e-Procurement portal to ascertain the tender status.

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 Insitu Sterilizable Fermentor Tender No. BT/KRIT/027/2024/INSTEFER

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 16^{th} September 2020 and other subsequent orders issued therein (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). Any vendor furnishing MSME (Trading) certificate is not eligible for EMD Exemption and as well not entitled for any relaxation in the tender conditions.
- 7. The company should have ISO 9001-2015 certification. The bidders must be the original equipment manufacturer of the fermentor. Certificates should be enclosed.
- 8. The information about the company and company products should be available on the public portal. The bidders should attach brochure of the fermentor while bidding
- 9. The bidder should have supplied at least more than five no. of same equipment to the IITS/Government institutions in past five financial years. The purchase order of last five purchases should be enclosed. Preference will be given if the system have any international research paper publication.
- 10. The service location should be available in Chennai to provide in-house service facilities within 48 hours of breakdown complaint.

III. Technical Specification for Insitu Sterilizable Fermentor

S. No.	Specification	Specification Details	
1.	Volume	The total volume of the reactor should be at least 2.4 liters with a minimum working volume of 0.5 liters and a maximum working	
		volume of 1.7 liters.	
2	Sterilization	It should be an in-situ sterilizable bioreactor	
3	Reactor inner shell	The inner shell should be made of borosilicate glass material	
4	Agitator assembly	AC Servo motor bottom driven with mechanical seal. The agitator should consist of Bearing housing, Shaft, Mechanical seal, and height-adjustable Ruston Impeller x 3nos.	
5	Top plate configuration	Top Plate with Acid, Basic, Antifoam, and Air Outlet, and Air Inlet. Top Plate having pH, DO, Temperature Sensor port and inoculum port, Provision of extra port for upgrade.	
6	Impeller	It should be a removable type impeller with a Ruston turbine with 6 nos. of blades.	
7	Baffles	The type of baffle should be removable. No. of baffles should be 4 and made of SS 316L.	
8	Sampling Device	The Sampling Device must be Complete Contamination free, Autoclavable glass container, should come with 0.22-micron filter with vacuum syringe device.	
9	Inoculation system	The inoculation system should absolutely contamination free, sterilizable direct connection with sterile container / sterile syringe.	
10	Air Sparger	The air sparger should have a maximum air flow of 2vvm of the working volume. Air line consists of air flow meter, regulated valve and pressure gauge, Ring sparger for fine dispersible airflows for submerged aeration.	
11	Control system	The PLC should be connected to SCADA software and should be able to control from PC.	
12	Temperature control	The temperature should be PID controlled, 4 to +120° C, pt 100 RTD sensor. PLC controlled, Direct immersed electrical heater 400W x 2 nos., usable for minimum working volume and cooling coil to maintain the temperature for the temperature control. temp controlled via Chiller/circulator.	

13	Aeration	The aeration of the system should be 0 to 10 LPM with Rotameter passed through 0.22-micron Filter.
14	Agitation	The agitation of the system should be 25 to 1500 rpm, with programmable Drive. PLC should be of Siemens or equivalent.
15	pH controller	The pH controller should be mettler toledo make, insitu sterilizable provided along with the transmitter.
16	Acid and Basic dosing Peristaltic Pump	Peristaltic pump should have a maximum dosing of 40 ml/min. Acid and Base dosing Peristaltic Pump 2 nos. with fixed speed to control with precise accuracy \pm 0.05 pH
17	DO Measurement & controlled System	The DO probe of mettler make should be in-situ sterilizable with the provision to control the DO as per set point.
18	Antifoam control	Conduct type measurement enable to activate final element through foaming agent by peristaltic pump. It should have 1 fixed speed Peristaltic pump with 12 mm needle assembly with necessary silicon tubes. The maximum flow rate should be 40ml/min.
19	Feed Addition	1unit variable speed peristaltic pump. The flow rate of the pump should be in the range of 0.4 to 40 ml/ min.
20	WinCC SCADA Software	The software should be able to control the bioreactor operation from PC/Laptop. On line Data acquisition in graphical & numerical mode., Automatic data logging. Comparison for different complete run should be possible in the software. Provision for data exported for data handling facility. Necessary computer (desktop or laptop) for efficient and smooth functioning of the software and control of the bioreactor. The computer should be future upgradable for handling future system and software updates
21	Peristaltic pump 3 numbers of fixed-speed Peristaltic pumps should be provided for controlled feed addition (0.01 to 45 m)	
	Other Terms and Con	ditions
1	Warranty and Annual Maintenance Certificate (AMC)	Equipment and system should have one-year onsite warranty with complete coverage of hardware, electronic boards, software etc. Equipment and system should also have two years AMC.

2	Technical support	Tender price should include delivery, installation, commissioning and training and demonstration at onsite. On-site Training & Demonstration: Operational training & demonstration programme should be provided onsite by the vendor as and when required by the users.	
3	Instrument brochure	The offer should clearly mention the Part No. and Model Quoted along with the technical specifications. Original brochures with image of the quoted model and specification sheets should be enclosed in the technical bid of the offer and same should be seen in the website.	
4	Compliance statement	Detailed compliance Statement highlighting the compliance towards the tender specification should be enclosed along with documentary evidence. This compliance report should be submitted in a tabulated and point wise manner clearly mentioning the page number of original catalogue / data sheet.	
5	In-house service	The service location should be available in Chennai to provide inhouse service facilities within 48 hours of breakdown complaint.	

TECHNICAL BID PROFORMA
Tender No. BT/KRIT/027/2024/INSTEFER **Item Name: Insitu Sterilizable Fermentor**

1.0 **Bidder Eligibility Criteria:**

I	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II	Local Content Percentage	Ref. Page No.
I	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 16 th September 2020 and other subsequent orders issued therein (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). Any vendor furnishing MSME (Trading) certificate is not eligible for EMD Exemption and as well not entitled for any relaxation in the tender conditions.		
7	The company should have ISO 9001-2015 certification. The bidders must be the original equipment manufacturer of the fermentor. Certificates should be enclosed.		

8	The information about the company and company products should be available on the public portal. The bidders should attach brochure of the fermentor while bidding.	
9	The bidder should have supplied at least more than five no. of same equipment to the IITS/Government institutions in past five financial years. The purchase order of last five purchases should be enclosed. Preference will be given if the system have any international research paper publication.	
10	The service location should be available in Chennai to provide inhouse service facilities within 48 hours of breakdown complaint	

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.	Specification	Specification Details	Complied/Not Complied	Ref Page No.
1	Volume	The total volume of the reactor should be at least 2.4 liters with a minimum working volume of 0.5 liters and a maximum working volume of 1.7 liters.		
2	Sterilization	It should be an in-situ sterilizable bioreactor		
3	Reactor inner shell	The inner shell should be made of borosilicate glass material		
4	Agitator assembly	AC Servo motor bottom driven with mechanical seal. The agitator should consist of Bearing housing, Shaft, Mechanical seal, and height-adjustable Ruston Impeller x 3nos.		
5	Top plate configuration	Top Plate with Acid, Basic, Antifoam, and Air Outlet, and Air Inlet. Top Plate having pH, DO, Temperature Sensor port and inoculum port, Provision of extra port for upgrade.		
6	Impeller	It should be a removable type impeller with a Ruston turbine with 6 nos. of blades.		

7	Baffles	The type of baffle should be removable. No. of baffles should be 4 and made of SS 316L.	
8	Sampling Device	The Sampling Device must be Complete Contamination free, Autoclavable glass container, should come with 0.22-micron filter with vacuum syringe device.	
9	Inoculation system	The inoculation system should absolutely contamination free, sterilizable direct connection with sterile container / sterile syringe.	
10	Air Sparger	The air sparger should have a maximum air flow of 2vvm of the working volume. Air line consists of air flow meter, regulated valve and pressure gauge, Ring sparger for fine dispersible airflows for submerged aeration.	
11	Control system	The PLC should be connected to SCADA software and should be able to control from PC.	
12	Temperature control	The temperature should be PID controlled, 4 to +120° C, pt 100 RTD sensor. PLC controlled, Direct immersed electrical heater 400W x 2 nos., usable for minimum working volume and cooling coil to maintain the temperature for the temperature control. temp controlled via Chiller/circulator.	
13	Aeration	The aeration of the system should be 0 to 10 LPM with Rotameter passed through 0.22-micron Filter.	
14	Agitation	The agitation of the system should be 25 to 1500 rpm, with programmable Drive. PLC should be of Siemens or equivalent.	
15	pH controller	The pH controller should be mettler toledo make, insitu sterilizable provided along with the transmitter.	

16	Acid and Basic	Peristaltic pump should have a maximum		
	dosing Peristaltic	dosing of 40 ml/min. Acid and Base dosing		
	Pump	Peristaltic Pump 2 nos. with fixed speed to		
		control with precise accuracy ± 0.05 pH		
17	DO Measurement &	The DO probe of mettler make should be in-		
	controlled System	situ sterilizable with the provision to control		
		the DO as per set point.		
18	Antifoam control	Conduct type measurement enable to activate		
		final element through foaming agent by		
		peristaltic pump. It should have 1 fixed speed		
		Peristaltic pump with 12 mm needle assembly		
		with necessary silicon tubes. The maximum flow rate should be 40ml/min.		
19	Feed Addition	1 unit variable speed peristaltic pump. The		
1)	1 ccu Addition	flow rate of the pump should be in the range of		
		0.4 to 40 ml/ min.		
		0.4 to 40 mil/mil.		
20	WinCC	The software should be able to control the		
	SCADA	bioreactor operation from PC/Laptop. On line		
	Software	Data acquisition in graphical & numerical		
		mode., Automatic data logging. Comparison		
		for different complete run should be possible		
		in the software. Provision for data exported for		
		data handling facility. Necessary computer		
		(desktop or laptop) for efficient and smooth		
		functioning of the software and control of the		
		bioreactor. The computer should be future		
		upgradable for handling future system and		
		software updates		
21	Peristaltic pump	3 numbers of fixed-speed Peristaltic pumps		
		should be provided for dosing of acid, base,		
		and antifoam agents. 1 variable speed pump		
		should be provided for controlled feed		
		addition (0.01 to 45 ml/min)		
	Other Terms and Co	onditions	L	
1	Warranty and	Equipment and system should have one-year		
	Annual	onsite warranty with complete coverage of		
	Maintenance	hardware, electronic boards, software etc.		
	Certificate	Equipment and system should also have two		
	(AMC)	years AMC.		
<u></u>	1 ' '	*	l	

2	Technical support	Tender price should include delivery, installation, commissioning and training and demonstration at onsite. On-site Training & Demonstration: Operational training & demonstration programme should be provided onsite by the vendor as and when required by the users.	
3	Instrument brochure	The offer should clearly mention the Part No. and Model Quoted along with the technical specifications. Original brochures with image of the quoted model and specification sheets should be enclosed in the technical bid of the offer and same should be seen in the website.	
4	Compliance statement	Detailed compliance Statement highlighting the compliance towards the tender specification should be enclosed along with documentary evidence. This compliance report should be submitted in a tabulated and point wise manner clearly mentioning the page number of original catalogue / data sheet.	
5	In-house service	The service location should be available in Chennai to provide in-house service facilities within 48 hours of breakdown complaint.	

Note:

- (i) 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.
- (ii) 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.

SIGNATURE OF BIDDER ALONG WITH SEAL OF THE COMPANY WITH DATE

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

Item Name: Insitu Sterilizable Fermentor Tender No. BT/KRIT/027/2024/INSTEFER

It. No	Description of work	Quantity	Units	Basic Rate in INR	GST in Percentage	Total Amount with taxes in INR
1	Insitu Sterilizable Fermentor with 1 year onsite warranty	1	No.			
2	Insitu Sterilizable Fermentor - AMC for 2 years after the Warranty period.	1	No.			
	Grand Total					

Total A	Amount Rupees in words
Note:	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.
I/We tl conditi	ne bidder accept all the terms and conditions as per tender including all technical & commercial ons.
Date: Place:	Authorized Signatory () Seal and signature

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

Tender Reference Number:					
Name of the item / Service:					
Date: I/WeS/o, D/o, W/o, Resident of					
Hereby solemnly affirm and declare as under:					
That I will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Policy vide GoI Order no. P-45021/2/2017-PP (B.EII) 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 and any subsequent modifications/Amendments, if any and					
That the local content for all inputs which constitute the said item/service/work has been verified by me and I am responsible for the correctness of the claims made therein.					
Tick (✓) and Fill the Appropriate Category					
I/We [name of the supplier] hereby confirm in respect of quoted items that Local Content is equal to or more than 50% and come under "Class-I Local Supplier" category.					
I/We [name of the supplier] hereby confirm in respect of quoted items that Local Content is equal to 20% but less than 50% and come under "Class-II Local Supplier" category.					
• The details of the location (s) at which the local value addition is made and the proportionate value of local content in percentage					
Address Percentage of Local content:%					
Country of Origin of Goods:					
For and on behalf of(Name of firm/entity)					
Authorized signatory (To be duly authorized by the Board of Directors) <insert and="" contact="" designation="" name,="" no.=""> [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.]</insert>					

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:
	CERTIFICATE
	(Bidders from India)
Division Order (Public procurement no 2 24.7.2020) regarding restrictions on pro	to Department of Expenditure's (DoE) Public Procurement 1, 2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & ocurement from a bidder of a country which shares a land hat I/ we (Name of the bidder) is/are to be considered for this tender.
	OR
(Bidders from Coun	atry which shares a land border with India)
Country) and has been registered with	e bidder) is/are from (Name of the the competent Authority. I also certify that I fulfil all the le 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 Origir	nal Equipmen	t Manufacture	ers (OEM) o	f				(Na	ame o	f
the company)	Ms				(Na	me	of the v	endor)	is one)
of our	Distributors/	Dealers/Rese	ellers/Partne	rs	(tick		one)	for	the)
					and	is	participa	ating i	n the)
above-ment	ioned	tender	by	offe	ering		our	р	roduc	t
model		(Nam	e of the pro	duct v	vith m	ode	l number).		
				is	auth	oriz	ed to bio	d, sell a	and pr	ovide
service suppo								•	•	
as mentioned	above.									

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) To submit document proof pertaining to point.no: 6 of tender 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 Form of Tender. The Form of Tender document shall be signed by a person legally authorized. (Proof of Authorization to be enclosed)	
(4) Completed Technical Compliance Statement	
(5) Evidence of similar contracts completed/Product supplied in case if the details are requested in (Annexure – A)	
(6) Certification of Class I / Class II Local Supplier (Goods, Services, or Works) is submitted as part of the technical bid. (Annexure – D)	
(7) EMD as per tender norms is deposited and the proof is enclosed (Annexure – \mathbf{I})	
(8) Land Border sharing declaration document is submitted (Annexure – E)	
(9) Non- Debarment Declaration (Annexure – H)	
(10) Authorized agent certificate from OEM is mandatory if 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.	

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 Bami

সাধিকার / Officer সর্ভ সুর্ভ রী বিন্দুর্ভ লাফা / IIT Chennai Branch ব্যালয় / Chennai - 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) 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	
COMPLETE CONTACT ADDRESS	
TELEPHONE NUMBER/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:	
DATE OF EFFECT: I hereby declare that the particulars given above are corredelayed or not effected at all for reasons of incomplete or institution responsible. I have read the option invitatives responsibility expected of me as a participant under the Sc	ncorrect information I would not h on letter and agree to discharge the
I hereby declare that the particulars given above are corre delayed or not effected at all for reasons of incomplete or i user institution responsible. I have read the option invitati	ncorrect information I would not h on letter and agree to discharge the
I hereby declare that the particulars given above are corre delayed or not effected at all for reasons of incomplete or i user institution responsible. I have read the option invitati	ncorrect information I would not hon letter and agree to discharge the heme. (
I hereby declare that the particulars given above are corredelayed or not effected at all for reasons of incomplete or i user institution responsible. I have read the option invitatives responsibility expected of me as a participant under the Sconsibility expected of me as a participant under the sconsibility expected of me as a participant under the sconsibility expected of me as a participant under the sconsibility expected of me as a participant under the sconsibility expected of me as a participant under the sconsibility expected of me as a participant under the sconsibility expected of me as a participant under the sconsibility expected of me as a participan	ncorrect information I would not hon letter and agree to discharge the heme. (

- 2. 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.