OFFICE OF THE REGISTRAR: BODOLAND UNIVERSITY

Debargaon, P.O. Rangalikhata Kokrajhar – 783370, BTC, Assam. bodolanduniv@gmail.com



Tel./Fax No. 03661-277183 (O) Tel. No. Mobile No.

F. No – BU/PHY/Pro/SERB/NEM-Non Rec/2023/ 2716

Date - 14/02/2024

Notice Inviting Tender

Sealed Tenders are invited from reputed manufactures/authorized dealers/suppliers for Supply, Installation and Commissioning of laboratory equipments under DST-SERB sponsored project of Department of Physics of Bodoland University. Detailed specification of the items, terms & conditions etc are given below. Last date of submission of Tender with all relevant papers is 04/03/2024 up-to 12:00 noon to be submitted at Tender box of Bodoland University.

The tender should be submitted in one sealed envelope containing two separate envelopes i.e. Part –I TECHNICAL BID and Part –II FINANCIAL BID. The technical bid shall be opened on above mentioned date and time and the financial bid of only those bidders who qualify in technical bid shall be opened on the same date or at a later date which shall be intimated to the bidder whose technical bid are found to be valid. Detailed specification and any other special features along with company manuals, receipt of Tender fee deposited should be submitted with their Technical bid. Tentative cost is Rs. 19,99,955 only.

The bidders are advised to visit the website <u>www.buniv.edu.in</u> for download the detail forms.

The tender fee for an amount of Rs. 2,000/- (non-refundable) should be deposited in the Bodoland University Account No. 31607155480, IFSC Code- SBIN0007379 by online mode. The receipts of the tender/EOI fee deposited should be submitted along with the technical bid. The EMD 2% of total quoted amount (Refundable) should be deposited y the successful bidder after issue of work order In case, if any Bandh/Holiday falls in any respect/sequence, the sequence will be held in the next working day.

The university authority reserves the right to reject or accept any one or all tender without assigning any reasons thereof.

Registrar

Copy to :-

- 1. The P.S to the V.C for kind appraisal to him.
- 2. The Finance Officer, i/c, for information.
- 3. Dr. Anjalu Ramchiary, P.I. for information.
- 4. The System Administrator for upload in university website.
- **5**. The Member Secretary, Purchase Committee for information.

Registrar

Generic name	Specifications					
Electrochemical	System Specifications					
Workstation						
	• 2-, 3- or 4-electrode configuration					
	 Floating (isolated from earth) or earth ground Potential scan range: ± 10 V 					
	 Applied potential resolution: 0.02% of potential range or better 					
	• Measured current range: ± 5nA to ± 200mA in multiple range					
	• Peak current: 300mA or better					
	• Compliance Voltage: ± 10V or better					
	• Compliance Current: 200mA or better					
	• Zero resistance ammeter					
	• CV and LSV scan rate: 10μV to 9,000 V/s or better					
	• Potentiostat rise time: < 0.8 micro seconds or better					
	• Applied potential resolution: 0.0015 % of potential range or better					
	• Applied potential accuracy: ≤ ±1 mV or better					
	• Measured current range: ± 10 pA to ±200mA in 12 ranges					
	• Measured current resolution: minimum 30 femto Amp or Better					
	• Current measurement accuracy: ±0.2% of range or better					
	• Galvanostat applied current range: ±3pA to ±200mA or better					
	• Input impedance: 10 ¹² Ohm or better					
	 Bandwidth: 1 MHz Input bias current: < 10pA or better 					
	• IMP frequency: 10μHzto 1MHz or better					
	• IMP amplitude: up to 0.7V RMS or better					
	• iR compensation: Automatic and manual					
	•					
	Electrochemical Cell System & Accessories					
	Electrochemical Cell System includes, 4 glass cells with one Cell top & Cell Stand					
	4 glass cells with one Cell top					
	Pt. Working Electrode – 01 No					
	GC Working Electrode – 02 No					
	Ag/AgCI Reference (aq) – 02 No					
	Pt Wire Counter Electrode- 02 No					
	Electrode Polishing Kit					
	Additional Accessories: 1 KVA UPS &(90v-250v) 100% Copper Heavy Duty Mainline					
	Automatic Voltage Stabilizer					
	Techniques					
	• Cyclic Voltammetry (CV)					
	• Linear Sweep Voltammetry (LSV)					
	• Tafel Plot (TAFEL), Linear Polarisation					
	• ChronoAmperometry (CA)					
	• ChronoCoulometry (CC)					
	Bulk Electrolysis with Coulometry (BE)					
	• AC Impedance (IMP)					
	• Impedance – Time (IMPT)					
	 Impedance – Potential (IMPE) Chronopotentiometry (CP) 					
	• Chronopotentiometry (CF) • Chronopotentiometry with Current Ramp (CPCR)					
	 Multi-Current Steps (ISTEP) 					
	• Potentiometer Stripping Analysis (PSA)					
	Open Circuit Potential – Time (OCPT)					
	• Galvanostat					
	Limited version of CV simulator					
	Impedance Simulator with fitting					

- IR Compensation
- External Potential Input
- Auxiliary Signal Measurement Channel
- Amperometrici-t Curve (i-t)
- RDE Control (0-10 V or better output)
- Electrochemical Noise Measurement (ECN)
- CV Simulation and fitting program
- Impedance Simulation and fitting program
- AC Impedance Plots 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 w^{1/2} w-angular frequency; Z' vs w Z"; Z' vs Z"/w; Cot (phase) vs w ½.
- Digisim or equivalent Cyclic Voltammetry simulation software. Impedance simulation and fitting software.
- Software should be upgradable Lifetime Free of Charges.

Computer

One computer with supporting software (System configuration: Core- i3 Processor, 8GB RAM, 1TB SSD, 19" LED Monitor, Keyboard, Mouse & Speaker).

Installation & Training:

Installation and Training to be provided at installation site. Installation requirement to be submitted in advance.

Warranty:

One Year

+ One Year AMC free

Manuals:

One set of manuals with all details of parts should be supplied.

Spin coating unit

Spin Coater Specifications

- Micro-controller based; Controlling option: PC GUI mode and Standalone mode (Keypad and LCD)
- Programable Speed Range: 100-10,000 R.P.M. [based on a Glass Substrate of Dimension 1.5" (L) X 1" (W) & Thickness 0.05"]; <±1% Error across the Full Speed Range
- Programable Acceleration: 40-5,000 R.P.M./sec [based on a Glass Substrate of Dimension 1.5" (L) X 1" (W) & Thickness 0.05"]
- Programmable Controlling Duration: 1-9,999 sec/step
- Unlimited Programs in PC GUI Mode & 15 Preset Editable Programs in Standalone Mode; Unlimited Steps/Program in PC GUI Mode & 20 Steps (Maximum)/Program in Standalone Mode
- Real-time Display of R.P.M., Timing & Program Status in PC Software in PC GUI Mode & on 4 Line LCD Console in Standalone Mode
- Real-time Display of R.P.M. vs. Time Graph in PC Software in PC GUI Mode
- Non-volatile Program Memory
- Input & Controlling through PC Software in PC GUI Mode & through Key-pad in Standalone Mode
- PTFE coated Working Chamber of 8" Diameter
- User-friendly PC Software & Firmware Interface
- Integrated Power On/Off Switch with Indicator
- Integrated Vacuum release Switch with On/Off Indicator: Yes, Both modes

Calibration Option: Yes, Both modes; Warm Up Option: Yes, Both modes Spill-drainage Facility; Experimental Sample Details Saving Provision (in PC GUI mode); N2 & other Inert Gas Purging Port Transparent Photo-resist Safety Lid over the Working Chamber; In-situ Sample Dispensing Port on the Transparent Photo-resist Safety Lid Power: 230V AC 50H; Wattage: 120 W (Maximum) **Vacuum Pump Specification** Power Input: Indian Standard; Power: 80 W [Maximum]; Overflow Protection available Vacuum: -735 mm/Hg. [Maximum] Flow Rate: 6-20 l/min; Motor Rotation: 1,450 R.P.M; Capacitance: 3 μf 450 V; Horse Power: 1/6 HP Net Weight: 5.2 kg; Port Thread: 0.3125"; Noise Level: 52 dB Current: 0.4 A [Maximum] Moisture Trap available; Vacuum Regulator available **Computer Specifications** Core-i5 processor, Gen 10, RAM 8 GB, 512GB SSD, USB Port 2.0(2). Warranty: One Year+ AMC Manuals: One set of manuals with all details of parts should be supplied. Hot air oven Capacity: 255 Ltrs, Size: 24" x 18" x 36" (600 x 450 x 900 mm). • Power supply 220/230V AC. Temperature range: Ambient to 250°C ± 2° C Temperature controlled by Hydraulic Type Capillary Thermostat and temperature reading will be on of "L" shape thermometer fitted at the front of the cabinet HEATING: Heating elements are made from high grade (Kanthal ISI) Resistance wire. 5KVA Servo Controlled Stabilizer, Input voltage Range: 170-208 V (approx.) Warranty: One Year+ AMC Manuals: One set of manuals with all details of parts should be supplied. Microcentrifuge Rotor Capacity: 12 place x 1.5/2 ml microtubes Maximum speed RPM/RCF (g): 15000 rmp/15596 g Display: Backlit LCD display Imbalance detection auto cut-off Noice < 60db Motor: Brushless DC motor Time setting: 1 to 999 mins Speed: 500 to 15000 RPM Warranty: One Year+ AMC Manuals: One set of manuals with all details of parts should be supplied.

RESPONSE FORM

The form should be typewritten in uppercase (or written in capital letters) and completed clearly and accurately ensuring that all questions are answered. The numbers below correspond to item numbers on the registration form.

SECTION 1: COMPANY DETAILS AND GENERAL INFORMATION

1. NAME OF COMPANY/INSTITUTION:					
2. STREET ADDRESS: 3. P.O. BOX and MAILING ADDRESS: ——————————————————————————————————					
4. TEL NO:6. E-MAIL ADDRESS:					
8. CONTACT NAME AND TITLE:					
9. PARENT COMPANY (Full legal name):					
10. SUBSIDIARIES, ASSOCIATES AND/OR OVERSEAS REPRESENTATIVE(S): (Attach list, if necessary)					
11a. NATURE OF BUSINESS (Tick one box only): Manufacturer: Authorized Agent: Consulting Company: Other (specify):					
11b. TYPE OF BUSINESS: Corporate/Limited: Partnership: Government Agency: University: Other (specify):					
12. YEAR ESTABLISHED: 13. NUMBER OF FULL-TIME EMPLOYEES:					
14. TRADE LICENCE NUMBER:					

TERMS AND CONDITIONS:-

GENERAL INFORMATION

The tender bids duly complete in all respects, along with the necessary documents should be submitted to the Registrar, Bodoland University. The Technical Bids so received, shall be opened on 04/03/2024 at 12.00 noon in the Office of the Registrar, Bodoland University in the presence of the representatives of the bidders. The Financial bid of the Bidders shall be opened on the same date or at a later date to be intimated to the bidders whose Technical Bids are found to be valid. Right to reject any or all Tenders, without assigning any reason thereof is reserved by the authority of Bodoland University.

Terms and Conditions of Supply:

- 1. All the manufacturers/ distributors should also give a brief profile about their company and the facilities available with them of the quoted items. Their turnover and important firms/ Government Institutes/ P.S.U. etc. to which they are supplying quoted items, should also be mentioned.
- 1. The last date and time for the acceptance of the bids is 04/03/2024 up-to 12:00 noon.
- 2. Suppliers should be submitted the following documents along with their quotations:

a. Technical Bid:

Cover-I

- (a) Unconditional Covering Letter,
- (b) The contractor's experience of successful execution of similar works having value mentioned in the N.I.T. The details of work order and work completion certificate from the executing officers may be furnished for establishing eligibility.
- (c) PAN, GST Registration, ESI certificate, EPF certificate, Labour License, Trade License, Bank balance sheet, experience certificate Income Tax Clearance Certificate, GST Registration Certificates etc.
- (d) Tender documents.
- (e) Tender fee deposited receipt.
- (f) Non black listed certificate in stamp paper.
 - b. **Financial Bid :** The Tender document with Bill of Quantities, duly priced and the Cover-II enclosed set of Tender Drawings duly signed.

- (c) Technical specifications offered by the Supplier.
- (d) Technical compliance table
- (e) Technical literature regarding the offered products including diagrams.
- 3. The rates should be mentioned in the Schedule attached with the Tender Document. Each page of the tender shall be signed in full and stamped with the seal by the supplier. The supplier must clearly state in what capacity he or she is signing the Tender.
- 4. The supplier shall submit the tender in two envelopes. The first envelope (Technical Bid) shall contain all the documents referred to in above and sealed. The second envelope (Commercial Bid) shall contain the Schedule, in which the supplier shall register the rates of supply. The second envelope shall also, likewise, be sealed. Both the envelope then should be put together, and should be sealed in an envelope on which the cut out slip provided as part of the tender document should be pasted, and should prescribe time and date. The Technical Bid shall be opened first to ensure that suppliers have submitted all the requisite documents. If the Technical Bids are not in order or are deficient in some respect, the commercial bids in respect of such tenders shall not be opened. The date and time of opening the financial bids shall be announced one day after opening all the Technical bids.
- 5. Supplier should read carefully all the instructions and terms and conditions, etc before registering rates in prescribed schedule of the tender. Taxes and duties etc. should be shown separately.
- 6. The Technical Documents shall be opened, at 12:30 P.M. on 04/03/2024 or on the next working day if the offices of the University remain closed due to any reason.
- 7. Technical specifications of the instruments/equipments are given separately.
- 8. The delivery and installation should be completed within 30 days or as specified from placing of the order. No extension shall be granted to the contractors/suppliers for the period of delivery, under any circumstances.
- 9. If the supplier fails to deliver the article as per the delivery schedule, the University shall be free to procure the balance/undelivered supply, at the risk and cost of the supplier, from other such suppliers.

- 10. The goods, articles, materials supplied by the supplier shall be accepted after inspection by an officer authorized by the competent authority. No articles/materials which do not conform to the specifications laid down in the terms and conditions or damaged in transit shall be accepted.
- 11. The bills of the suppliers shall be paid by the University after all the materials/articles/equipments have been received and installed, inspected.
- 12. Supplier/Vendor must submit Compliance statement in tabular form comparing each specification of the quoted item with that given in the Tender Document
- 13. The bidder has to install all the required applications provided by the user and also has to provide at least 1 (one) day training to the user including their group.
- 14. This tender document is not transferable.
- 15. In the event of any breach of the terms and conditions of the supply, the University may terminate the contract placed with the supplier and forfeit the security deposit of the supplier.
- 16. The Bidder shall have to be an Original Equipment Manufacturer (OEM) certificate of the products.
- 17. The bidder should have average annual sales turnover of Rs.20.00 lakh or more during the last three financial years ending 31st March, 2023. Attach firm's last 3 years audited profit and loss Account balance sheet duly audited by C.A.
- 18. The quantity as mentioned may be increased or decreased at the time of placing Order as per requirement.
- 19. Bidders are advised to study all technical and commercial aspects, instructions, forms, terms and specifications carefully in the tender document. Failure to furnish all information required in the Tender Document or submission of a bid not substantially responsive to the Tender document in every respect will be at the bidder's risk and may result in the rejection of the bid.
- 20. If the Supplier/Firm could not meet up the standard of the work or not up to the satisfaction of the authority during execution and supply, the authority would not liable to release the payment for partially or whole of the work, as desired, whose decision would be the final. The Supplier/Firm should be bound to accept the decision without any claim thereof.

21. Deleted.

22. Any dispute between the Parties on matters concern shall be resolved by mutual discussion and legal recourse shall be only as last resort, in which case the matter shall be submitted for Arbitration subject to Kokrajhar Jurisdiction only.

23. Note:

- 1. (a) Bidders are advised to read carefully the Terms and Conditions of supply before recording the rates in this Schedule. Bidder should sign all the relevant documents along with Tender documents and should be submitted with the technical bid. Before submission of the Tender, Bidder shall sign each page of the tender form/document and all of its relevant papers with date. The additional alternative and or subtractive clause (if any) shall also to be signed by the bidder, otherwise Bid documents may be treated as cancelled.
 - (b) No erasures or overwriting shall be allowed, unless they are authenticated under the full signature and the seal of the bidder.
 - (c) The University reserves the right to:
- (i)Accept/reject any/all tenders without assigning any reason thereof.
- (ii)Revise the quantities at the time of placing the order without change in the rate quoted by the bidder.
- (iii) Add/modify/relax or waive any of the conditions stipulated in the tender document whenever deemed necessary.
- (iv)Award the contract to one or more bidders for the items covered by the tender.

Declaration

1. I declare that all the terms and conditions stated in the Notice Inviting Tender are acceptable to me/us and I/We shall abide by the same in case the contract is

awarded to me/us.

2. I also declare that the specification given would strictly be maintained by me/us.

3. I/we understand that non-fulfillment and/or partly fulfillment of specification as

made is liable for penalty as deemed fit and necessary by the University authority.

4. All the particulars furnished by me/us in the bid are true to the best of my/our

knowledge.

5. I/We will also abide by the conditions that should be stipulated during the period

of contract.

6. The decision of the authority will be accepted by me/us during and after the bid

evaluation process, without any assigning reason thereof.

Date:	(Signature of the Bidder)	
	Name:	
Place:		
	Contact Number:	

Address:

Financial bid:-

Sl. No	Particulars	Quantity	Rate	Amount in Rs. Including all taxes.
1	Electrochemical Workstation	01		
2	Spin coating unit	01		
3	Hot air oven	01		
4	Microcentrifuge	01		

Signature of supplier with seal