BHARATHIAR UNIVERSITY: COIMBATORE – 641 046

No. BU/R/D1/2022/Chemistry/8852/Electro.Chemi.Workstation Date : 01.07.2022.

**TENDER NOTICE**

Sealed Tenders are invited by the Registrar, Bharathiar University, Coimbatore- 641 046 **upto 3.00 P.M on 03.08.2022** **(Separate Technical Bid and Commercial Bid)** from the reputed ISO Certified firms for the supply of **1 No. of Multichannel Electrochemical Workstation with accessories** to the Dept. of Chemistry, Bharathiar University, Coimbatore.

 Tender documents can be downloaded from our website [www.b-u.ac.in](http://www.b-u.ac.in) and in the Govt. website [www.tenders.tn.gov.in](http://www.tenders.tn.gov.in) upto **03.08.2022.** The cost of the tender document **Rs.10,620/-** and  **EMD Rs.34,000/-** has to be enclosed in the form of DD drawn in favour of the Registrar, Bharathiar University, Coimbatore while submitting the tender.

 LAST DATE FOR SUBMISSION OF TENDERS : 03.08.2022 UPTO 3.00 PM

 TECHNICAL BID OPEINING DATE : 03.08.2022 AT 4.00 PM

 **--Sd/-**

 **REGISTRAR i/c.**

 **BHARATHIAR UNIVERSITY**

Note :

1. Separate covers should be submitted for **Technical Bid** and **Commercial Bid.** Otherwise the Tenders will not be considered.
2. The **Tender Cost** and **EMD amount** should be enclosed **in the Technical Bid** Cover in the form of DD drawn in favour of the Registrar, Bharathiar University, Coimbatore.
3. The tender cover should be superscribed as “Tender for supply of 1 No. of Multichannel Electrochemical Workstation with accessories to the Dept. of Chemistry, Bharathiar University, Coimbatore.

**BHARATHIAR UNIVERSITY: COIMBATORE – 641 046**

TENDER CONDITIONS AND INSTRUCTIONS FOR PURCHASE OF MULTICHANNEL ELECTROCHEMICAL WORKSTATION WITH ACCESSORIES TO THE DEPT. OF CHEMISTRY, BHARATHIAR UNIVERSITY,COIMBATORE.

1. Sealed Tenders will be received by the Registrar, Bharathiar University, **upto 3.00 p.m. on 03.08.2022** for purchase of **1 No. of Multichannel Electrochemical Workstation with Accessories** to the **Dept. of Chemistry, Bharathiar University**, Coimbatore.
2. Tender should be addressed to the **Registrar, Bharathiar University** and should be only in sealed covers by Registered post/ or in person. Tenders received in ordinary covers without seal will not be considered.
3. The tender cover should be superscribed as **“Tender for purchase of** **1 No. of Multichannel Electrochemical Workstation with Accessories** to the **Dept. of Chemistry, Bharathiar University, Coimbatore. Due on 03.08.2022.**
4. **Technical Bids** only opened on **03.08.2022** at **4.00 p.m.** in the presence of the tenderers who are present. The Price Bids will be opened after technical evaluation. Date of opening of the Price Bids will be intimated later.
5. Each tender shall be accompanied with the **EMD of Rs.34,000/-** in the form of DD drawn in one of the Nationalised Banks in the name of “Registrar, Bharathiar University” payable at Coimbatore. Cheques and Bank Guarantees will not be accepted. Tenders without EMD shall be summarily rejected. EMD will not carry any interest.
6. Tenders received late will be returned to the tenderer unopened.
7. The tender should contain particulars like the name and addresses of the Tenderers, Net rate including excise duty, surcharge, sales tax, freight, octroi, insurance, delivery, installation and commissioning of the above work and such other levies that may be applicable.
	1. The rates will be kept firm for One hundred and Eighty days from the date of the opening of the Tenders in acceptance.
	2. c) The rate should be quoted with specification and model if applicable and should be indicated clearly both in words and figures. Any scoring or overwriting should be attested by the tenderers with full signature. The rate quoted should be firm and should not be subjected to any variation clauses.
	3. d) US Dollar/EURO/Yen/CHF Swiss Franc billing can also be quoted for the required Equipments.
	4. e) University shall not pay increase in duties, taxes and surcharges on account of any revision by the Government at the time of supply and installation.
	5. f) Supply shall be as per the specifications mentioned in the Appendix and according at the time of supply.
	6. g) The tenderer should quote as per the tender specifications of the equipment only. Option shall be given separately.
	7. h) The tender form (Annexure I & II) should be completed in all respects. Wherever the information is not relevant to your bid, the space should be appropriately filled with ‘NA or NIL’. No space shall be left blank. All pages of the tender documents should be enclosed otherwise the tenderers are likely to be rejected.
		1. If the given space is in sufficient to give required information, additional sheets may be added. Each such additional page shall be numbered consecutively and shall bear our tender reference number and signature of bidder or his/her authorized agent.

Faxed Bids are liable to be rejected.

1. Tenders will be opened by the Registrar or his nominee in the presence of Tenderers or their representatives who may be present at the time of opening. The representatives of the tendering firms who are attending during opening of the tenders should bring a letter of authorization from the tendering firms, which they represent to identify their bonafied.
2. The tender shall be valid for a period of 180 days from the date opening. Tenderer should not withdraw his tender after the tenders are opened. In case the tender is withdrawn after it is opened, the EMD paid by him will be forfeited.
3. The EMD of the unsuccessful tenders will be refunded immediately after the tenders are disposed of by the competent authority.
4. Successful tenderer shall execute an agreement for the fulfillment of contract in the stamp paper in the model form. The conditions stipulated in the form should be strictly adhered to and violation of any of the conditions will entail termination of the contract without prejudice to be right of the University and to recover any consequential loss from the successful tenderer.
5. Successful tenderer shall remit a 6.5% Security deposit of the order value (excluding EMD already remitted). Security Deposit will be refunded at the end of warranty period subject to the satisfaction of the University. The EMD may be adjusted towards Security deposit payable.
6. If the tenderer failed to act upto the tender or backs out when his tender accepted, security deposit will also be forfeited to department.
7. The material should be supplied strictly in accordance with the specifications given in the Appendix and should fulfill the successful tests carried out by the Competent Authority of the University. The supply and installation should be made as per the delivery schedule to be sent by the Registrar along with the exact location of the work. The guarantee period shall take effect from the date of trial run. Successful tenderer shall be liable to change any defective part during the warranty period. In either case the damaged or defective items will have to be taken back at supplier’s cost and risk.
8. The commissioning and installation should be getting completed within the stipulated period mentioned in the supply order. If the supply is not made within the period, the supply order will be cancelled and the EMD & Security deposit will be forfeited.
9. The materials are to be guaranteed for the warranty period mentioned as per the given specifications from the date of installation and commissioning against manufacturing defect and bad workmanship. The period of warranty and the Annual Maintenance Contract (AMC) are as per the given specifications and the specified period shall commence from the date of installation.
10. The materials quoted shall confirm to ISI standard. The make of the materials shall be mentioned in the tender.
11. Any dispute arising out of this contract shall be settled only at the court having jurisdiction of Coimbatore.
12. The authority competent to accept the tender reserves the right to reject or accept any tender without assigning any reasons thereof.
13. Regarding the acceptance of supply with reference to the specification and quality of materials supplied, the decision of Registrar shall be final.
14. Prices: The Prices shall be quoted in Currency US Dollars/Japan Yens/EURO/CHF /UK Pounds.
15. If the tenderer quotes the price with GST, should mention the valid GST registration number along with the copy of the registration Certificate.
16. Incomplete Tenders: Tenders without the complete particulars will not be considered.
17. Tenders will be considered only from the ISO certified Manufacturers / authorized distributors with sound technical and financial capabilities.
18. The University is registered with DSIR and eligible for exemption towards customs duty as per the Government Notification No: 51/ 96 Customs Dt.23.7.1996, Notfn No. 28/2003 – Customs dt. 01.03.2003, Notfn. No. 43/2017 – Customs dt. 30.06.2017, & Notfn. No. 47/2017 – Integrated Tax (Rate) dt. 14.11.2017, Notfn. No. 10/2018 – Integrated Tax (Rate) dt. 25.01.2018, and Notfn. No. 45/2017 – Central Tax (Rate) dt. 14.11.2017, Notfn. No. 45/2017 – Union Territory Tax (Rate) dt. 14.11.2017 & Notfn. No. 9/2018 – Central Tax (Rate) dt. 25.01.2018, Notfn. No. 9/2018 – Union Territory Tax (Rate) dt. 25.01.2018. The University will be given necessary exemption certificates.
19. Loss or Damage: External damages or shortages that are prima facie the results of rough handling in transit or due to defective packing will be intimated within a fortnight from the date of receipt of the material, Internal defects, damages of any internal parts that cannot ordinary be exhibited on superficial inspection though due to bad handling in transit or defective packing will be intimated within two months from the date of receipt of the stores. In either case the damaged or defective stores will have to be taken back at supplier’s cost and risk.
20. Guarantee: The Supplier shall undertake to repair free of charge or replace any defective part of the equipment supplied due to defective or faulty design or bad workmanship during a period of three years from the date of commissioning of the equipment.
21. Leaflets and Descriptive Literature: Full descriptive particulars and manuals of the equipment offered should accompany the tender. Information regarding the country of manufacturer or origin of materials in the manufacture of articles should be furnished.
22. Tests: Manufacturer’s certificate for the routine tests specified in the BSS of the latest issue or as per manufacturer’s standard practice should be forwarded in duplicate. The materials will be rejected, if the test results are not satisfactory.
23. Penalty Clause: The delivery should be guaranteed by you under the penalty clause mentioned hereunder:
	1. Should delivery be delayed by strike, lockouts, fire accidents or any cause whatsoever, beyond the reasonable control of the contractor and whether such delay or impediment occurs before or after the time or extended time for dispatch or completion, a reasonable extension time shall be granted.
	2. If the contractor fails in due performance of this contract, within the time fixed by the contractor the extension thereof, the contractor is liable at discretion of the purchaser to a penalty of 4% per month of the contract value of such portion only of materials as cannot, in consequence of the delay, be used during each month between the appointed or extended time as the case may be and the actual time of acceptance, and such penalty shall be in full satisfaction of the contractor’s liability for the delay but shall no in any case exceed 25 % of the contract value of such portion of the materials.”
24. Additional Documents: Please also attach with the quote the following documents:
	* ISO Certificate
	* Number of service centres of the supplier in Tamilnadu/India.
	* Number of years standing in the business.
	* Average turnover in the last two years.
	* Backup facility for the warranty period.
	* TIN and CST Number, whenever required.
	* Certificates attained by the manufacturer.
	* Company Profile.
	* Any other relevant details in support of the items specified.
25. Other Enclosures:
* Attested copies of the Registration Certificate of the Company.
* Audited Annual Financial Statements and Annual Report and Certified Statement from the current Statutory Auditors of the Bidder.
* Signed and stamped copy of the original tender document downloaded from the website along with its annexures/corrigendum/documents etc.
* The copy of the GST Registration Certificate and Copy of PAN.
* The annual turnover of the bidder for the last 3 financial years.
* Any other document.
1. The University’s general rules for the supply of the materials and works will apply on this purchase also.
2. In case of foreign bidders, the shipping charges be stated separately.
3. The customs clearance charges, transportation upto the University have to be borne by the firm’ account.
4. The installation and training charges if any are to be borne by the firm.
5. Indian firms can only quote against the Open Tender and shall quote in Indian Rupee on FOR Coimbatore basis.
6. Foreign firms having their own office in India can quote in respective country currency.
7. No communications from any tenderer adding to/adhering or explaining any terms of the tender will be considered prior to the submission or after opening of the tenders by the competent authority
8. In case of any modifications in specifications/terms and conditions/ any clarifications to the bid document it will be hosted in our website only and bidders are requested to log on to our website from time to time regularly for any amendment and no separate corrigendum will be issued in this regard.
9. The tender is submitted subject to and agreeing the above conditions duly attested and certified.

**TO BE FILLED IN BY THE TENDERER:**

|  |  |  |
| --- | --- | --- |
| S.No. | Tender Cost – **Rs.10,620/-**DD No./ Date/Bank/Amt | EMD Details **Rs.34,000/-** DD No./ Date/Bank/Amt  |
|  |  |  |

**SIGNATURE OF THE TENDERER**

BHARATHIAR UNIVERSITY: COIMBATORE – 641 046

TENDER CONDITIONS AND INSTRUCTIONS FOR PURCHASE OF MULTICHANNEL ELECTROCHEMICAL WORKSTATION WITH ACCESSORIES TO THE DEPT. OF CHEMISTRY, BHARATHIAR UNIVERSITY,COIMBATORE.

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Product Description** | **Rate Each Rs.** | **Amount Rs.** |
| **1.** | **Multichannel Electrochemical workstation with accessories*** Electrochemical Workstation with Bipotentiostat/

multichannel, Potentiostat/Galvanostat with Windows Based Acquisition Software, Power supply 220V/50Hz, Interface Cable (Serial / USB).* General Techniques: Cyclic Voltammetry (CV) with simulation/fitting programs, Linear Sweep Voltammetry (LSV) with stripping, Bulk Electrolysis with Coulometry (BE).
* Trace Metal analysis & Pulse Techniques: Differential Pulse Voltammetry (DPV) with stripping, Normal Pulse Voltamemtry (NPV) with stripping, Square Wave-Osteryoung Voltammetry (SWV) with stripping analysis.
* Corrosion Studies: Tafel Plot (TAFEL), potentiodynamic deactivation, pitting corrosion, corrosion rate, linear Polarisation, Corrosion current etc.
* Fuel cell Analysis: Multi-Potential Steps (STEP), Multi-Current Steps (ISTEP), Amperometric i-t Curve (i-t) – Lifetime testing, Polarisation, I-V curves Linear Sweep, Open Circuit Potential – Time (OCPT).
* Impedance Spectroscopy: AC Impedance (IMP) – 10 Hz to 1MHz, Impedance – Time (IMPT) (Mott-Scottsky plot), Impedance – Potential (IMPE), Impedance Simulator with fitting, Open Circuit Potential – Time (OCPT), Hydrodynamic EIS.
* AC Impedance Plots with Simulation: Bode : log Z vs log (freq), Bode : Phase vs log (freq), Bode : log Z” & Z’ vs log (freq), Bode : log Y vs log (freq), Nyquist ; Z” vs Z’, Admittance; Y” vs Y’, Warburg: Z” & Z’ vs w1/2 w, angular frequency, Z’ vs w Z”, Z’ vs Z”/w, Cot (phase) vs w ½.
* Battery & supercapacitor Analysis: Galvanostatic Charge discharge single/multiple cycle vs specific capacitance plot, Chrono Potentiometry (CP) with potential limits, polarity by potential or time, no. of cycles etc, Voltage vs current density curves, Voltage measurement on counter electrode, etc & Rectangular CV analysis at varying scan rates for pseudocapacitor analysis.
* Deposition Studies: Single or Multi potential steps with charge limits, single or Multi current steps, mixed voltage/current control.
* Electrocatalysis: ORR analysis using RDE/RRDE at varying rotation speeds and built in Koutecky-Levich plot generation, HER and OER analysis for water splitting, Carbon dioxide reduction analysis, default technique for spectroelectrochemistry based LSV, CV and Chrono evaluation.
 |  |  |

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|  |  |  |  |
| --- | --- | --- | --- |
|  | * General useful techniques: Chronoamperometry (CA), Chronocoulometry (CC), AC Voltammetry (ACV) with stripping, Differential Normal pulse Voltamemtry (DPNV) with stripping, Second Harmonic AC Voltammetry with stripping, Differential Pulse Amperometry (DPA), Double Differential Pulse Amperometry (DDPA), Triple Pulse Amperometry (TPA), Integrated Pulse Amperometry Detection (IAPD), Hydrodynamic Modulation Voltammetry (HMV), Sweep-Step Functions (SSF), Chronopotentiometry with Current Ramp (CPCR), Potentiometric Stripping Analysis (PSA), Staircase Voltammetry (SCV) with stripping, Auxiliary Signal Measurement Channel, RDE / RRDE control (0-10 V output), IR Compensation, External Potential Input.
* Electrochemical Cell System includes, 4 glass cells with one Cell top, Pt Working Electrode, GC Working Electrode, Ag/AgCI Reference (aq &) Ag/AgCl Reference (non aq), Calomel Reference Electrode, Pt Wire Counter Electrode & Electrode Polishing Kit Cell Stand.
* Licensed & Full version of software for Electrochemistry & all the techniques & PC/Laptop
* Rotating Ring Disk Electrode Apparatus with purge & stir facility: Integration of control unit and rotator Compact size and easy operation, both remote and manual operations of rotating and purging are needed, Rotating rate range: 100-8,000 rpm, Operatable as RDE (Rotating Disk Electrode) and RRDE (Rotating Ring/Ring Disk Electrode) systems.
* Electrodes: RRDE Pt Ring/GC Disk Electrode, RRDE Pt Ring/Pt Disk Electrode, RDE GCE Glassy carbon Disk Electrode, RDE Platinum Disk Electrode, Pt counter electrode & Reference Electrode Ag/AgCl.
* Recent version operating PC & Laser printer should be included.
 |  |  |
|  |  **Amount Rs.** |  |
|  |  **GST Tax details and other charges etc, if any** |  |
|  |  **Net Amount (Inclusive of all taxes)** |  |

**SIGNATURE OF THE TENDERER**

 **NOTE:**

1. Please Quote the Price for the Materials with make; without the mention of make the tenders will not be considered.
2. The University is eligible for exemption of Central Excise Duty as per the Govt. Notification No.43/2017-Customs dated 30.06.2017, Notification No.47/2017-Integrated Tax (Rate) dated 14.11.2017, 10/2018-Integrated Tax (Rate) dated 25.01.2018 and 45/2017-Central Tax (Rate) dated 14.11.2017. Hence the item price may be quoted separately (i.e.) Unit. Price & Taxes etc. only. The University will be given necessary exemption form for Central Excise. It is also eligible for customs duty exemption as per the Govt. Notification No.51/96 customs dt.23.07.1996.
3. The firm may quote the rates as per the tender specification, the rate quoted by the firm will be considered if it is only as per the tender specifications. If there is any deviation from the tender specification, the tender will not be considered.
4. The Original tender form should be submitted to this office along with the tender schedules.

BHARATHIAR UNIVERSITY: COIMBATORE – 641 046

**TECHNICAL BID**

 **ANNEXURE - I**

Tender reference No:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name and address of Bidder
2. The details of EMD

Amount of EMD Rs.\_\_\_\_\_\_\_\_\_\_\_, DD No. \_\_\_\_\_\_\_\_\_\_\_\_ dt

Bank:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Due Date of bid :
2. The bid shall remain valid for acceptance for 90 days, from the date of tender opening.
3. Schedule of Requirements:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sl.No | Brief description of stores | QtyRequired | QtyOffered | Delivery | Unitprice(Rs) | Total Cost(Rs) |
|  |  |  |  | At Bharathiar UniversityCoimbatore | To be filled in Annex:II |
| (i) | GST |  | % |  | - | - |  |  |
| (ii) | Other charges, if any | - | - |  |  |
| Grand total cost in Rs. |  |
| Total cost (in words)Rupees. |

Warranty:

Note: (1) All columns must be filled up.

 (2) Adhering to the format given above is a pre- requisite for considering your bid.

 (3) Please indicate applicability.

I/certify that I/We have completely read and understood and agree to all the terms & conditions given in Part II.

Date : Signature of Bidder :

Office Stamp Signing as :

 Name in block letters :

Tele No. Fax No. e mail

**BHARATHIAR UNIVERSITY: COIMBATORE – 46**

**PRICE BID**

 **ANNEXURE: II**

Tender reference No:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name and address of Bidder
2. The details of EMD

Amount of EMD Rs.\_\_\_\_\_\_\_\_\_\_\_, DD No. \_\_\_\_\_\_\_\_\_\_\_\_ dt

Bank:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Due Date of bid :
2. The bid shall remain valid for acceptance for 90 days, from the date of tender opening.
3. Rates for items given in Techno-commercial offer at Schedule of requirements are as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl.No | Brief description of stores | QtyOffered | Delivery | Unitprice(Rs) | Total Cost(Rs) |
|  |  |  | At Bharathiar UniversityCoimbatore |  |  |
| (i) | GST  |  | % |  | - | - |  |  |
| (ii) | Other charges, if any  | - | - |  |  |
| Grand total cost in Rs. |  |
| Total cost (in words) Rupees. |

Warranty:

Note: (1) Price must be quoted in Indian Rupees only on FOR Bharathiar University Coimbatore basis with customs duty/excise duty excluded as necessary exemption certificate will be issued as indicated. Taxes and other levies excluded price to be quoted and percentage of the same to be indicated separately.

 (2) Adhering to the format given above is a pre-requisite for considering your bid.

(3) Separate list should be attached where required in the same format giving details of each item and cost.

Date : Signature of Bidder :

Office Stamp Signing as :

 Name in block letters :

Tele No. :

Fax No. :

e mail :

**BHARATHIAR UNIVERSITY: COIMBATORE – 46**

**Tender No.**

**Date :**

**To**

**THE REGISTRAR**

**Bharathiar University**

**Coimbatore – 641 046**

 **I/We agree to furnish required supplies / services as detailed in the Tender schedule or such portions thereof as you may specify in the Acceptance of Tender in accordance with the General Terms and Conditions governing the contract / supply order enclosed hereto duly accepted on receipt of the order for the same.**

 **I /We agree to hold this offer open until and shall be bound to supply / omission /erect the equipment and despatch the same within the specified period.**

 **I/ We agree to supply and commission /erect the equipment and complete the whole of the work and hand over to the purchaser within the period of weeks. From the date of receipt of intimation from you regarding acceptance of this tender / receipt of supply order.**

**Signature of the bidder**

**With office stamp**

**Name & Address**

**Station**

**Date:**

**BHARATHIAR UNIVERSITY: COIMBATORE – 46**

**SPECIFIC INSTRUCTIONS:**

1. Please Quote the Price for the instruments with make; without the mention of the make the tenders will not be considered.
2. The firm may quote the rates as per the tender specification, the rate quoted by the firm will be considered if it is only as per the tender specifications. If there is any deviation of specification from the tender specification, the tender will not be considered.
3. The Original tender form should be submitted to this office along with the tender schedules.
4. Quote the Price with Warranty and annual maintenance contract (AMC) periods mentioned in the specifications. Separate charges for warranty and AMC will not be considered at any cost.
5. The Instruments should be supplied at University Campus. Customs duty @ Govt.Concesional rate for Educational institutions will be borne by the University. However, the successful tenderer shall accept to pay the Customs duty for clearance after receipt of Airway bill, Invoice & etc. so as to avoid demurrage. Necessary clearing documents will be handed over to the Supplier within 3 working days after the receipt of Airway bill, Invoice & etc. The permissible Customs Duty paid by the Tenderer will be reimbursed by the University.
6. Freight Clearance charges, packing, forwarding charges , transportation charges will have to be borne by the firm Please quote the price for free delivery at University Campus .
7. No demurrage will be paid by the University for clearing delay.
8. The tender shall be submitted subject to and agreeing the above conditions duly attested and certified.

 **SIGNATURE OF THE TENDERER**