

**TENDER DOCUMENT
INVITATION FOR
TECHNICAL AND FINANCIAL BIDS**

SCME, NUST Islamabad, Pakistan

Tender Reference # 803/02/Proj Eqpt/SCME/2026-27

**(4 x Project Equipment for SCME Campus headed by Dr. Muhammad Sajid
PI-ChE Dept)**

1. Bids are invited from authorized well-established suppliers, OEMs or distributors having NTN / Sales Tax registration with active ATL Status in FBR record with modern facilities for supply and delivery of **4 x Project Lab Equipment to SCME-NUST Islamabad**". Complete specifications and required quantities have been mentioned and attached as **(Annex-A)**.

2. **SUBMISSION OF QUOTATIONS/ BIDS**

Single Stage-Two Envelopes (Rule 36-b PPRA) bids must be submitted in soft through EPADS. All reference to manual processes and manual submission of tender should be deemed to have been replaced with the processes and procedures defined in E-PAK Procurement Regulation, 2023. However, sealed hard copy of technical bid complete in all aspects along with earnest money in separate envelop must be submitted at the time of technical bid opening.

3. **QUOTATIONS & SINGLE STAGE -TWO ENVELOPE**

- a. Bids must include quotation; detailed specifications and all other relevant technical details of the quoted item(s) as attached at **Annex "A"**.
- b. Financial quotations must indicate rates for each item separately and include all applicable taxes i.e. with GST etc. Any exemptions in taxes by the federal government (where applicable) must also be indicated.
- c. Financial Quotation must be submitted in the format as per attached at **Annex-B** at your company letterhead.
- d. Firms must submit **earnest money (refundable) value PKR 200,000/-** with the financial bid as pay order / bank draft in favor of Principal SCME- NUST, Islamabad. Original Pay Order / Bank Draft must be provided at the time of technical bid opening.
- e. Bidder must submit authorization letter as evidence of their level of relationship (i.e. partner, distributor and reseller) with the Principle. This letter is to be obtained from the Original Equipment Manufacturer (OEM) and should be valid for delivery of this contract.
- f. Detailed bids are to be submitted on Firm's letter-head duly signed by an authority/Signatory of the Firm. It must also include following documents pertaining to the Firm:



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- (1) Record of taxes deposited in last one year / Audit Report.
 - (2) Income and Sales tax certificates.(Copies)
 - (3) Company profile.
 - (4) Bank statement for last six months / Bank credit limit / Balance Sheet.
 - (5) Where to subject services provided in last 2 years.
 - (6) Quality Certification(s) - if any.
 - (7) OEM's Authority letter/authorization letter if applicable.
 - (8) Non-black listing record certificate on stamp paper.
 - (9) Dully filled-in and signed annex "C, D, E, F & G" (Attached with this document)
- g. Bidders are to provide quotes with validity at least 120 days from the date of opening of tender, in case of need arises.
 - h. All items should be quoted with **02 year warranty**, support and upgrade period for the product.
 - i. Selected firm shall provide "**Performance Guarantee (PG)**" equal to **10% of the contracted value** in the form of CDR / Bank Draft valid for the entire warranty period or cut from bill at the time of payment.
 - j. SCME-NUST reserves the right to reject partial quotes.
 - k. Bidding Documents processing fee must be provided physically in original at the time of technical bid opening in the shape of Pay Order / Bank Draft of **Rs. 3,000/-**(non-refundable) in favor SCME-NUST H-12, Islamabad. (Mandatory)

4. **COST EFFECTS:** The total cost of each quoted item (where ever applicable) will be distinctly broken down as under
 - a. Item Price and separate GST.

5. **GENERAL INSTRUCTIONS FOR FIRMS/SUPPLIERS**

- a. The financial bid should be quoted on FOR Islamabad basis all taxes included. The supplier will be bound to deliver the ordered at SCME-NUST Lab Islamabad at his own expense.
- b. Following must be mentioned in quotations separately: (if applicable)
 - (1) Taxes i.e. custom duty, excise duty, income tax etc.
 - (2) Insurance charges
- c. All stake holders would maintain secrecy / confidentiality of information. Mutual information shall not be shared with unauthorized firm(s) / person(s).
- d. The completed work will be verified as per SCME- NUST standards. Salient features are as follows: -
 - (1) Complete Documentation & Labeling.

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- (2) Registration of SCME-NUST as user and customer against all procured items with the manufacturer (where applicable).
 - (3) Conduct and quality of training if required.
 - (4) The bidders must meet our specifications requirements or equivalent.
 - (5) Firms are to ensure that "End of Sale" and "End of Life" has not been declared against quoted items.
- e. NUST reserves the Right to purchase at risk-and-expense of Supplier, if the selected supplier, fails to complete the order, or delays to supply within the quoted delivery time or extended time given by SCME-NUST, supplies substandard / low quality items and may resort to the following: -
- (1) Purchase single, all or unsupplied quantity of item(s) as the case may be on supplier's Risk and Expense.
 - (2) Forfeit Performance Guarantee / Earnest Money.
 - (3) Initiate administrative action.
- f. Only one Representative from each bidder would be allowed to witness the opening of tenders, without conferring any privileges. No mobiles phones / recorders would be allowed inside the bid-opening room.
- g. Contract Agreement shall be assigned with the successful bidder(s), as per NUST policy. The provision of stamp paper (Rs 100/-) shall be the responsibility of firm which shall be delivered to SCME-NUST for award of contract within 3 days before issuance of Purchase Order.
- h. In case of dispute, decision of Pro-Rector / Rector-NUST shall be final and binding on both the parties.
- i. Supplier shall be responsible for all the clearances and transportation of sample or the bulk up to / within NUST premises and provisioning of loading/ un-loading labor would be the responsibility of the supplier.
- j. Subletting of the bid will disqualify the successful vendor.
- k. Submission of quotations / bids through email / fax is not admissible.
- l. Integrity Pact envisaged in PPRA rules will apply.
- m. Bids can be withdrawn by the firm within three working days of its submission, but not more than one week.
- n. Bids shall be rejected if rate(s) are incomplete, unclear, conditional, altered or ambiguous. Multiple options of the items are allowed.
- o. Bids shall be rejected if required detail of specifications, brand, origin, make, model, warranty, support period etc are not clearly quoted / mentioned. No margin shall be given on this account.
- p. Late submissions would not be entertained at any cost.



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- q. Moreover, Tender Notice is only an invitation to offer quotations / bids. The competent authority may reject all quotations / bids or cancel the Tender as per rules laid down by PPRA.
- r. The fitting / installation charges (if any) to be included in the bid price. No additional charges will be accepted during the installation / commissioning.

6. **DELIVERY PERIOD.** The delivery time should not be more than 8 to 12 weeks. (Relaxation may be granted as per merit of the case).

7. **PENALTY & LATE DELIVERY.** In the event of any delay in delivery, the firm shall inform SCME before expiry of such period giving reasons / justification for delay. However, purchaser reserves the right to take following actions:-

- a. Evaluate the request for extension in delivery period as per its merit and may consider extension in delivery period or otherwise.
- b. In case of late delivery for the reasons well within control of the firm, LD charges at the rate of 1% per week but not exceeding 10% of the total value of the undelivered stores / items may be levied.
- c. May cancel the contract and partial deliveries in such case will be forfeited.
- d. The purchaser's decision under this clause shall not be subjected to arbitration.

8. **INSPECTION/TESTING.** SCME Inspection Committee / Faculty will inspect and test the supplied tools/items as per specifications and accessory list after arrival at the premises. All tests if applicable would be conducted in the presence of LETC SCME NUST and test reports/inspection report if required would be signed by both the parties and submitted to SCME-NUST.

9. **TERMS OF PAYMENT.** Payment shall be made after the delivery, installation, commissioning, testing, training, demonstration and formal acceptance of the ordered items (as per the Purchase Order) by NUST, including all standard attachments, accessories or agreed deliverables. **Payment shall be made for 95% of the total contract value upon acceptance, with 5% retained as Performance Guarantee which shall be deducted from the final payment** and released upon completion of the warranty period, provided no pending claims or defects exist. The PG may be submitted in the form of a bank guarantee, cheque, or other approved instrument as per NUST rules. Payment shall be made only after submission of the following documents:



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- (a) Inspection/clearance note duly signed by the relevant Lab Equipment Technical Committee Members or authorized NUST personnel.
- (b) Delivery challan/bill/invoice in triplicate.
- (c) GST invoice and updated ATL/inventory list, if applicable.
- (d) Receipt voucher duly signed by the concerned staff.
- (e) Evidence of applicable taxes, exemptions, or waivers as required by law or NUST policy.

All payments shall be subject to deduction of applicable taxes at source and in case of exemptions, the Supplier shall provide valid supporting evidence to NUST. Payment shall be released within thirty to forty-five (30 to 45) days of receipt of all required documents and acceptance of the goods/services.

10. **BID RECEIPT and OPENING.** Single stage - two envelop method (PPRA-36 (b)) would be adopted for the bid. NUST reserves the right to accept or reject any or all of the bids as per PPRA 33 (a). All tenders will be opened in SCME Conference Room at given Date and Time through online system of E-Pad PPRA.

Sr. No.	Name of Item	Qty	Type of Bid	Bid Submission Last Date & Time	Technical Bids Opening Date & Time	End User
1.	Electrochemical workstation (for full cell assembly)	01	Tender	07 Oct 2026 till 11:00 hrs.	07 Oct Sep 2026 till 11:30 hrs.	Dr. Muhammad Sajid
2.	Battery tester (with 10hz Data record))	01	Tender	-Do-	-Do-	-Do-
3.	Hydraulic coin cell crimper	01	Tender	-Do-	-Do-	-Do-
4.	Precision Disc Punching	01	Tender	-Do-	-Do-	-Do-

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11. The bid opening may be postponed under unforeseen circumstances. However, in such a case, SCME-NUST will notify all the bidders well in time and communicate next date and time.

12. For technical queries (if any), firms may contact on SCME Email (Dr. Muhammad Sajid" muhammad.sajid@scme.nust.edu.pk at telephone number **051-90855111** for subject **Project Equipment**. The subject of the email should include the PPRA tender reference number for intended action and reply.

13. If the participants are less than three against a Tender SCME-NUST has the right to reject the bids and proceed for re-Tendering.

14. **SOURCE AND NATIONALITY REQUIREMENTS.** The cooperating country for this procurement is Pakistan. **The firms must not quote or supply** any commodities or services that are manufactured or assembled in, shipped from, transported through, or otherwise involving Burma (Myanmar), Cuba, Iran, North Korea, Sudan, Syria, & India.

15. **AFTER SALE SERVICE.**

- a. Supplier will guarantee the availability and the supply of Essential Maintenance Spares required to keep the equipment operational for a period of **Five (5) years** from the date of inspection & commissioning of equipment.
- b. The firm would provide details of any improvements / modifications in the supplied equipment during warranty period / currency of the contract if carried out by the OEM.
- c. Manual and Documents shall be provided with the equipment.

16. **WARRANTY.** Standard warranty service and repair within the cooperating country is required for all items under this procurement. The warranty coverage must be valid on all items for a minimum of **02 (two) years** after their successful supply, installation and commissioning.

17. **DEMURRAGE / LOSS OF CARGO.** If the cargo is lost due to any omission in the preparation of bill of lading, airway bill, the supplier will be responsible through insurance, for making the loss good. Supplier would be responsible for the correctness of all shipment documents. In case of failure on their part in this regard, the firm would be responsible for any demurrage or extra charges.

18. **SHIPPING/DISPATCH INSTRUCTIONS/.** Shipping will be made by the supplier preferably through the National Vessel / Airline. Shipment by

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INDIAN or ISRAELI Vessel / Airline is not allowed. The partial shipment of stores shall also be not allowed. Complete stores will be shipped as one consignment except where countries / OEMs are different and for which prior approval from SCME-NUST has been sought.

19. **TAXES.** Being an educational institution and working under umbrella Pakistan Enhanced Partnership Agreement, SCME-NUST is exempted from certain taxes. Therefore, all such taxes are to be indicated and items are to be supplied in the name of NUST, Islamabad so that such taxes are not levied. All applicable taxes against which NUST is not exempted shall be applied (In case of C&F tender).

20. **ORDERED QUANTITY.** SCME-NUST reserves the right to: -
a. Change the required quantity, time period etc. while placing purchase order or decrease currency of contract.
b. Reject any bid or procurement process as per "PPRA" rules.
c. Make / seek clarification at any time as per rules.

21. **PACKING & TRANSPORTATION.** All items shall be individually packed in standard packing provided by the manufacturer for onwards transportation and delivery. Any item damaged during transportation will be replaced by the bidders at their cost including freight and insurance charges.

22. **DEFAULT.** If the firm fails to effect or keep in force any of the insurances referred to in the contract or fails to provide satisfactory work, SCME-NUST may, without prejudice to any other right or remedy, terminate the Purchase Order and cancel contractor rights or remedy to recover the amount paid in advance (if any). If the vendor fails to deliver items/ services as per approved samples and specifications, SCME-NUST reserves the right to terminate the contract.

23. **TECHNICAL USER MANUAL/ PUBLICATION.** Successful vendor(s) will be bound to provide subject material to SCME-NUST at the time of delivery.

24. **TOOL KITS/ ACCESSORIES / OPERATIONS & MAINTENANCE MANUALS.** Standard sets of General Tool kit / accessories/ Operations and Maintenance manuals of the equipment shall be supplied by the firm along with equipment within the quoted price.

25. **ARBITRATION.** In case of any dispute, case shall be reviewed by SCME-NUST Complaint Committee" and Pro-Rector Academics / Rector NUST shall be final and binding on both the parties without recourse to legal action.



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26. **FORCE MAJEURE.** The Supplier shall not be held liable in the event of their failure to comply with the delivery schedule of the ordered items(s) for reasons of Force Majeure including but not limited to: war and other instabilities invasion, act of foreign enemies, mobilization or embargo, civil war etc.

27. **GRIEVANCES.** Grievances (if any) by any vendor may be sent / addressed to Principal, SCME-NUST within 10 days after results announcement.

28. **EVALUATION CRITERIA.** Criteria will be as per **Annex-G** of this document.

29. **INSURANCE /SHIPMENT CLEARING & LOCAL TRANSPORTATION CHARGES**

Insurance, shipment clearing and local transportation charges will be made by the supplier and all financial charges will be paid by supplier/Firm.



**President Local Purchase Committee
(SCME-NUST)
(Dr.Tayyaba Noor Associate ChE Dept)**



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Format of Technical Quotation

Date: 27-08-2026

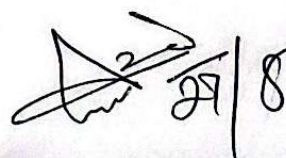
To,
The President of Local Purchase Committee
SCME, NUST H-12 Islamabad

Subject: Purchase of Lab Equipment

Sr. No	Name of Item	Specifications	Country of Origin	Qty Req	Remarks
01	Electrochemical workstation (for full cell assembly)	• Bi potentiostat/galvanostat complete unit including software and operating system. • Dual-channel measurements for all electrochemical tests • 2- or 3- or 4-electrode configuration • Floating (isolated from earth) or earth ground • Maximum potential: ± 10 V for <u>both channels</u> • Maximum current: ± 250 mA continuous (sum of two current channels), ± 300 mA peak • Compliance Voltage: ± 13 V • Potentiostat rise time: < 1 s, 0.8 s typical • Applied potential ranges: ± 10 mV, ± 50 mV, ± 100 mV, ± 650 mV, ± 3.276 V, ± 6.553 V, ± 10 V • Applied potential resolution: 0.0015% of potential range • Applied potential accuracy: ± 1 mV, $\pm 0.01\%$ of scale • Applied potential noise: < 10 V rms • Measured current range: ± 10 pA to ± 0.25 A in 12 ranges • Measured current resolution: 0.0015% of current range, minimum 0.3 fA • Current measurement accuracy: 0.2% of current range 1e-3A/V to 1e-6 A/V, 1%	USA/UK/ Germany /Equivalent	01	Delivered Duty Paid (DDP) PKR Basis



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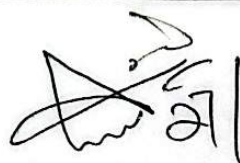
otherwise

- Input bias current: $< 20 \text{ pA}$

Required Functions:

The workstation must have dual channel following functions

- ✓ Cyclic Voltammetry (CV)
- ✓ Linear Sweep Voltammetry (LSV)
- ✓ Staircase Voltammetry (SCV)
- ✓ Tafel Plot (TAFEL)
- ✓ Chronoamperometry (CA)
- ✓ Chronocoulometry (CC)
- ✓ Differential Pulse Voltammetry (DPV)
- ✓ Normal Pulse Voltammetry (NPV)
- ✓ Differential Normal Pulse Voltammetry (DNPV)
- ✓ Square Wave Voltammetry (SWV)
- ✓ AC Voltammetry (ACV)
- ✓ 2nd Harmonic AC Voltammetry (SHACV)
- ✓ Fourier Transform AC Voltammetry (FTACV)
- ✓ 2nd Harmonic AC Voltammetry (SHACV)
- ✓ Amperometric i-t Curve (i-t)
- ✓ Differential Pulse Amperometry (DPA)
- ✓ Double Differential Pulse Amperometry (DDPA)
- ✓ Triple Pulse Amperometry (TPA)
- ✓ Integrated Pulse Amperometric Detection (IPAD)
- ✓ Potentiostatic Intermittent Titration Technique (PITT)
- ✓ Bulk Electrolysis with Coulometry (BE)
- ✓ Hydrodynamic Modulation Voltammetry (HMDV)
- ✓ Sweep-Step Functions (SSF)
- ✓ Multi-Potential Steps (STEP)
- ✓ AC Impedance (IMP)
- ✓ Impedance - Time (IMPT)
- ✓ Impedance - Potential (IMPE)
- ✓ Chronopotentiometry (CP)
- ✓ Chronopotentiometry with Current Ramp (CPCR)
- ✓ Multi-Current Steps (ISTEP)
- ✓ Galvanostatic Intermittent Titration Technique (GITT)





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- ✓ Potentiometric Stripping Analysis (PSA)
- ✓ Electrochemical Noise Measurement (ECN)
- ✓ Open Circuit Potential - Time (OCPT)
- ✓ Galvanostat
- ✓ RDE control (0-10V output)
- ✓ Full version of CV simulation and fitting program
- ✓ Limited version of CV simulation and fitting program
- ✓ Impedance simulation and fitting program
- ✓ iR Compensation
- ✓ External Potential Input

Electrometer:

- Reference electrode input impedance: 1e13 ohm
- Reference electrode input bandwidth: 10 MHz
- Reference electrode input bias current: ≤ 10 pA @ 25°C

Waveform Generation and Data

Acquisition:

- Fast waveform update: 10 MHz @ 16-bit
- Fast data acquisition: dual channel 16-bit ADC, 2,500,000 samples/sec simultaneously
- External signal recording channel at maximum 1 MHz sampling rate

Experimental Parameters:

- CV and LSV scan rate: 0.000001 to 15,000 V/s, two channels simultaneously
- Potential increment during scan: 0.1 mV @ 1,000 V/s
- CA and CC pulse width: 0.0001 to 1000 sec
- CA minimum sample interval: 0.4 us, both channels
- CC minimum sample interval: 1 sec
- True integrator for CC
- DPV and NPV pulse width: 0.001 to 10 sec
- SWV frequency: 1 to 100 kHz

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- i-t sample interval: minimum 1 s, both channels
- ACV frequency: 0.1 to 13 kHz
- SHACV frequency: 0.1 to 5 kHz
- FTACV frequency: 0.1 to 50 Hz, simultaneously acquire 1st, 2nd, 3rd, 4th, 5th, and 6th harmonics ACV data
- IMP frequency: 0.000001 to 3 MHz
- IMP amplitude: 0.00001 V to 0.7 V rms

Other Features:

- Positive-Feedback and Current interrupt iR compensation
- Current measurement bias: full range with 16-bit resolution, 0.003% accuracy
- Potential measurement bias: $\pm 10V$ with 16-bit resolution, 0.003% accuracy
- External potential input
- Potential and current analog output
- Programmable potential filter cutoff: 1.5 MHz, 150 KHz, 15 KHz, 1.5 KHz, 150 Hz, 15 Hz, 1.5 Hz, 0.15 Hz
- Programmable signal filter cutoff: 1.5 MHz, 150 KHz, 15 KHz, 1.5 KHz, 150 Hz, 15 Hz, 1.5 Hz, 0.15 Hz
- RDE control output: 0-10V (corresponding to 0-10000 rpm), 16-bit, 0.003% accuracy
- Digital input/output lines programmable through macro command
- Flash memory for quick software update
- Serial port or USB port selectable for data communication
- Cell control: purge, stir, knock
- Maximum data length: 256K-16384K selectable
- CV simulation and fitting program, user defined mechanisms
- Impedance simulation and fitting program

Mandatory Requirement/Accessories:

- Operating program/software with lifetime license/workability.
- Integrated UPS with at least 1 hour

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- power back and replaceable batteries.
- Integrated computer system with ≥ 1 TB storage (minimum i7).
- Relevant electrodes for electrochemical testing
- Likely companies: GAMRY, CHI, or equivalent
- Vendor should be authorized distributor
- Import documents should be submitted at the time of bills and delivery.

Warranty:

- At least two years warranty.

2. Battery tester
(with 10hz Data record)

- Complete battery testing system including tester(s), module, software and operating system.
- The system shall be a programmable multi-channel battery testing system suitable for controlled charging, discharging, pulse testing, cycling and DCIR evaluation of battery cells/devices.
- The system should have ≥ 16 independently controllable channels.
- Each channel shall provide independent control of voltage and current parameters and shall support four-wire electrical connection for measurement and sampling.

Electrical Supply

- Input power: AC 220 V $\pm 10\%$, 50 Hz
Maximum input active power: 40 W A/D resolution: 26 bit
- D/A resolution: 19 bit
- Input impedance: ≥ 1 G Ω

Voltage Control

- Programmable constant-voltage operation: 10 mV to 5 V
- Minimum discharge voltage: -5 V
- Voltage accuracy: $\pm 0.01\%$ FS
- Voltage stability: 0.01% FS

Current Control

Four programmable current ranges:

- Range 1: 0.2 μ A–0.2 mA

USA/UK/
Germany
/Equivalent

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Delivered
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(DDP)
PKR Basis

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- Range 2: 0.2 mA–2 mA
- Range 3: 2 mA–12 mA
- Range 4: 12 mA–110 mA
- Current accuracy: $\pm 0.01\%$ FS; current stability: 0.02% FS.
- Constant-voltage cut-off current: 0.1 μ A / 1 μ A / 10 μ A / 0.1 mA for ranges 1–4 respectively.

Channel Output

- Maximum output power: 0.5 W/channel.
- Current response time (10% FS to 90% FS): ≤ 1 ms.
- Constant-current and constant-voltage sources shall utilize a double closed-loop control structure.

Charging/Discharging Functions

- Support constant-current, constant-voltage, constant-current/constant-voltage and constant-power charge/discharge.
- Charge/discharge termination conditions shall include voltage, current, relative time, capacity and negative ΔV .

Pulse Testing

- Support constant-current and constant-power pulse charging/discharging.
- Minimum pulse width: 500 ms. A single pulse working step shall support at least 38 different pulses.
- Continuous charge/discharge switching shall be supported within a pulse step. Pulse termination shall support voltage and relative time.

DCIR Testing

The system shall provide DCIR testing with support for customized measurement/sampling points for DCIR calculation.

Cycling / Recurrence Testing

- Programmable circulation range: 1–75000 cycles. Up to 270 steps per individual cycle.
- Nested cycle programming of up to 15 levels.

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Data Acquisition and Recording

- Minimum recording interval: 100 ms; recording frequency: 10 Hz. Supported time format: HH:MM:SS:MS.
- Maximum working-step time capability: up to 420 × 24 hours.

Protection and Safety

Power-loss data protection; offline testing; programmable voltage/current limits; capacity limit; programmable delay-time protection; leakage current $\leq 0.005 \mu\text{A}$.

Measurement / Connection

Four-wire voltage/current measurement; independent channel control; system noise 45 dB; protection rating IP20.

Software and Communication

TCP/IP communication; centralized test-data management/database; MySQL database architecture or equivalent centralized database functionality; Windows 7 / Windows 10 or later compatibility; Excel 2003, Excel 2010 and TXT export; minimum server disk configuration 1 TB.

Environmental Requirements

- Operating temperature: $-10^{\circ}\text{C} - 50^{\circ}\text{C}$.
- Calibration temperature normally $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$; accuracy drift: 0.001% FS/ $^{\circ}\text{C}$.
- Storage temperature: $-10^{\circ}\text{C} - 50^{\circ}\text{C}$.
- Operating RH: $\leq 70\%$ non-condensing.
- Storage RH: $\leq 80\%$ non-condensing.

Physical Configuration

- 20-inch rack-mount type; 1U; approximate dimensions (W × D × H): 443 × 310 × 43 mm.
- Fixture configuration shall support polymer-type and crocodile-type/polymer fixtures as applicable.

Software Running Module/System

- Software running module (Mid machine) which can operate ≥ 5 battery testing machines (testing unit) simultaneously.
- It should be compatible with different systems of the quoted brand.

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		<u>Mandatory Requirement/Accessories:</u> - Operating program/software with lifetime license/workability. - Integrated UPS with at least 1 hour power back and replaceable batteries. - Integrated computer system with ≥ 1 TB storage (minimum i7) and high-capacity printer. 24 pieces of coin cell clamps with 0.2-meter cables and 03 with at least 03-meter cables. - Vacuum oven with vacuum pump ≥ 24 ltr (Temp: ≥ 200 °C and timer control) operated at standard supply conditions to test the batteries at different temperatures. - All standard accessories including crocodile fixtures, polymer fixture, PCB buckle fixture. - Likely companies: ACCERETECH , EUROPA, or equivalent - Vendor should be authorized distributor - Import documents should be submitted at the time of bills and delivery. <u>Warranty:</u> At least two years warranty.			
3.	Hydraulic coin cell crimper	- Automatic/semi-automatic multi-Coin Cell Crimping Machine. - Laboratory-grade multi coin-cell crimping/sealing machine suitable for rechargeable Zn/Li-ion coin-cell research and assembly. - Hydraulically actuated precision crimping mechanism with automated control and repeatable sealing force. - Minimum compatibility with CR2016, CR2025 and CR2032, with interchangeable tooling/dies for other standard coin-cell sizes. - Dedicated precision tooling for CR2032 coin cells shall be supplied as standard. - Max. 8 metric Tons hydraulic pump with automatic pressure relief	USA/UK/ Germany / Equivalent	01	Delivered Duty Paid (DDP) PKR Basis

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- Max.200 Kg/cm² on CR20XX series coin cell.
- Crimping stroke: ≥ 45 mm.
- Crimping operations shall provide consistent and repeatable sealing pressure between successive cells.
- Tooling: Precision-machined, corrosion-resistant interchangeable dies and tools which should be replaceable without modification of the machine.
- Suitable for operation inside an inert-atmosphere glove box using high-purity nitrogen or argon.
- Design shall minimize risk of cell deformation, short-circuiting, or damage during crimping.
- Rigid laboratory-grade metal construction suitable for continuous lab research for benchtop/glove-box-compatible construction.
- Suitable for coin-cell assembly involving Zinc/Sodium/potassium/lithium-ion battery materials, electrolytes, electrodes, separators and related electrochemical research.

Mandatory Requirement/Accessories

- Spare CR2032 die/tooling, pressure regulator/control components and operating manual shall be included.
- 316ss full sets CR2032 coin cell full cell battery cases for Zn Ion batteries with O ring spacer spring for ≥ 500 batteries.
- Manufacturer's original technical datasheet, user manual, model number, warranty certificate and certificate of origin shall be supplied.
- Equipment shall be new, unused and of current production.
- Bidders should provide manufacturer's documentary evidence for each mandatory specification, brand and model.

Warranty:

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	At least two years warranty.			
Precision Disc Punching Machine	- Automatic/semi-automatic/manual precision laboratory disc punching/cutting machine(s) with guided linear movement for preparation of circular electrode and separators for lab scale coin-cell battery assembly. - Selectable range between Ø3–40 mm. - Tools and dies shall support preparation of electrode and separator discs for CR2016, CR2025 and CR2032 coin cells. - Material thickness: Shall accommodate suitable electrode/foil and separator materials in the approximate range of 0.005–1.0 mm. - Separator capability: Shall be capable of clean punching of thin polymer separator films, including films below 50 µm, subject to material properties. - Cutting shall produce clean circular discs with minimal burrs, ragged edges, dents, deformation or delamination. - Punching system should provide repeatable disc dimensions suitable for laboratory coin-cell assembly. - Effective punching stroke: ≥45 mm. - Die alignment: Upper and lower cutting components shall maintain accurate coaxial alignment throughout the punching stroke. - Suitable for battery electrode sheets/foils, metallic current collectors, coated electrodes and polymer separator films. - Rigid laboratory-grade construction using corrosion-resistant materials suitable for laboratory and glove-box environments. - Cutting area and dies shall permit straightforward cleaning and shall minimize retention of punched material/debris. - Cutting dies shall be manufactured from	USA/UK/ Germany /Equivalent	01	Delivered Duty Paid (DDP) PKR Basis

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hardened, wear-resistant precision tool material suitable for repeated laboratory punching.

- Dies shall be replaceable using standard tools without factory modification of the machine.

Mandatory Requirement/Accessories

- Complete set of required dies, die-changing accessories, operating handle and manufacturer's operating manual shall be supplied.
- One set of spare dies must be provided.
- Zinc Metal Foil with purity $\geq 99.9\%$ and size 1400 x 100 x 0.1 mm.
- Automatic/semiautomatic/manual thin film coater with 30-120 μm coat thickness and 10-100 mm width (stainless steel)
- Manufacturer's original technical datasheet, user manual, model number, warranty certificate and certificate of origin shall be supplied.
- Equipment shall be new, unused and of current production.
- Bidders should provide manufacturer's documentary evidence for each mandatory specification, brand and model.

Warranty:

At least two years warranty.

Note:- (1) It is certified that above Eqpt is as per specification according to end user requirement.

Verified By:-

Dr. Muhammad Sajid PI Project ChE Dept

Dr. Muhammad Sajid
Associate Professor
Dept. of Chemical Engineering
SCME, NUST H-12, Islamabad

Counter Signature

Dr. Sofia Javed HoD Research

HoD Research
SCME, NUST H-12,
Islamabad

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Generation Instructions

- i. Quotation font should be **Arial 14**.
- ii. All Machines/Tools/Equipment's warranty will be at least for 2 year including spares.
- iii. Equipment with similar or better specs will be considered.
- iv. All operational machines/equipment supported with functional training program.
- v. All operational machine/equipment supported with installation & functional tests with demonstration of complete operations.
- vi. All operational machines/equipment supported with standard attachments & accessories.
- vii. OEM Certificate.
- viii. Technical literature / brochures.
- ix. Company profile.
- x. Technical networks details.
- xi. Distributor certificate.
- xii. Bid validity: Bids are valid for 120 days.
- xiii. 200,000/ Earnest bid Copy: Bank draft / pay order @ 200,000/ of the total bid value (After applicable Taxes amount) as Bid Security is to be marked as **"Financial Bid"** in the shape of CDR in favor of Principal SCME must be accompanied with financial bid, however, **true copy of the CDR with amount omitted must be attached with the technical bid**

Documents Included (As applicable)

- i. User /operational; Manual
- ii. Technical Manual
- iii. Diagrams/Maintenance Manuals etc.

Spare Parts Supply

The supply of spare parts for at least 5 years of operation will be ensured to be available as per requirement on separate agreement.



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Format of Financial Quotation

Date: _____

To,
The President of Local Purchase Committee
SCME, NUST H-12 Islamabad.

Subject: _____

S.No	Description	Make/Model	A/U	Qty	Unit Price	Total Price in PKR
1						
2						
Total Amount without taxes						
GST @ 18%						
Gross Payable Amount in PKR including all takes						

Note:- GST /IT included or otherwise may be mentioned in the note.

Terms and conditions:

Price validity: Prices are valid for 120 days.

Prices: are included all taxes (if applicable)

Mode of payment: as per Tender Document

Warranty: 12 Months after sales service including spares.

Attachment:

GST & NTN Certificates

Firm profile

Bank statement

Bid Security / Earnest Money @ 200,000 of the total Bid value

Proper letter head (with stamp, sig, telephone, email address & Fax #)



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PROPOSAL SUBMISSION UNDERTAKING

To,
The President of Local Purchase Committee
SCME, NUST H-12 Islamabad

Dear Sir

1. We, the undersigned, offer to provide our services for "Supply of Project Lab Equipment" in accordance with your Tender Document Number dated We are hereby submitting our proposal, which includes technical as well as financial proposal as per instructions.

2. We hereby acknowledge and agree to all terms, conditions, special provisions, and instructions included in the above-referenced tender document. We further certify that the under mentioned firm as well as its Principal (OEM) are eligible to participate in this procurement under the terms of this solicitation and under PPRA regulations.

3. We understand and agree that the decision of the procurement / evaluating committee shall be final and cannot be challenged on any ground at any forum and the procurement / evaluating committee will not be liable for any loss or damage to any party acting in reliance thereon.

4. Furthermore, we hereby certify that, to the best of our knowledge and belief: -

- a. We have no close, financial or familial relationships with any NUST / (SCME-NUST) staff members.
- b. We have no close, financial or familial relationships with any other bidder submitting proposals in response to the above-referred Tender Document.
- c. The prices in our offer have been arrived independently, without any consultation, communication, or agreement with any other bidder or competitor for the purpose of restricting competition.
- d. All information in our proposal and all supporting documentation are authentic and accurate.
- e. We understand and agree to NUST / (SCME-NUST) prohibitions against fraud, bribery, and kickbacks.

5. We hereby certify that the enclosed representations, certifications, and all other submitted documents / statements are accurate, current, and complete.



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Authorized Signature

M/S (Firm's Name)

Dated: _____



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SOURCE AND NATIONALITY COMPLIANCE FORM

1. I, (Name); (CNIC No), (Designation), (Company Name), confirm / do not confirm that the quoted items are not manufactured, grown, produced, shipped from, or otherwise originate from any of the following countries; Burma (Myanmar), Cuba, Iran, North Korea, (North) Sudan, or Syria.
2. Source. "Available for Sale" in the Cooperating Country.
3. In case, the supplier is an authorized sales representative / dealer of the manufacturer in the cooperating country, a brief introduction and copies of dealership certifications are to be presented.
4. In case, the quoted items are included in supplier's standard catalog, the catalog is to be presented.
5. The supplier is to certify that the quoted items are routinely traded or offered for sale in the cooperating country. (YES/NO). Tick whichever is applicable.
 - a. Supplier has an installation base in the cooperating country. (YES / NO)
 - b. If yes provide some details of after sale support points with complete addresses.
 - c. Offered equipment is serviceable by the supplier and has a valid warranty in the cooperating country (YES / NO)
 - d. IF yes, please provide details of capability how equipment is serviceable in cooperating country
 - e. Complete details of type of warranty offered in cooperating country (or attach standard warranty terms and conditions offered).
 - f. Supplier will be responsible of ensuring that after sale service support / spare parts are available will try all efforts to make it available. (Bidder / Supplier agrees with is statement) — Yes / NO
 - g. For items purchased outside of the cooperating country:
 - h. If the items are not "available for purchase" in the cooperating country, identify the "source" of the equipment and describe compliance with the authorized geographic code 937.

The items will be imported from source is

[Describe the "source" countries and compliance with the authorized geo code.]

6. **Nationality:**

Per 22 CFR 228.11, organizations must meet both (a) and (b) below, as well as either (c) or (d):

- a. The supplier is incorporated or legally organized under the laws of a country in the authorized geographic code:

[Describe the supplier's registration status; attach a copy of their business license or official registration to support registration status.]



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b. The supplier is operating as an "ongoing concern" in a country in the authorized geographic code:

c. The supplier is managed by a governing body, the majority of whom are citizens (or lawful permanent residents) of countries in the authorized geographic code:

[Provide details and/or attach a certification from the supplier documenting that they comply with this.]

d. The supplier employs citizens (or lawful permanent residents) of countries in the authorized geographic code, in more than 50% of its permanent fulltime positions and more than 50% of its principal management positions:

[Provide details, such as organizational chart with information, and/or attach a certification from the supplier documenting that they comply with this.]



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OVERALL COMPLIANCE UNDERTAKING

I, (Name); (CNIC No), (Designation), (Company Name) have gone through the Terms / Conditions of this tender document and have found the document in whole as non-biased to any particular vendor or product / brand. All quoted items. I hereby undertake and firmly bound myself to abide by / comply with all sections of this tender document except for items mentioned below: -

- a.
.....
- b.
.....
- c.
.....
- d.
.....
- etc

Authorized Signature
M/S (Firm's Name)
Dated: _____



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Annex " F"

PROJECT'S INFORMATION: COMPLETED ONGOING (LAST 2 YEARS)

Sr#	PURCHASE ORDER OR CONTRACT DETAILS	CLIENT DETAILS	CONTRACT			REMARKS
			Award Year	Amount	Duration	
1						Add all projects pertaining to your Firm
2						
3						
4						
5						
6						
7						
8						
9						
10						

Authorized Signature
M/S (Firm's Name)
Dated _____

Note:-

Firms/suppliers registered with SCME-NUST are not required to submit the details on this annex.



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EVALUATION CRITERIA TECHNICAL & FINANCIAL**Part A) Mandatory Requirement**

1.	Firm is registered in Income tax and sales tax department and will produce Sales Tax and Income Tax Registration certificate.
2.	Firm has to produce Authorization dealer/ OEM certificate of the principal /manufacturer for Pakistan.
3.	The bidders must have office in Pakistan.
4.	Financial strength to be verified through Audited Financial Statements and bank statement for last six months
5.	The firm should not have been blacklisted by any government / Semi Government organization.
6.	Authorized Dealer (In Case of import) Firm has to produce Authorization dealership certificate of the Principal/ Manufacturer for Pakistan/region.
7.	Preference will be given to bidder(s) that quote all four items. Latest models will be preferred. Clearly mention the make and model of the quoted item.

Part B) General Evaluation

Sr	Attributes	Max. Score		Criteria
1.	Specification Compliance	30	30	To be assigned by the Technical Evaluation Committee: Same as requested.
			15	Not the same but still suitable.
			0	Does not meet the specifications (Disqualified).
2.	Brand/ Manufacturer country of origin	15	15	Brand: USA/UK/Germany
			5	Equivalent
3.	After Sale Service / Spare Parts Availability/ Technical Resources	10	10	Firm will supply Spare Parts within 15 days.
			7	Firm will supply Spare Parts within 1 month.
			5	Firm will supply Spare Parts within 3 months.
4.	Financial Strength verified through a Bank Certificate	10	10	Bank statement with more than Rs. 5 Million annual Turnover for last one (01) year.
			5	Bank statement with more than Rs. 3 Million annual Turnover for last one (01) year.
5.	Similar Projects	5	5	Firm has completed more than five (5)



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	Completed/ Company Profile			similar projects. (Documentary proof and references are required)
			2	Firm has completed less than five (5) similar projects. (Documentary proof and references are required)
6.	Authorized Dealer	10		
7.	Firm has its Office in Pakistan preferably in Islamabad/Rawalpindi/Lahore/Karachi/Peshawar/Quetta	5		
8.	Technical Bid Completeness (documentary proof, brochures, diagrams etc.)	5		To be assigned by Technical Evaluation Committee
Total		90		
Financial Bid		10		
Grand Total		100		

Note:

1. Financial proposals of the bidders who would secure minimum 60% marks from technical weightage would be opened.
2. The technically qualified bidder with **lowest price** will be considered for issuance of Purchase Order.

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**SCHEDULE – H TO BID
(INTEGRITY PACT)**

**DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC.
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN
CONTRACTS WORTH RS. 10.00 MILLION OR MORE**

Contract No. _____
Dated: _____
Contract Value: _____
Contract Title: _____

..... [name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan (GoP) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoP through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Supplier] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.



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Notwithstanding any rights and remedies exercised by GoP in this regard, [name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

Name of Buyer:
.....

Name of Seller/Supplier:

Signature:

Signature:

[Seal]

[Seal]



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