

# **Tender Document**

## **For Supply and Installation of Electrochemical Workstation**

### **MaDeIT Innovation Foundation**

(A Section 8 Company under Companies Act floated by IIITDM Kancheepuram)

Regd. Office: 3<sup>rd</sup> Floor, New Academic Block,  
IIITDM Kancheepuram campus, Melakottaiyur,  
Off Vandalur-Kelambakkam Road, Chennai-600127

Date: 12.08.2021

Item	:	<b>Supply and Installation of Electrochemical Workstation (Specification and quantity enclosed as Annexure)</b>
Tender Enquiry No	:	<b>MaDeIT/21-22/FL/001 Dt. 12.08.2021</b>
EMD	:	Earnest Money Deposit (EMD) for Rs.12,000/- (Rupees Twelve Thousand only) in the form of Demand Draft/Bankers Cheque/ Bank Guarantee drawn in favour of <b>“MaDeIT Innovation Foundation” payable at Chennai</b> . The firms registered and having valid NSIC/MSME Certificate are exempt from submission of EMD.
Submission of Offer	:	<b><u>Two Bid System:</u></b> Two bid systems will be followed in this tender. In this system the bidder must submit his offer in <b>two separate sealed envelopes</b> . Both the technical bid and commercial bid envelopes should be securely sealed and stamped separately and clearly marked as <b>“Envelope No: 1 - Technical Bid”</b> and <b>“Envelope No: 2 - Commercial Bid”</b> respectively. <b>EMD should be placed in the Technical Bid. These two separate sealed envelopes should be placed in a single envelope superscribing the tender No and description of the item.</b>
Due Date (For submission of bids)	:	<b>03: 00 PM, 27<sup>th</sup> August 2021</b> (any bid received after the due date and time by any means will be summarily rejected)
Opening of Technical Bid	:	<b>04: 00 PM, 27<sup>th</sup> August 2021</b>
Place of Submission of Bid	:	The Director, MaDeIT Innovation Foundation Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, 3 <sup>rd</sup> Floor, Laboratory Complex, Off Vandalur – Kelambakkam Road, Melakkottaiyur, Chennai – 600 127.

**Important :**

All communications are to be addressed to in the name of Director, MaDeIT Innovation Foundation only and not in the name of any officer and mails has to be sent to official purchase email id **ceo\_madeit@iiitdm.ac.in**

## Terms and Conditions

1. The Bidders are requested to give detailed tender in two bid formats.  
**Envelope-I** : **Technical Bid**  
**Envelope-II** : **Commercial Bid**
2. The bidder has to accept all terms and conditions of the Institute and conditional offers will not be accepted.
3. The tender document can be downloaded from the MaDeIT Innovation Foundation website [www.madeit.iiitdm.ac.in](http://www.madeit.iiitdm.ac.in) at free of cost. The duly filled tenders should be submitted to Director, MaDeIT Innovation Foundation, Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, 3<sup>rd</sup> Floor, Laboratory Complex, Off Vandalur – Kelambakkam Road, Melakkottaiyur, Chennai – 600 127 **on or before due date 03: 00 PM, 27<sup>th</sup> August 2021.**
4. Tenders which are submitted without following the two bid offer system will summarily be rejected.
5. **Envelope No-1 : Technical Bid**  
The technical offer should comprise of the following:
  - i) EMD for Rs.12,000/- (Rupees Twelve Thousand only) in the form of Demand Draft/Bankers Cheque / Bank Guarantee drawn in favor of **“MaDeIT Innovation Foundation” payable at Chennai.** (The EMD without interest shall be returned to the unsuccessful bidders after finalization of the tender).
  - ii) The firms registered and having valid NSIC/MSME Certificate are exempt from submission of EMD.
  - iii) Bids should have a validity of **60 days.**
  - iv) The technical offer **should not contain any price information.**
6. **Envelope No-2 : Commercial Bid**  
This should contain only the price information along with commercial terms and conditions.
7. **Opening of Technical Bids**  
The technical bids will be opened on the scheduled date in the presence of the bidders or their authorized representatives who choose to attend the technical bid opening.
8. **Technical Evaluation**
  - i) All the technical aspects of the bids received and will be evaluated for suitability and specification. If required, the Institute may seek additional clarification from the bidders.
  - ii) The technical recommendation shall be final and binding on all the parties.
  - iii) The technically qualified firms will be intimated about Price Bid opening by email
9. **Opening of Commercial Bids**  
MaDeIT Innovation Foundation will open commercial bids of only the shortlisted bidders in technical evaluation in the presence of the bidders or their authorized representatives who

choose to attend the commercial bid opening. The representatives of shortlisted firms only will be allowed for commercial bid opening.

#### 10. Price

- i) The price can be quoted either in INR or in Foreign Currency. The price quoted should be for Destination at MaDeIT Innovation Foundation, IIITD&M Kancheepuram, 3<sup>rd</sup> Floor, Laboratory Complex, Melakkottaiyur, Off Vandalur-Kelambakkam Road, Chennai – 600 127. The packing, forwarding, freight, insurance and clearance charges may be quoted separately in price bid.
- ii) The Institute will arrive at the INR Rate by converting the foreign currency rate quoted with equivalent of INR as on the date of closing of tender (RBI Conversion rate will be applicable) for comparison of rates.

#### 11. Delivery & Installation Period / Timelines

**The time is the essence of the contract. It is mandatory for the bidders to deliver and install the item within 04 weeks from the date of purchase order.**

**The delivery and installation period of 04 weeks or less should be specified in the bid and the bidder may note that no relaxation in this condition will be entertained and bids not adhering to the delivery schedule will be rejected in the technical evaluation.**

#### 12. Locations for the supply / services

The items covered by this document is required to be supplied and installed at

MaDeIT Innovation Foundation

Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram,

3<sup>rd</sup> Floor, Laboratory Complex,

Off Vandalur-Kelambakkam Road,

Melakkottaiyur, Chennai – 600 127, Tamil Nadu

MaDeIT Innovation Foundation will not provide any accommodation / transportation for the engineers / representatives for attending installation, commissioning and demonstration work. It is the absolute responsibility of the principal supplier / agent to make their own arrangements.

#### 13. Installation

- i) Bidder shall be responsible for installation as applicable and for after sales service during the warranty and thereafter.
- ii) Shipping and Installation to be arranged by the supplier free of cost and the same is to be done within 15 days of the arrival of the item at site.

#### 14. Warranty / Support

- i) The items supplied shall carry the warranty as per the requirement mentioned in the technical specification.
- ii) The defects, if any, during the guarantee / warranty period are to be rectified free of charge by arranging free replacement wherever necessary.

#### 15. Indemnity

The vendor shall indemnify, protect and save MaDeIT Innovation Foundation against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc., or such other statutory infringements in respect of all the items supplied by them.

**16. Freight and Insurance**

The items to be supplied will be insured by the vendor against all risks of loss or damage from the date of shipment till such time it is delivered at MaDeIT Innovation Foundation site.

**17. Payment**

- i) **INR Terms:** 100% payment after delivery, installation and acceptance by MaDeIT Innovation Foundation on submission of Bank Guarantee for an equivalent value of 5% of PO value valid till warranty period plus 2 months
- ii) **Foreign currency terms:** 100% LC with 95% payment against submission of documents and balance 5% after delivery, installation and acceptance by MaDeIT Innovation Foundation against submission of Bank Guarantee for an equivalent value of 5% of PO value valid till warranty period plus 2 months.

**18. Penalty for delayed services / LD**

- i) As time is the essence of the contract, delivery and installation period mentioned in the purchase order should be strictly adhered to. Otherwise the LD clause will be applied / enforced.
- ii) If the supplier fails to supply, and fix the item as per specifications mentioned in the order within the due date, the supplier is liable to pay liquidated damages of 1% of order value for delay of every week or or part thereof subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.
- iii) MaDeIT Innovation Foundation reserves the right to cancel the order in case the delay is more than 04 weeks and the contractor is not eligible for any damage from the Institute and contractor will forfeit his claim for EMD.

**19. Purchasers right to vary quantities at the time of award**

MaDeIT Innovation Foundation reserves the right at the time of award of contract to increase or decrease the quantity of items specified in the schedule of requirements without any change in price or other terms and conditions.

**20. Jurisdiction**

The disputes, legal matters, court matters, if any, shall be subject to Courts in the district of Kancheepuram Jurisdiction only.

**21. Force Majeure**

- a) MaDeIT Innovation Foundation may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that the delay, in performance or other failure to perform its obligations under the contract, is the result of a force majeure.

b) If the due date of submission of tender / Tender opening is declared a holiday for the Institute, the due date for submission of tender / Tender will be extended to the same time on the next working day.

**22. Arbitration**

All disputes of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc., shall be referred by either party (MaDeIT Innovation Foundation or the bidder) after issuance of 30 days' notice in writing to the other party clearly mentioning the nature of dispute and will be referred to the arbitrator to be nominated by Director, MaDeIT Innovation Foundation, India. The Venue for arbitration shall be Chennai, India.

**23. Acceptance of the terms and conditions of tender document**

The bidders have to accept all the terms and conditions of this tender document and it is made known that the bidders quoting for this tender had implicitly accepted the terms and conditions of this tender.

**24. Interpretation of the clauses in the Tender Document**

In case of any ambiguity / dispute in the interpretation of any of the clauses in this tender document, interpretation of the Director, MaDeIT Innovation Foundation shall be final and binding on all parties. The MaDeIT Innovation Foundation reserves the right to accept the offer in full or in parts or reject the offer summarily or partly without assigning any reasons.

Sd/-

**Director**

**MaDeIT Innovation Foundation**

**SPECIFICATION FOR ELECTROCHEMICAL WORKSTATION**

<b>SCOPE: Supply and Installation of Electrochemical Workstation – Quantity – 1 No.</b>					
<b>S. No</b>	<b>Description of Requirement</b>	<b>Required</b>	<b>Offered</b>	<b>Deviation</b>	<b>Remarks</b>
1	<b>Applications:</b> Electrochemical Workstation	Vendor to confirm			
2	Operating modes	Potentiostat, Galvanostat, ZRA, FRA			
3	Cell Connections	2, 3, 4, of 5 Electrodes or more			
4	ADC/DAC Resolution	12bit or more			
5	Slew Rate	5MV/s			
6	Maximum Sampling rate	100,000 samples/s			
7	Input Impedance	>10 Tera-ohm (typical)			
8	Input Bias Current	<1pA (typical)			
9	On Board Data Backup Memory	8GB or more			
10	Computer Interface Connection	USB or any PC compatible			
<b>Potentiostat Input/Output</b>					
11	No. of channel	1			
12	Compliance Voltage	±12 V or more			
13	Controlled Voltage	±10 V or more			
14	Applied Potential Accuracy	0.1% of setpoint, 2 mV max accuracy			
15	Applied Potential Resolution	370 µV or more			
16	Measured Potential Accuracy	0.1% of setpoint, down to 1 mV 1 mV max accuracy			
17	Measured Potential Resolution	300 µV or more			
<b>Galvanostat Input/Output</b>					
18	Maximum Current	±1 A or more			
19	Current Ranges	8 ranges (100 nA to 1 A) or more			
20	Applied Current Accuracy	0.2% of range, 1 nA max			
21	Applied Current Resolution	0.003% of range, 3 pA max			
22	Measured Current Accuracy	0.1% of range, 100 pA max			
23	Measured Current Resolution	0.003% of range, 3 pA max			

Impedance Analyser					
24	AC Frequency Range for EIS	10 $\mu$ Hz to 1 MHz or more			
25	AC Frequency Accuracy	0.005% or better			
26	AC Frequency Resolution	0.0004%, 3 $\mu$ Hz max			
27	Demonstration of all features of the machine, control system & accessories to the satisfaction of MaDeIT officials	Vendor to confirm			
28	In case of ordering, a complete demonstration of all type of supported material used to Live Test prints to the satisfaction of MaDeIT officials	Vendor to confirm			
29	Geometrical accuracies as per test provided by the supplier.	Vendor to confirm			
30	Full Size test to demonstrate the maximum & minimum capacity of the machine.	Vendor to confirm			
31	Vendor shall train Two MaDeIT officials in Operation, Maintenance and Safety of the Machine at MaDeIT	Vendor to confirm			
32	Competent, English speaking experts shall be arranged by the vendor during training for satisfactory & effective training of MaDeIT officials	Vendor to confirm			
33	Detailed Operation & Safety manual of machine	Vendor to confirm			
34	In case of ordering, a complete list of spares for the machine and its accessories along with spares specification / type / model, and name & address of the spare supplier shall be submitted along with documentation while supplying the machine.	Vendor to confirm			
35	All types of spares for the machine and its accessories should be available for a minimum ten years, after supply of the machine. If any spares or controls are likely to become obsolete within this period, the vendor should inform MaDeIT officials and provide details of its suppliers to enable MaDeIT to procure them in advance.	Vendor to confirm			
36	Operating Manual document (Hardcopies Or soft copies) in English language should be	Vendor to confirm			



	supplied along with the machine				
37	Seaworthy & rigid packing for all items of complete machine, all Accessories and other supplied items to avoid any damage/loss in transit. When machine is dispatched in containers, all small loose items shall be suitably packed in boxes.	Vendor to confirm			
38	Standard Warranty: Vendor will have to provide 1 year warranty for all the components of the system from the date of installation of the machine at MaDeIT	Vendor to specify			
39	Extended Warranty: Vendor is required to quote separately for 2 years extended warranty after expiry of standard warranty period	Vendor to specify			
40	Vendor must have supplied similar configuration Machine of the same brand / make to reputed Institutes in India. The list of such Institutes along with the contact details must be provided along with the BID	Vendor to specify			

Sd/-  
**Director**  
**MaDeIT Innovation Foundation**