#### INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036

Telephone: [044] 2257 9763 E-mail: tender@imail.iitm.ac.in



The Senior Manager (Project Purchase)

Date: 02.11.2023

Open Tender Reference No: CY/KOTH/051/2023/MULTICHAN

GEM NAR ID: GEM/GARPTS/02112023/YPH2TRK9IEE9

Due Date/Time: 08.11.2023 @ 3:00 PM

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, Tenders are invited in two bid system from Class-I local suppliers and Class II local suppliers, for the supply of: "**Multichannel CV-IV System**" Conforming to the specifications given in **Annexure -A**.

Tender Documents may be downloaded from Central Public Procurement Portal <u>https://etenders.gov.in/eprocure/app</u>. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website <u>https://etenders.gov.in/eprocure/app</u>. 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'. 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 <u>https://etenders.gov.in/eprocure/app</u> as per the schedule attached.

1)	Pre-bid Meeting Details	:	NA
2)	) ICSR Vendor Registration		<u>Vendor registration code</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: <u>vendorhelpdesk@icsrpis.iitm.ac.in</u>

<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	:	08.11.2023 @ 3:00 PM
Date & time of opening of tender	:	09.11.2023 @ 3:00 PM

# **<u>3. Instructions to the Bidder:</u>**

A)	Searching for tender documents	:	• There are various search options built in the CPP Portal, to facilitat bidders to search active tenders by several parameters. Thes 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 th 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 " <b>My Tender</b> " 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 <b>unique Tender ID</b> assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.				
<b>B</b> )	Assistance to bidders	:	<ul> <li>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.</li> <li>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]</li> </ul>				
C)	Enrollment Process	:	REGISTRATION				
	to Bidders		<ul> <li>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.</li> <li>As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.</li> <li>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.</li> <li>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.)</li> <li>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.</li> <li>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.</li> </ul>				

			<ul> <li>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</li> <li>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".</li> </ul>
<b>D</b> )	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 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.
			<ul> <li>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.</li> <li>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.</li> </ul>
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.
		<ul> <li>Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.</li> <li>More information useful for submitting online bids on the CPP Portal may be obtained at: <u>https://etenders.gov.in/eprocure/app</u>.</li> <li>All tender documents including pre-qualification bid, Technical Bid &amp;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.</li> </ul>
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 not be entertained

4)	Preparation of Tender: The bidders should submit the bids in two bid system as detailed below.				
	Bid I _Te	chnical Bid			
		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 excel 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 only in INR net per unit (after breakup) and must include all packing, transit insurance and delivery charges to the <b>Department of Chemistry</b>			
	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 (5.5%). Relevant certificates will be issued 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.				
	<ul> <li>(iv) All of your future correspondences including Invoices should bear the GST No. and Area Code.</li> </ul>				
7)	Terms of	Delivery:			
	Supplier will be fully responsible for the safe carriage, Installation/Commissioning of goods up to the <b>Department of Chemistry</b> , 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 Executive 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 fo	r 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.				
9)	EMD: NA				
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10)	Performance Security: - NA		
11)	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.		
12)	The offers/bids should be sent only for a item/Equipments of latest version that is available in the market and supplied to a number of customers. A list of customers in India with details must accompany the quotations. Quotations for a prototype machine will not be accepted		
13)	Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid.		
14)	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 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.		
16)	Payment:		
	(i) No Advance payment will be made. However, 90% Payment against Delivery 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 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/Guarantee:		
	The offer should clearly specify the warranty or guarantee 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/guarantee 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 of Tender.		
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		

	<ul> <li>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&amp;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&amp;SR IIT Madras, Chennai.</li> <li>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.</li> <li>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.</li> </ul>
22)	<b>Force Majeure:</b> 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:
23)	As per the Government of India Order, only "Class - I Local Suppliers" and "Class - II Local Suppliers" <u>can participate in this tender.</u>
	> 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 as mentioned.
24)	Preference to "class I Local Suppliers": preference will be given to "class 1 local suppliers" (subject
24)	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. <b>Declaration to be provided as per Annexure-D per item/service/work.</b>
	> '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.

	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)	Evaluation of Bids							
	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 <b>Multichannel CV-IV System</b> 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							
20)	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 Multichannel CV-IV System Tender No. CY/KOTH/051/2023/MULTICHAN

## **1.0 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<sup>th</sup> September 2020 and other subsequent orders issued therein.

EMD as per Tender 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).

### 2.0 Bidder Eligibility Criteria –II

1. The participating Bidder's firm shall be the Original Equipment Manufacturer (OEM) or OEM Certified / authorized firm. (Annexure F)

2. The bidder/OEM should have supplied at least 3 similar **Multichannel CV-IV System** or more to IITs, NITs, IISERs, CSIR Labs or other Indian Government organizations in the last 5 years, PO copies or installation certificates along with model number and contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation

Type of Device	Multichannel Potentiostat/Galvanostat		
Channels	Minimum 4 channels, should be able to be later upgradeable to at		
	least 8 channels.		
	All channels should be able to be upgradeable in future for		
	Impedance analysis up to 1 MHz		
Hardware Specifications	2,3 Electrode system with Banana and crocodile connectors		
	Each channel should be able to be operated individually or		
	simultaneously with same/different programs		
Maximum Applied Voltage	At least $\pm$ 5V (All Channels)		
Compliance Voltage	$\pm$ 10 V or more		
Maximum Applied Current	At least 30 mA (All Channels)		
Minimum Current measurement	100 pA or less		
Potential Accuracy	0.1% or more		
Current Resolution	5 fA or less		
Power Supply	USB Powered		
Storage	Internal Storage for data analysis		
Miscellaneous	Auxiliary Port for I/O option for each channel		
Software Specifications			
Supported Electrochemical	Cyclic Voltammetry, Differential Pulse Voltammetry, Linear		
Techniques	Sweep Voltammetry, Square Wave Voltammetry Normal Pulse		
	Voltammetry, AC Voltammetry, Stripping Voltammetry,		
	Chronoamperometry, Pulsed / Multi Pulsed Amperometry , Fast		

# 3.0 Technical Specification for Multichannel CV-IV System

	amperometry, Chronopotentiometry, Open Circuit			
	Potentiometry, Multistep Amperometry ,Multistep			
	Potentiometry, Corrosion Test, Tafel Plot,			
	System Should have inbuilt feature capable to measure up to			
multiple working electrode array with shared counter and				
	reference electrode and having multi cell setup			
Future Upgradeable Options				
	Each Channel upgradeable with multiplexer for up to 128			
	channels			
	Spectro EC Setup			
	Bi Potentiostat			
	EQCM			
Each Channel should be upgradeable to at least 10 V				
All channels should be able to be independently upgradeab				
	later with impedance having a frequency range of at least 10 µHz			
to 1 MHz				
Additional Terms and Conditions:				
1. Downtime should not be more the	han 2 days and if the machine is down for more than 2 days then			
	stended to the number of days the machine was down.			
2. The minimum 3 years warranty for the entire system				
3. If any technical issue arises during warranty period for the multichannel CV-IV system, it should				
be rectified within India itself; it	f it needs export, the cost of shipping/clearing is to be on			
vendor/company's cost in during the warranty period.				
* *	ks from the date of Purchase Order			

# TECHNICAL BID PROFORMA Tender No. CY/KOTH/051/2023/MULTICHAN

# Item Name: Multichannel CV-IV System

#### **Bidder Eligibility Criteria:** 1.0

Ι	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II	Local Content Percentage	Ref. Page No.
Ι	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 <sup>th</sup> September 2020 and other subsequent orders issued therein.			
II	Bidder Eligibility Criteria-II	Complied/N	ot Complied	Ref Pg. No
1	The participating Bidder's firm shall be the Original Equipment Manufacturer (OEM) or OEM Certified / authorized firm. (Annexure F)			
2	The bidder/OEM should have supplied at least 3 similar <b>Multichannel CV-IV System</b> or more to IITs, NITs, IISERs, CSIR Labs or other Indian Government organizations in the last 5 years, PO copies or installation certificates along with model number and contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation			

# **3.0Technical Compliance:**

Type of Device	Multichannel	COMPLIED/NOT	CATLAGOURE
	Potentiostat/Galvanostat	COMPLIED	Ref Pg. No.
Channels	Minimum 4 channels, should be able to		
	be later upgradeable to at least 8		
	channels.		
	All channels should be able to be		
	upgradeable in future for Impedance		
	analysis up to 1 MHz		
Hardware	2,3 Electrode system with Banana and		
Specifications	crocodile connectors		
	Each channel should be able to be		
	operated individually or simultaneously		
	with same/different programs		
Maximum Applied	At least $\pm$ 5V (All Channels)		
Voltage			
Compliance Voltage	$\pm 10$ V or more		
Maximum Applied	At least 30 mA (All Channels)		
Current			

Minimum Current 100 pA or less measurement 100 pA or less measurement 2015 or more		100 4 1	
Potential Accuracy       0.1% or more         Current Resolution       5 fA or less         Power Supply       USB Powered         Storage       Internal Storage for data analysis         Miscellaneous       Auxiliary Port for 1/O option for each chamel         Software       Specifications         Supported       Cyclic Voltammetry, Differential Pulse         Voltammetry, Linear Sweep       Voltammetry, Surgare Wave         Voltammetry, Nare Wave       Voltammetry, Stripping Voltammetry, Stripping Voltammetry, Stripping Voltammetry, Fast amperometry, Chronoapperometry, Fast amperometry, Chronoapperometry, Fast amperometry, Corrosion Test, Tafel         Plot,       System Should have inbuilt feature capable to measure up to multiple working electrode array with shared counter and reference electrode and having multi cell setup         Future       Upgradeable         Options       Each Channel upgradeable with multiplexer for up to 128 channels         Spectre EC Setup       Spectre EC Setup         Bi Potentiostat       EQCM         Each Channel should be upgradeable to at least 10 µHz to 1 MHz         Additional Terms and Conditions:       1.         1. Downtime should not be more than 2 days then the warranty period should be extended to the number of days the machine was down.		100 pA or less	
Current Resolution       5 fA or less         Power Supply       USB Powered         Storage       Internal Storage for data analysis         Miscellaneous       Auxiliary Port for I/O option for each channel         Software       Specifications         Supported       Cyclic Voltammetry, Differential Pulse         Electrochemical       Voltammetry, Square Wave         Voltammetry, CVoltammetry, Stripping Voltammetry, Chronooptentiometry, Chronooptentiometry, Open Circuit Potentiometry, Multistep         Amperometry, Chronooptentiometry, Open Circuit Potentiometry, Multistep         Potentiometry, Corrosion Test, Tafel         Plot.         System Should have inbuilt feature         capabel to measure up to multiple         working electrode array with shared         counter and reference electrode and         having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with         multiplexer for up to 128 channels         Bi Potentiostat         EQCM         Alt channels should be able to be         independently upgradeable later with         impendence having a frequency range of         at least 10 V         Alt channels should be able to be         in		0.10/	
Power Supply       USB Powered         Storage       Internal Storage for data analysis         Miscellaneous       Auxiliary Port for I/O option for each channel         Software       Specifications         Supported       Cyclic Voltammetry, Differential Pulse Voltammetry, Square Wave Voltammetry, Square Wave Voltammetry, Square Wave Voltammetry, Normal Pulse Voltammetry, Chronopotentiometry, Pulsed / Multi Pulsed Amperometry, Pulsed / Multi Pulsed Amperometry, Multistep Amperometry, Multistep Amperometry, Multistep Amperometry, Vultistep Amperometry, Vultistep Amperometry, Vultistep Amgerometry, Wultistep Amgerometry, Corrosion Test, Tafel Plot,         System Should have inbuilt feature capable to measure up to multiple working electrode array with shared counter and reference electrode and having multi cell setup         Future       Upgradeable         Options       Each Channel upgradeable with multiplexer for up to 128 channels         Spectro EC Setup       Bi Potentionstat         EQCM       Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable to at least 10 U       All channels should be able to be independently upgradeable to at least 10 µLt to 1 MHz         Additional Terms and Conditions:       1.       Downtime should not be more than 2 days then the warranty period should be extended to the number of days the machine was down.			
Storage       Internal Storage for data analysis         Miscellaneous       Auxiliary Port for I/O option for each channel         Software       Specifications         Supported       Cyclic Voltammetry, Differential Pulse         Electrochemical       Voltammetry, Linear Sweep         Voltammetry, Suare Wave       Voltammetry, Stripping Voltammetry, Stripping Voltammetry, Chronoanperometry, Pulsed / Multi         Pulsed Amperometry, Past       amperometry, Chronopotentiometry, Open Circuit Potentiometry, Multistep         Amperometry, Corrosion Test, Tafel       Potentiometry, Gorrosion Test, Tafel         Plot,       System Should have inbuilt feature         capable to measure up to multiple       working electrode array with shared         counter and reference electrode and       having multi cell setup         Future       Upgradeable       Detentiostat         EQCM       Each Channel upgradeable with       Each Channel should be upgradeable to at least 10 V         All channels should be upgradeable to at least 10 V       All channels should be upgradeable to at least 10 V       All channels and frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:       In Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.       Extended to the number of days the machine was down.			
Miscellaneous       Auxiliary Port for L/O option for each channel         Software       Specifications         Supported       Cyclic Voltammetry, Differential Pulse         Electrochemical       Voltammetry, Linear Sweep         Techniques       Voltammetry, Square Wave         Voltammetry, AC Voltammetry, Stripping Voltammetry, Stripping Voltammetry, Chronoapperometry, Fast       amperometry, Fast         Amperometry, Chronopotentiometry,       Supported       Pulse         Amperometry, Chronopotentiometry,       Pulse         Amperometry, Vultistep       Amperometry, Multistep         Amperometry, Vultistep       Potentiometry, Corrosion Test, Tafel         Plot,       Plot,         Voltammuty icell setup       Pulse         Future       Cyperadeable         Options       Each Channel upgradeable with         multiplexer for up to 128 channels       Spectro EC Setup         Bi Potentiostat       EQCM         Each Channel should be upgradeable to at least 10 V       All channels should be able to be independently upgradeable to at least 10 µLz to 1 MHz         Additional Terms and Conditions:       In         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.	** *		
channel     channel       Software Specifications     Supported       Supported     Cyclic Voltammetry, Differential Pulse       Electrochemical     Voltammetry, Square Wave       Voltammetry, Square Wave     Voltammetry, Supare Wave       Voltammetry, SQuare Wave     Voltammetry, Stripping Voltammetry, Stripping Voltammetry, Past       amperometry, Chronopotentiometry, Open Circuit Potentiometry, Multistep     Amperometry, Multistep       Amperometry, Corrosion Test, Tafel     Plot.       System Should have inbuilt feature     capable to measure up to multiple       working electrode array with shared     counter and reference electrode and having multi cell setup       Future     Each Channel upgradeable with multiplexer for up to 128 channels       Spectro EC Setup     Bi Potentiostat       EQCM     Each Channel should be upgradeable to at least 10 V       All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz       Additional Terms and Conditions:     1.       1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.	<u> </u>		
Specifications       Cyclic Voltammetry, Differential Pulse         Supported       Cyclic Voltammetry, Guare Wave         Voltammetry, Square Wave       Voltammetry, Surap Pulse         Voltammetry, Normal Pulse       Voltammetry, Surap Pulse         Voltammetry, Soura Wave       Voltammetry, Surap Pulse         Voltammetry, Chronopotentiometry, Chronopotentiometry, Open Circuit Potentiometry, Multistep       Amperometry, Multistep         Amperometry, Multistep       Amperometry, Corrosion Test, Tafel         Plot,       System Should have inbuilt feature         capable to measure up to multiple       working electrode array with shared         counter and reference electrode and       having multi cell setup         Future       Upgradeable         Options       Each Channel upgradeable with         multiplexer for up to 128 channels       Spectro EC Setup         Bi Potentiostat       EQCM         Each Channel should be upgradeable to at least 10 V       All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:       In Own time should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.	Miscenaneous	· · ·	
Supported       Cyclic Voltammetry, Differential Pulse         Electrochemical       Voltammetry, Square Wave         Techniques       Voltammetry, Square Wave         Voltammetry, Square Wave       Voltammetry, Square Wave         Voltammetry, AC Voltammetry,       Stripping Voltammetry,         Chronoamperometry, Pulsed / Multi       Pulsed Amperometry, Pulsed / Multi         Pulsed Amperometry, Chronopotentiometry,       Open Circuit Potentiometry, Multistep         Amperometry, Multistep       Amperometry, Corrosion Test, Tafel         Plot,       System Should have inbuilt feature         capable to measure up to multiple       working electrode array with shared         counter and reference electrode and       having multi cell setup         Future       Upgradeable			
Electrochemical       Voltammetry, Linear Sweep         Techniques       Voltammetry, Square Wave         Voltammetry, Normal Pulse       Voltammetry,         Voltammetry, AC Voltammetry,       Stripping Voltammetry,         Chronoamperometry, Pulsed / Multi       Pulsed Amperometry, Fast         amperometry, Chronopotentiometry,       Open Circuit Potentiometry, Multistep         Amperometry, Multistep       Potentiometry, Multistep         Potentiometry, Corrosion Test, Tafel       Plot,         System Should have inbuilt feature       capable to measure up to multiple         working electrode array with shared       counter and reference electrode and         having multi cell setup       Each Channel upgradeable with         Pultipradeable       Options         Bi Potentiostat       E         EQCM       Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:       I         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
Techniques       Voltammetry, Square Wave         Voltammetry, Normal Pulse       Voltammetry,         Stripping Voltammetry,       Stripping Voltammetry,         Chronoamperometry, Pulsed / Multi       Pulsed Amperometry, Pulsed / Multi         Pulsed Amperometry, Chronopotentiometry,       Open Circuit Potentiometry, Multistep         Amperometry, Chronopotentiometry,       Open Circuit Potentiometry, Multistep         Potentiometry, Corrosion Test, Tafel       Plot,         System Should have inbuilt feature       capable to measure up to multiple         working electrode array with shared       counter and reference electrode and         having multi cell setup       Future         Upgradeable       Options         Each Channel upgradeable with       multiplexer for up to 128 channels         Spectro EC Setup       Bi Potentiostat         EQCM       Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:       I         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warraty period should be extended to the number of days the machine was down.			
Voltammetry, AC Voltammetry, Stripping Voltammetry, Chronoamperometry, Pulsed / Multi Pulsed Amperometry, Pulsed / Multi Pulsed Amperometry, Chronopotentiometry, Open Circuit Potentiometry, Multistep Amperometry, Chronopotentiometry, Open Circuit Potentiometry, Multistep Amperometry, Multistep Potentiometry, Corrosion Test, Tafel Plot,         System Should have inbuilt feature capable to measure up to multiple working electrode array with shared counter and reference electrode and having multi cell setup         Future Upgradeable Options       Each Channel upgradeable with multiplexer for up to 128 channels         Spectro EC Setup       Image: Spectro EC Setup         Bi Potentiostat       Image: Spectro EC Setup         Each Channel should be upgradeable to at least 10 V       Image: Spectro EC Setup         All channels should be able to be independently upgradeable to at least 10 V       Image: Spectro EC Setup         All channels should be able to be independently upgradeable to at least 10 µHz to 1 MHz       Image: Spectro EC Setup         Additional Terms and Conditions:       Image: Spectro EC Setup       Image: Spectro EC Setup         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days and if the machine is down for more than 2 days and if the machine is down.       Image: Spectro EC Setup       Image: Spectro EC Setup			
Voltammetry, AC Voltammetry,         Stripping Voltammetry,         Stripping Voltammetry,         Chronoamperometry, Pulsed / Multi         Pulsed Amperometry, Fast         amperometry, Chronopotentiometry,         Open Circuit Potentiometry, Multistep         Amperometry, Multistep         Potentiometry, Corrosion Test, Tafel         Plot,         System Should have inbuilt feature         capable to measure up to multiple         working electrode array with shared         counter and reference electrode and         having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with         multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to         at least 10 V         All channels should be able to be         independently upgradeable later with         impedance having a frequency range of         at least 10 µHz to 1 MHz    Additional Terms and Conditions:	Techniques		
Stripping Voltammetry,         Chronoamperometry, Pulsed / Multi         Pulsed Amperometry, Pulsed / Multi         Pulsed Amperometry, Chronopotentiometry,         Open Circuit Potentiometry, Multistep         Amperometry, Chronopotentiometry,         Open Circuit Potentiometry, Multistep         Amperometry, Corrosion Test, Tafel         Plot,         System Should have inbuilt feature         capable to measure up to multiple         working electrode array with shared         counter and reference electrode and         having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with         multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to         at least 10 V         All channels should be able to be         independently upgradeable later with         impedance having a frequency range of         at least 10 µHz to 1 MHz    Additional Terms and Conditions:           1. Downtime should not be more than 2 days and if the         warratty period should be extended to the number of         days the machine was down. <td></td> <td>•</td> <td></td>		•	
Chronoamperometry, Pulsed / Multi         Pulsed Amperometry, Fast         amperometry, Chronopotentiometry,         Open Circuit Potentiometry, Multistep         Amperometry, Multistep         Potentiometry, Corrosion Test, Tafel         Plot,         System Should have inbuilt feature         capable to measure up to multiple         working electrode array with shared         counter and reference electrode and         having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with         multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to         at least 10 V         All channels should be able to be         independently upgradeable later with         impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should no be more than 2 days and if the machine is down for more than 2 days then the warrany period should be extended to the number of days the machine was down.		5.	
Pulsed Amperometry , Fast amperometry, Chronopotentiometry, Open Circuit Potentiometry, Multistep Amperometry, Multistep Potentiometry, Corrosion Test, Tafel Plot,         System Should have inbuilt feature capable to measure up to multiple working electrode array with shared counter and reference electrode and having multi cell setup         Future Upgradeable Options       Each Channel upgradeable with multiplexer for up to 128 channels         Spectro EC Setup       Bi Potentiostat         EQCM       Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:       Image: Spectro Setup to 1 24 should be upgradeable to at least 10 µHz to 1 MHz         Additional Terms should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.       Image: Spectro Setup to 10 should be able to the number of days the machine was down.		11 0	
amperometry, Chronopotentiometry, Open Circuit Potentiometry, Multistep Amperometry, Multistep Potentiometry, Corrosion Test, Tafel Plot,         System Should have inbuilt feature capable to measure up to multiple working electrode array with shared counter and reference electrode and having multi cell setup         Future Upgradeable Options       Each Channel upgradeable with multiplexer for up to 128 channels         Bi Potentiostat       Each Channel should be upgradeable to at least 10 V         All channels should be upgradeable to at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days and if the machine is down for more than 2 days and if the machine is down.			
Open Circuit Potentiometry, Multistep         Amperometry ,Multistep         Potentiometry, Corrosion Test, Tafel         Plot,         System Should have inbuilt feature         capable to measure up to multiple         working electrode array with shared         counter and reference electrode and         having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with         multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to         at least 10 V         All channels should be able to be         independently upgradeable later with         impedance having a frequency range of         at least 10 µHz to 1 MHz			
Amperometry ,Multistep         Potentiometry, Corrosion Test, Tafel         Plot,         System Should have inbuilt feature         capable to measure up to multiple         working electrode array with shared         counter and reference electrode and         having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with         multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to         at least 10 V         All channels should be able to be         independently upgradeable later with         impedance having a frequency range of         at least 10 µHz to 1 MHz			
Potentiometry, Corrosion Test, Tafel         Plot,         System Should have inbuilt feature         capable to measure up to multiple         working electrode array with shared         counter and reference electrode and         having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with         multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.		1 1 1	
Plot,       System Should have inbuilt feature         capable to measure up to multiple       working electrode array with shared         counter and reference electrode and       having multi cell setup         Future       Upgradeable         Options       Each Channel upgradeable with         multiplexer for up to 128 channels          Spectro EC Setup          Bi Potentiostat          Each Channel should be upgradeable to at least 10 V          All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz          Additional Terms and Conditions:           1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
System Should have inbuilt feature capable to measure up to multiple working electrode array with shared counter and reference electrode and having multi cell setup         Future Upgradeable Options         Each Channel upgradeable with multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 μHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the warranty period should be extended to the number of days the machine was down.			
capable to measure up to multiple         working electrode array with shared         counter and reference electrode and         having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with         multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to at least 10 V         All channel should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
working electrode array with shared counter and reference electrode and having multi cell setup		•	
counter and reference electrode and having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
having multi cell setup         Future         Upgradeable         Options         Each Channel upgradeable with         multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
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Upgradeable OptionsEach Channel upgradeable with multiplexer for up to 128 channels		having multi cell setup	
Options       Each Channel upgradeable with multiplexer for up to 128 channels         Spectro EC Setup       Image: Spectro EC Setup         Bi Potentiostat       Image: Spectro EC Setup         EQCM       Image: Spectro EC Setup         Each Channel should be upgradeable to at least 10 V       Image: Spectro EC Setup         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 μHz to 1 MHz       Image: Spectro EC Setup         Additional Terms and Conditions:       Image: Spectro EC Setup       Image: Spectro EC Setup         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.       Image: Spectro EC Setup	Future		
Each Channel upgradeable with multiplexer for up to 128 channels         Spectro EC Setup         Bi Potentiostat         EQCM         Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.	10		
multiplexer for up to 128 channels	Options		
Spectro EC Setup       Bi Potentiostat         Bi Potentiostat       EQCM         Each Channel should be upgradeable to at least 10 V       All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:       1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
Bi Potentiostat       EQCM         Each Channel should be upgradeable to at least 10 V       Each Channel should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:       1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.		· · · · · · · · · · · · · · · · · · ·	
EQCM       Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 μHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.		· · ·	
Each Channel should be upgradeable to at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 μHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.		Bi Potentiostat	
at least 10 V         All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.		EQCM	
All channels should be able to be independently upgradeable later with impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
independently upgradeable later with impedance having a frequency range of at least 10 μHz to 1 MHz       Impedance having a frequency range of at least 10 μHz to 1 MHz         Additional Terms and Conditions:       Impedance than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.       Impedance than 2 days then the warranty period should be extended to the number of days the machine was down.		at least 10 V	
impedance having a frequency range of at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
at least 10 µHz to 1 MHz         Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.		1 1 1	
Additional Terms and Conditions:         1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
1. Downtime should not be more than 2 days and if the machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.		at least 10 µHz to 1 MHz	
machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.	Additional Terms a	nd Conditions:	
machine is down for more than 2 days then the warranty period should be extended to the number of days the machine was down.			
warranty period should be extended to the number of days the machine was down.	1. Downtime should not be more than 2 days and if the		
days the machine was down.			
	• 1		
2. The minimum 3 years warranty for the entire system			
	2. The minimum	a 3 years warranty for the entire system	

3. If any technical issue arises during warranty period for the multichannel CV-IV system, it should be rectified within India itself; if it needs export, the cost of shipping/clearing is to be on vendor/company's cost in during the warranty period.	
<ol> <li>Delivery period: within 4 weeks from the date of Purchase Order</li> </ol>	

# SIGNATURE OF BIDDER ALONG WITH SEAL OF THE COMPANY WITH DATE

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

# Item Name: Multichannel CV-IV System Tender No. CY/KOTH/051/2023/MULTICHAN

It. No	Description of work	Quantity	Units	Basic Rate in INR	GST in Percentage	Total Amount with taxes in INR
1	Multichannel CV-IV System with minimum 3 years warranty period	1	No.			
	Grand Total					

Total Amount Rupees in words \_\_\_\_\_

S

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

### **Tender Reference Number:**

#### Name of the item / Service:

Date:	
I/We	S/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.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 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
	thatLocal 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.
• Th	e details of the location (s) at which the local value addition is made and the proportionate value of local
CO	ntent in percentage
Addres	
Addres	5570

For and on behalf of ...... (Name of firm/entity)

Authorized signatory (To be duly authorized by the Board of Directors) <Insert Name, Designation and Contact 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.]

# 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.

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

No.\_\_\_\_\_

Dated: \_\_\_\_\_

# **CERTIFICATE**

(Bidders from India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I am not from such a country.

OR

# (whichever is applicable)

(Bidders from Country which shares a land border with India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I from \_\_\_\_\_\_ (Name of Country) and has been registered with the Competent Authority. I also certify that I fulfil all the requirements in this regard and is eligible to be considered. (Copy/ evidence of valid registration by the Competent Authority is to be attached)

Place: Date: Signature of the Tenderer Name & Address of the Tenderer with Office Stamp

## **ANNEXURE - F**

#### OEM CERTIFICATION FORM (In Original Letter Head of OEM)

Tender No:	. Dated:
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We are Original Equipme	ent Manufacturers	(OEM) of			(Nar	ne o	f the	
company) Ms (Name of the vendor) is one c					ne of	our		
Distributors/Dealers/Resellers/Partners		(tick	one)		for		the	
			and	is	participating	in	the	
above-mentioned	tender	by	offering		our	pro	duct	
model								

..... is authorized to bid, sell and provide service support warranty for our product as mentioned above.

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

# <u>TENDER CHECKLIST – Mandatory to be filled and sent (inside the Main Bid</u> <u>Cover) along with Bidding Document.</u>

- (1) I have registered as a Vendor with IC&SR. (Proof to be enclosed)
- (2) Technical bid cover and Financial Bid cover to be submitted separated.
- (3) Completed and **Signed Form of Tender**. The Form of Tender document shall be signed by a person legally authorized.
- (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 (As a part of technical bid) per item / service / work as per (Annexure D)
- (7) EMD (Ref. tender document pg.no. 6, Point no.9)
- (8) Land Border (Annexure E)
- (9) 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 only 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 may result in the bid being considered as non-compliant and rejected.

Signature of the Bidder

# FORM - A NON-BLACKLISTING DECLARATION

Date: XXXX

To, The Indian Institute of Technology Madras, Sardar Patel road, Guindy, Chennai - 600036

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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 blacklisted 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