

# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

शिक्षा मंत्रालय, भारत सरकार द्वारा स्थापित

### सैक्टर 81,नॉलेज सिटी,प. ओ. मनोली, एस. ए. एस. नगर, मोहाली, पंजाब 140306 INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI

(Established by Ministry of Education, Govt. of India)

Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab PAN No. - AAAAI1781K GSTIN – 03AAAAI1781K2ZS

• Phone: +91-172- 2240121 • Fax: +91-172-2240124 • http://www.iisermohali.ac.in • Email: stores@iisermohali.ac.in

CPPP/Institute Website

IISERM(1658)23/24-Pur

Dated: 06<sup>th</sup> February 2024

## <u>ई - निविदा आमंत्रण सूचना</u> NOTICE INVITING E-TENDER

सहायक उपकरणों के साथ अनुकूलित इलेक्ट्रो-बायोरिएक्टर/बायोइलेक्ट्रो केमिकल रिएक्टर की आपूर्ति और स्थापना के लिए दो बोली प्रणाली में निदेशक, आईआईएसईआर मोहाली की ओर से ऑनलाइन निविदाएं आमंत्रित की जाती हैं। तकनीकी विनिर्देश और नीचे दिए गए विवरण के अनुसार और सीपीपीपी पर मूल निर्माता/आपूर्तिकर्ता से बीओक्यू सूची अर्थात https://eprocure.gov.in/eprocure/app निविदा दस्तावेज ई-प्रोक्योरमेंट पोर्टल की वेबसाइट https://eprocure.gov.in/eprocure/app और संस्थान की वेबसाइट www.iisermohali.ac.in से डाउनलोड किए जा सकते हैं।

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for the **Supply and Installation of Customized Electro-Bioreactor/Bioelectrochemical Reactor with accessories** as per technical specification and details given below and BOQ list from the original manufacturer/supplier at CPPP i.e. **https://eprocure.gov.in/eprocure/app**. Tender documents may please be downloaded from the E-procurement portal website **https://eprocure.gov.in/eprocure/app** & Institute website **www.iisermohali.ac.in**.

Sd/-**सहायक कुलसचिव (क्रय तथा भंडार)** Assistant Registrar (Stores & Purchase)

NOTE: This is a domestic Tender according to the DPIIT P.-45021/2/2017 PP (BE-II) dated 04.06.2020 and No. P-45021/2/2017-PP(BE-II) dated 16-09-2020 and subsequent amendments to the order for Public Procurement Preference & PROVISION FOR LOCAL SUPPLIERS TOWARDS PREFERENCE TO MAKE IN INDIA. The bidder required to declare on the letter head the percentage of Local content for the quoted instrument and submit with the Technical Bid. Bidder should also give details of the location(s) at which the local value addition is made.



# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

शिक्षा मंत्रालय, भारत सरकार द्वारा स्थापित

### सैक्टर 81,नॉलेज सिटी,प. ओ. मनोली, एस. ए. एस. नगर, मोहाली, पंजाब 140306 INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI

(Established by Ministry of Education, Govt. of India) Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab PAN No. - AAAAI1781K GSTIN – 03AAAAI1781K2ZS

• Phone: +91-172- 2240121 • Fax: +91-172-2240124 • http://www.iisermohali.ac.in • Email: stores@iisermohali.ac.in

CPPP/Institute Website

### ई - निविदा आमंत्रण सूचना / E-TENDER NOTICE

Tender Ref.- IISERM(1658)23/24-Pur Dated: 06<sup>th</sup> February 2024

#### **Critical Date Sections**

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	06 <sup>th</sup> February 2024	6:00pm
2.	Tender Document download start Date & Time	06 <sup>th</sup> February 2024	6:00pm
3.	Bid Submission start Date &Time	06 <sup>th</sup> February 2024	6:00pm
4.	Bid Submission End date and Time	27 <sup>th</sup> February 2024	Upto 2:30pm
5.	Tender opening Date and Time	28 <sup>th</sup> February 2024	At 3:30pm

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for following item(s) from the original manufacturer/supplier at CPPP i.e. https://eprocure.gov.in/eprocure/app. Tender documents may please be downloaded from the E-procurement portal website https://eprocure.gov.in/eprocure/app & Institute website www.iisermohali.ac.in. Online Tender fee of Rs 590/- (Non-refundable) should be submitted by bidder in favour of IISER Mohali through Online mode in Institute Account (Canara Bank Saving Account Number 4790101001912 and IFSC Code CNRB0004790). However, scanned copy of the Tender fee/UTR copy should be uploaded on website along with technical bid. Micro & MSME/NSIC and Firms registered and the firms registered with concerned Ministries/ Departments, the bidders are exempted from payment of Tender Fee as per GOI notifications/GFR (2017) and Ministry of Finance OM No. F.9/4/2020-PPD dated 12 November 2020.

Bidders will also be required to execute bond/undertaking Bid Security Declaration Form attached as ANNEXURE-I, in lieu of EMD.

### **ITEM WISE DETAILS**

Sr. No.	Description	Qty. (in units)
1.	Supply and Installation of Customized Electro-Bioreactor /Bioelectrochemical Reactor with accessories	03
	Technical Specifications: As per Annexure-IV	

### A) IMPORTANT NOTES:-

- I This is a domestic Tender according to the DPIIT OM dated 04/06/2022 and subsequent amendments to the order for Public Procurement Preference & PROVISION FOR LOCAL SUPPLIERS TOWARDS PREFERENCE TO MAKE IN INDIA (MII). Bidders should also give details of Locations(s); at which the local value addition is made. Bidders are requested to furnish the declaration regarding local content/locations in Annexure II.
- II. Restriction under Rule 144 (xi) of the General Financial Rules (GFRs). 2017 under sub clause 3, in terms of DOE, MoF No. F.18/37/2020-PPD dated: 8<sup>th</sup> February, 2021:
  - (i) A bidder is permitted to procure raw material, components, sub-assemblies etc. from the vendors from countries which shares a land border with India. Such vendors will not be required to be registered with the Competent Authority, as it is not regarded as "sub-contracting".
  - (ii) However, in case a bidder has proposed to supply finished goods procured directly/indirectly form the vendors from the countries sharing land border with India, such vendor will be required to be registered with the Competent Authority. Kindly submit the declaration in Annexure-III.
- III. The online updated Price BOO is in INR format. Bids are invited in INR only against domestic tender.
- IV. The Online bids should be submitted directly by the original manufacturer/supplier/OEM, the OEM is required to furnish certificate to this effect. If quotation is submitted/filled by any representative/ agent/dealer then they must upload a Authorization Authority certificate from the principal company/OEM.
- V. All MSME/NSIC/Startup Units shall be considered as per provisions/rules prescribed by Govt of India.
- VI. Auto-extension of last date for E-Tenders has been activated by CPP Portal which has participation 2 bids or less.

### B) **SUBMISSION OF TENDER**

I. All bid/tender documents are to be uploaded online at Central Public Procurement portal i.e. <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> only and in the designated cover/ part on the website against tender ID. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained. Also upload Annexure I (Bid Securing Declaration Form) if registered as <a href="Micro & MSME/NSIC">MSME/NSIC</a> and <a href="Firms registered with concerned Ministries/ Departments">Micro & MSME/NSIC</a> and <a href="Firms registered with concerned Ministries/ Departments">Ministries/ Departments</a>. Late tenders will not be accepted.

- II. The online bids shall be opened at the office of the Assistant Registrar (S&P), IISER Mohali, on above given date and time. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.
- III. The bidder shall upload the tender documents/NIT duly filled in and stamped by the authorized signatory on each and every page along with all necessary Annexures as per NIT along with checklist and Annexures. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.

### Check List of Documents (signed & stamped) to be provided and uploaded by the bidder:

S.	Particulars of Documents	Yes/No	Page No.
No.			(As per technical bid)
1.	Tender Notice Document Copy of NIT		
	(duly signed and stamped)		
2.	Undertaking Bid Security Declaration Form-Annexure-I (on letter head duly signed and stamped)		
3.	Annexure-II declaration of Local content/MII, with complete		
	information (if applicable)		
	(on letter head duly signed and stamped)		
4.	Land border sharing declaration in Annexure-III.		
5.	Technical Compliance Sheet as per Annexure-IV.		
	(on letter head duly signed and stamped)		
6.	Authorization/MAF Certificate from OEM (principle)/		
	Manufacturer certificate, if applicable (signed copy)		
7.	Tender Fee, if applicable or Exemption Certificate		
	(NSIC/MSME Certificate)		
	(duly signed and stamped)		
8.	Attached copy of PAN Card		
9.	Attached copy of GST		

<sup>\*</sup> If checklist is not provided by the bidder along with ABOVE DOCUMENTS (signed and stamped copy of NIT) the bid shall be summarily rejected.

- IV. Bidders applying against "MSME/NSIC Certificate" issued by appropriate Authority, should ensure that the certificate attached is relevant to the area of service/supply. For example, If the tender is for "supply & installation of Desktop" the certificate should be issued for activity/area of "Computer supply and services activities etc" otherwise bid will be REJECTED without notice.
- V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

### C) INSTRUCTIONS

1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected.

- 2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID.
- 3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Conditional tenders will be summarily rejected.
- 4. In case of Ex-godown terms the amount of packaging forwarding freight etc. should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.
- 5. Custom Duty as applicable, as per GOI Rules.
- 6. GST as applicable, as per GOI Rules.
- 7. Bidder/s quoting in currency other than **Indian Rupee** (**INR**) should explicitly mention the currency in which tender quoted wherever applicable in <u>Technical Bid</u> along the tender documents.
- 8. The delivery period should be specifically stated. Earlier delivery will be preferred.
- 9. The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets & literature of the article quoted and also should enclose <u>Technical Compliance Sheet along with quoted product/material with make and model, if any applicable in the current NIT.</u> The name of the manufactures and country of manufacture should also invariably be stated. In the absence of these particulars and documents, the quotation is liable for rejection. Tenders not accompanied by detailed information as required, are liable to be rejected.
- 10. If any information furnished by the bidder is, at any stage found to be incorrect, false or fabricated, the Institute/purchaser shall have the absolute right to forfeit E.M.D. and security deposits, in addition to cancellation of contract, forfeiting the warranty/performance Guarantees and other action in accordance with law, such as black-listing, risk & cost etc.
- 11. Validity of offer: 90 days.
- 12. The warranty (if applicable) period after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/Performance Bank Guarantee @ 5% to 10% of the value of supply order as per norms may be sought from the firms, in terms of Ministry of Education, GOI, OM No. F. No. 29-1/2019-IFD dated 06th April, 2023 for compliance of Ministry of Finance, DoE, GOI, OM No.F.1/2/2023-PPD dated 03.04.2023.
- 13. The right to reject all or any of the quotations and to split up the requirements for itemized L-1 are reserved by the IISER Mohali. The quantities are tentative, and ordering specific quantities and items is subject to the availability of funds. Any other items will be rejected even if all comply with the conditions stipulated in NIT and partial material/s can be ordered. All the above conditions, without assigning any reason, are

reserved by the IISER Mohali. The decision of the IISER Mohali on the above is final. For any corrigendum and addendum please check the website <a href="https://eprocure.gov.in/eprocure/app\_and">https://eprocure.gov.in/eprocure/app\_and</a> http://www.iisermohali.ac.in

14. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

-Sd/-सहायक कुलसचिव (क्रय तथा भंडार) Assistant Registrar (Stores & Purchase)

### ANNEXURE-I

### **Bid Securing Declaration Form**

Date:	E-Tender No	E-Tender ID
*	nplete name and address of the pulersigned, declare that:	rchaser)
I/We understated Declaration.	and that, according to your cond	itions, bids must be supported by a Bid Securing
	the date of notification if I am /	m bidding for any contract with you for a period of We are in a breach of any obligation under the bid
the period of b b) having bee validity (i) far Performance S Securing Deck earlier of (i) th	oid validity specified in the form of in notified of the acceptance of il or reuse to execute the contra Security, in accordance with the laration shall cease to be valid i	our Bid by the purchaser during the period of bid ct, if required, or (ii) fail or refuse to furnish the Instructions to Bidders. I/We understand this Bid f I am/we are not the successful Bidder, upon the he name of the successful Bidder; or (ii) thirty days
_	t signature of person whose name of (insert legal capacity of person)	and capacity are shown) n signing the Bid Securing Declaration)
	complete name of person signing ed to sign the bid for an on behalf	he Bid Securing Declaration) of (insert complete name of Bidder)
	day of l (where appropriate)	(insert date of signing)
	of a Joint Venture, the Bid Securenture that submits the bid)	ring Declaration must be in the name of all partners
PS: Furnish the d	above in original stationary/letter head	with signed and sealed.

### **ANNEXURE-II**

# SELF DECLARATION [For Local Content of Products, Services or Works]

To,	
India (Estal Secto	Director In Institute of Science Education and Research blished by Ministry of Education, Govt. of India) In Str. 81, Knowledge city, PO-Manauli, Nagar Mohali-140306, Punjab
P u	With reference to Order no P45021/2/2017 PP (BE-II) dated 04.06.2020 and No. P-45021/2/2017-P(BE-II) dated 16-09-2020 of DPIIT, Ministry of Commerce and Industry, Govt. of India, we fall nder the following category of supplier (please tick the correct category) for the items for which this ender has been floated and being bided.
	Class I local supplier - has local content equal to more than 50%. Local contents added at
	(name of location local contents are added).
	Class II local supplier – has local content more than 20% but less than 50%. Local contents added
	at (name of location local contents are added).
	Non-local supplier – has local content less than or equal to 20%. Local contents added at (name of location local contents are added).
d R	We are solely responsible for the abovementioned declaration in respect of category of supplier. False eclarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial cules for which we may can be debarred for up to 2 years as per Rule 151(iii) of the General Financial cules along with such other actions as may be permissible under law.
Signa	ature & seal of the company
Nam	e and address of the organization
Date	e:
<u>Note</u>	: In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier' / 'Class-II local supplier' shall be required to provide a certificate from the 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.

### **ANNEXURE-III**

(To be submitted on the letterhead of the company/firm)

### **CERTIFICATE BY THE BIDDER (FOR TENDERS)**

I have read the clause regarding restrictions on procurement from bidder of as country which shares a land border with India. I certify that this bidder is not form such a company or if from such a country, has been registered with the Competent Authority (copy of Registration Certificate enclosed). I hereby certify that the bidder fulfils all requirements in this regard and is eligible to be considered. This is in terms of Restriction under Rule 144 (xi) of the General Financial Rules (GFRs). 2017 under sub clause 3, in terms of DOE, MoF No. F.18/37/2020-PPD dated: 8<sup>th</sup> February, 2021.

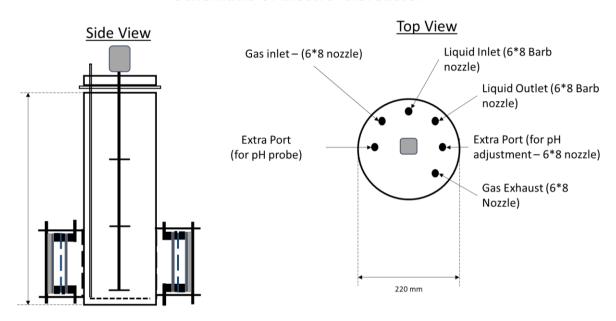
Date:	Name of the company/firm/organization
Place:	Signature with Date and stamp of the bidder

### **ANNEXURE-IV**

# Technical specifications for the customized Electro-bioreactor/Bioelectrochemical reactor with accessories

 Customized electro-bioreactor or bioelectrochemical reactor comprising of one bioreactor vessel and two electrochemical cells with accessories as per the design specifications described below – Total units #3

### **Schematic of Electro-bioreactor**



### **Specifications of the Bioreactor vessel:**

- Size: 580x220 mm (Height x Diameter)
- Total volume: 22L
- Body Material: SS316
- Gas inlet: 6\*8 mm Barb nozzle along with

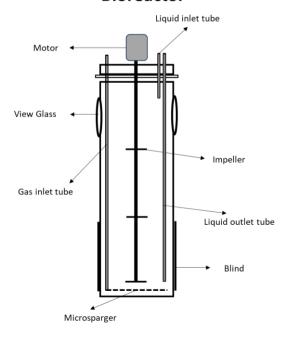
a tube of appropriate length and diameter connected with the gas inlet nozzle at the top

and micro-sparger at the bottom of the bioreactor.

It should be made up of non-metallic, non-corrosive, biocompatible material such as glass or any other appropriate material.

- Micro-sparger
  - Pore size 10-20 microns
  - Length 5" (or standard size close to this)
  - Maximum gas flow rate 1
     L/min
- Gas exhaust: 6\*8 mm Barb nozzle
- Liquid inlet: 6\*8 mm Barb nozzle connected with a tube of ~ 20 mm in length and appropriate

### **Bioreactor**

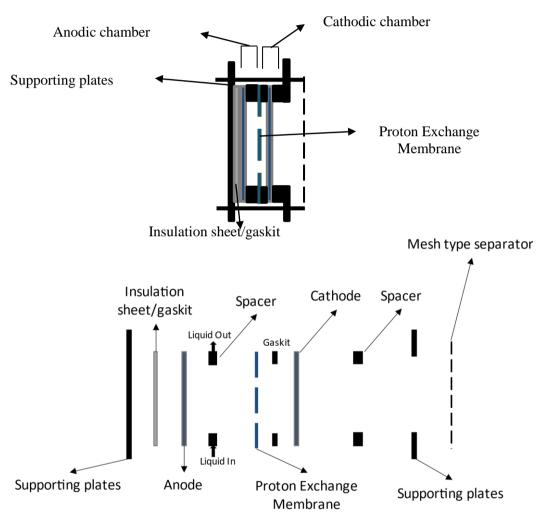


Page 10 of 12

diameter made up of non-metallic, non-corrosive, biocompatible material.

- Liquid outlet: 6\*8 mm Barb nozzle along with a tube of ~ 540 mm in length and appropriate diameter made up of non-metallic, non-corrosive, biocompatible material such as glass or any other appropriate material.
- Impeller: 3 Rushton type with 4 blades/standard made up of non-metallic, non-corrosive, biocompatible inert material.
- Standard Motor for impeller: Fixed [50-60 rpm]
- Blinds: 2 nos for electrochemical cell attachment
- View glass: 2 nos (30 mm diameter)
- Extra port for pH probe: as per the requirement of the indenter, to be finalized at the time of reactor manufacturing.
- Extra port for pH adjustment: 6\*8 mm Barb nozzle
- Gas leakproof stoppers of appropriate size for all ports/openings of bioreactor.
- Power module for operating the motor

#### **Specifications of the Electrochemical cell:**



- The dimensions of the electrochemical cell should be finalized as per the electrodes and membrane dimensions mentioned below.
- Dimensions of electrodes and membrane:
  - o Anode Area: 120 cm<sup>2</sup>; Thickness: 0.2 cm; Volume: 120 mL
  - Cathode Area: 120 cm<sup>2</sup>; Thickness: 0.8 cm; Volume: ~no gap between membrane and cathode
  - o Membrane Area: 80 100 cm<sup>2</sup>; Thickness: 0.18 mm

- Membrane support: Provision to support the membrane to avoid damage due to pressure on the membrane made up of non-metallic, non-corrosive, biocompatible material
- Mesh type separator: non-corrosive, biocompatible, non-conductive (mesh size 1 mm), easily attachable, and detachable whenever required.
- Reactor Fabrication Material: Standard alloy materials or polycarbonate or acrylic.
- Spacer: ~5 mm with inlet and outlet (non-metallic, non-corrosive, non-conductive, biocompatible material)
- Size of the spacers, insulation sheet/gasket, mesh-type separator, and supporting plates as per the electrode and membrane dimensions
- The connection/assembly of the electrochemical cells to the bioreactor vessel should be completely leakproof for gases and liquid and can be a flange type or any other suitable type as applicable.

### **Additional key points:**

- Scope of work:
  - o Engineering design and drawing of the complete bioelectrochemical reactor
  - o Fabrication of the reactor according to the above-mentioned specifications
  - Providing electrode materials and cation exchange membrane is out of the scope of this work
- Warranty: Two-years standard warranty on the complete reactor and accessories, as applicable

#### **Other Terms and Conditions:**

- All types of connectors, tubing, and other accessories should be provided to assemble the reactor and make it ready for use.
- The vendor must demonstrate the assembly of all components and conduct quality checks, including leakage tests, at the time of installation of reactors.
- The price should be quoted for a single unit as well as three reactor units. IISER Mohali reserves the right to reduce the total number of reactor units or cancel the tender if the financial bid or the quoted price by the bidder exceeds the budget availability.
- The Vendor should have an ISO 9001/equivalent manufacturing Certification.
- The vendor should have prior experience in providing bioelectrochemical or electrochemical or anaerobic bioreactors or bioreactors.
- A prior experience in manufacturing customized bioelectrochemical reactors is highly desired. The vendor should provide the list of users with contact details (Name, Organization, Email ID, and contact number) indicating the type of reactors supplied.
- All the requirements listed under the above specifications must be carefully read and understood.
- The bidder should provide a compliance statement sheet with the technical bid, and if there is any deviation in the above-mentioned specifications, it should be clearly highlighted in the remarks.

\*\*\*\*\*\*\*