GC WOMEN UNIVERSITY SIALKOT

Directorate Purchase and Store

Tel# 052-9250649

www.gcwus.edu.pk

Ref# GCWU/SKT/DP/25-26/26 **Date:** 29-04-2026

GC WOMEN UNIVERSITY SIALKOT

Directorate of Purchase and Stores

BIDDING DOCUMENTS FOR LABORATORY EQUIPMENT (INTERNATIONAL) OF CENTERAL RESEARCH LAB

Estd. 2013

GC WOMEN UNIVERSITY SIALKOT

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The Primary Contact & Secondary Contact for all Correspondence in relation to his bid is as follows:

Primary Contacts:

Dr. Hafiz Muhammad Abd Ur Rahman
Incharge, Central Research Lab
Government College Women University, Sialkot.
E-Mail: hafiz.rahman@gcwus.edu.pk
Tel: 0321-4532269

Secondary Contact:

i. Dr. Faisal Munir
Additional Director (Purchase & Store)
Government College Women University, Sialkot.
E-Mail: director.purchase@gcwus.edu.pk
Tel: 052-9250649

ii. Mr. Asim Ali
Deputy Director (Purchase & Store)
Government College Women University, Sialkot
E-Mail: dd.purchase@gcwus.edu.pk
Tel: 052-9250649

Bidders should note that during the period from the receipt of the bid and until further notice from the Primary Contact, all queries should be communicated via Primary Contact and in writing / e-mail only. In case of urgent situation where the Primary Contact cannot be contacted, the bidder may alternatively direct their enquiries through the Secondary Contact.

Bidders are also required to state in their proposals the name, title, telephone / mobile, fax number and e-mail address of the bidder's authorized representative through whom all communications shall be directed until the process has been completed or terminated.

Note: GC Women University Sialkot will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.

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Tender Notice
For Laboratory Equipment (International) of Central Research Lab

Sealed tenders/ bids on Item wise Basis are invited from the firms registered with Sales Tax and Income Tax Departments for following Tender on the basis of Single Stage Two Envelope Bidding Procedure in terms of Rule No. 38(2)(a) of the Punjab Procurement Rules, 2014:

Sr. No.	Tender Description	Quantity	Estimated Price in PKR Million	Closing Date and Time	Opening Date and Time
01.	Laboratory Equipment (International)	Details are given in the tender documents	228.544 Million	10-06-2026 11:00 AM	10-06-2026 11:30 AM

- Procurement will be made on C&F Basis (in USD) or DDP Basis in PKR. Vendor must quote both mode of procurement.
- The Bid Security equal to 2% of the estimated price in the form of "CDR., Bank Draft, Pay Order etc." in favor of "Treasurer, GC Women University Sialkot" is required to be submitted Purchase Directorate before closing date and time, without which the offer shall be rejected being non-responsive. The details of amount of Bid Security is given in the Tender Document.
- Bids without supporting documents, undertaking, valid documentary evidence, and bids not conforming to terms and conditions given in the Tender Notice & Document will be liable for rejection.
- No supporting document will be accepted, at all, after opening of Technical Bids.
- Bids received after due date and time or bids without Bid Security in shape of CDR/Pay Order or Bid Security less than required amount shall be summarily rejected.
- The URL of the website of the PPRA is http://eproc.punjab.gov.pk/ViewTender.aspx and response time shall be calculated exclusively from the date of publication of the advertisement on the website of the PPRA.

Additional Director Purchase and Store
GC Women University Sialkot
Ph: 052-9250649
Director.purchase@gcwus.edu.pk

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1. **Invitation of Bid:**
   GC Women University Sialkot invites sealed bids on the basis of Single Stage Two Envelopes Procedure on C&F Lahore or Sialkot Airport Basis and DDP from the active Taxpayers / Firms.

2. **Instructions To The Bidders:**
   i. Procurement will be made under Punjab Procurement Rules 2014.
   ii. It will be clearly understood that the Terms and Conditions mentioned in this document are intended to be strictly enforced.
   iii. Bids without supporting documents, valid documentary evidence, and bids not conforming to terms and conditions given in the bidding documents will be liable for rejection.

3. **Bid Preparation and Submission:**
   i. The bid shall be filed in / accompanied by the prescribed Forms, Annexes, Schedules, Drawings, Documents, Brochures, Literature, etc. which shall be completely filled in, stamped and signed by the bidder or his authorized representative. In case of copies, photocopies may be attested.
   ii. The Bids / Tenders should be submitted in two parts (1) Technical Proposal and (2) Financial Proposal. The Technical Proposal and Financial Proposal shall be submitted on E-PADs.
   iii. Only those bids which qualify in the technical stage will be eligible for the Financial Proposal opening. The Financial Proposals of bidders who failed in the technical stage will not be opened.

4. **Technical Proposal:**
   i. The Technical Proposal will enable the Committee to evaluate whether the bidder is technically competent and capable of executing the order and the specifications offered by the bidder meet the ones given in the bidding documents.
   ii. The Technical Proposal shall be filled, signed and stamped in all pages. The Committee will not be responsible for the errors committed in the bids by the bidders.
   iii. The Technical Proposal should not strictly contain any Price / Cost indications as such otherwise the bids will be summarily rejected.
   iv. The Bidder should quote only one brand / model / make of each item.
   v. Detail and order of documents to be furnished with the technical proposal.
   vi. The documents attached with the Technical Bid must be signed and stamped by the bidder or his authorized representative. The documents attached must be numbered and attached in the following order:
   vii. Covering letter duly signed and stamped by bidder or his authorized representative.
   viii. Copy of bid security.
   ix. Copy of income tax registration certificate.
   x. Copy of sales tax registration certificate.
   xi. Copy of latest professional tax certificate (2025 – 2026).
   xii. Detailed specifications / pictures of items / brochures / literatures.
   xiii. Manufacturer / Sole Authorized Distributor / Agent / Certificate duly attested by notary republic / chamber of commerce/ apostille / embassy of the quoted brand (The original

certificate may be verified by the procuring agency).

xiv. Compliance of Offered Specifications and sample (Where demanded in the technical specifications) to the Advertised Specifications.
xv. Certificate of After Sales Services by the Authorized Sole Distributor / Agent of the manufacturer.
xvi. Certificate from the manufacturer about availability of spare parts for at least ten years.
xvii. The quoted model must be available on the official website of the manufacturer otherwise the model will be considered obsolete and rejected.
xviii. Affidavit / Undertaking on stamp paper (As per sample).
xix. For experience evidence, copy of FBR returns, bank statement, copy of supply / work orders may be submitted along with proposal(s).

5. Financial Proposal:

i. Financial Proposal Covering Letter.
ii. Financial Proposal duly filled, signed and stamped by the Bidder or his authorized representative.
iii. The bidder must quote rates of all the items, quoting the partial items is not allowed. If the bidder does not quote for all items, its bid will not be accepted / considered and shall stand rejected / disqualified.
iv. The price quoted by the bidder on **C&F basis** will be inclusive of all insurance, clearing and Transportation/ Freight Charges and Quoting on **DDP basis**, the quoted price will be inclusive of all taxes, duties, levies, insurance, freight (transportation charges), etc
v. The cost quoted by the bidder shall be kept firm and unchanged for a period specified in the Bid / Bidding Documents from the date of opening of the bid(s). The bidder shall keep the price firm/unchanged during the period of Contract including during the period of extension of time if any.

6. Bid Currency:

i. The currency that shall be used for Bid evaluation and comparison purposes to convert all Bid prices expressed in currencies are: **US Dollar and PKR**
ii. The source of exchange rate shall be: Monthly Floating Average Exchange Rates of STATE BANK OF PAKISTAN.
iii. The date of exchange rate shall be: **Date of Opening of Financial Bids**.

7. Validity Period of The Bid:

i. Validity period of the bids shall be 180 days.
ii. In exceptional circumstances, the Procuring Agency may ask the Bidders for an extension of the period of validity. The request and the responses shall be made in writing. A bidder accepting the request will neither be required nor permitted to modify its tender.

8. Bid Security:

i. In order to be considered, bid security of 2% of the total estimated price to be valid for 180 days from the tender opening date and. Bid security from any schedule Bank of Pakistan in

favor of the **"Treasurer Government College Women University Sialkot"** will be acceptable.

ii. Original Bid Security must be submitted in an envelope clearly marked with the tender number and Title, **well before the closing date and time** in **Office of the Director Purchase, GC Women University Sialkot**, failing which bid shall be considered Non-Responsive.

iii. Bid security should be furnished in the shape of CDR /Pay order in Favour of **Treasurer GC Women University Sialkot**.

iv. Cheque or Cross Cheque shall not be accepted at all.

v. The bid security to be returned to the disqualified / un-responsive bidder after uploading of Technical Evaluation Report on E-PADS system upon submission of an affidavit with a declaration of non-grievance in the bidding process.

vi. Those qualified for the financial evaluation and are not successful bidders can receive their bid security after uploading of Financial Evaluation Report on E-PADS system upon submission of an affidavit with a declaration of non-grievance in the bidding process.

vii. The successful bidder can receive the bid security after the delivery of the procurement; failed to deliver the goods may lead to forfeiture of the bid security;

viii. The bid security shall be released on a prescribed request letter followed with release order duly signed by Secretary UPC / Director Purchase;

Sr. No	Estimated Cost (in PKR Millions)	Bid Security (2%) (in PKR)
1	228.544/-	4,570,880/-

9. <u>Amendment of Bid Schedule</u>:

i. At any time prior to the deadline for submission of Bids, but not later than days/ date specified in the Advertisement/ BDS before the closing time of the submission of Bid, the Procuring Agency, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, may modify the Bidding documents by amendment. Any such change/amendment in the Bidding documents shall be provided in a timely manner, preferably through electronic means also and on equal opportunity basis as per Rule-25(3) of PPR-14.

ii. All prospective Bidders that have received the Bidding documents will be notified of the amendment in writing or by email, and will be binding on them.

iii. Before the deadline for submission of bids, the Procuring Agency for any reason, weather at its own initiative or in response to a clarification requested by prospective bidder or pre-bid meeting may modify the bidding documents by issuing addenda.

iv. Any addendum issued including the notice of any extension of the deadline shall be part of the Bidding Documents and shall be communicated in writing or in any identified electronic form, e.g., email that secures record of the content of subject communication.

v. In order to allow prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring Agency, at its discretion, may extend the deadline for the submission of Bids, as per rule 29 of PPR-14, in the manner similar to the

original advertisements, so as to avoid any inconvenience and to doubly ensure level playing field for all prospective bidders.

10. The bid security may be forfeited:

a) If a bidder withdraws its bid during the period of bid validity specified by the bidder on the bid form; or
b) In the case of a successful bidder, if the bidder:

i. Fails to sign the contract in accordance with bidding documents; or
ii. Fails to furnish Performance Guarantee; or
iii. If the blacklisting proceedings under Section-17A of PPRA Act, 2009 read with Rule-21of PPR-14 are initiated and the bidder is declared blacklisted after due process of law.

11. DELIVERY, INSTALLATION AND TESTING OF ITEMS

i. Delivery Period will be (C&F basis) 90 days after Opening of LC and on DDP basis 90 days after Issuance of Letter of Acceptance
ii. The Supplier will be responsible for delivery of items at GC Women University Sialkot (Imam Bibi Campus at Eminabad Road Sialkot).
iii. The Supplier will be responsible for installation, Commissioning, Testing and Training of Equipment.
iv. The Bidder will provide training as mentioned in respective Item.
v. The supplier will bear all costs associated with the preparation, insurance, delivery and installation of the Items and the Purchaser will in no case be responsible or liable for those costs. The supplier will make such arrangements to ensure safe delivery of goods. Any damage sustained during transportation / delivery will be rectified by the supplier at his cost

12. Technical Evaluation Criteria

i. A technically eligible bidder / vendor, based on conditions listed in this document, not providing the verifiable proof will be rejected in Technical Evaluation, and its sealed / unopened Financial Proposal shall be returned back.
ii. The bidders / vendors who have duly compiled with the Eligibility / Qualification and Evaluation Criteria will be eligible for further processing.
iii. The bids which do not conform to the Technical Specifications or Bid conditions or the Bids from the Bidders / Vendors without adequate capabilities for the supply / services will be considered Non-Responsive.
iv. The Eligible / Technically Qualified Bidders / Vendors will be considered for further evaluation.
v. The Technical proposals shall be evaluated by the technical evaluation committee in the light of following evaluation criteria.

Category	Description
Legal (Required)	Valid Income Tax & Sales Tax Registration (Status = Active with FBR)
	Valid Professional Tax Certificate (2025 – 2026)
	Foreign Manufacturer's Declaration Form (Specimen Attached) (The original

	certificate may be verified by the procuring agency).
	Compliance of Offered Specifications and sample (Where demanded in the technical specifications) to the Advertised Specifications.
	Certificate of After Sales Services by the Authorized Sole Distributor / Agent of the manufacturer.
	Certificate from the manufacturer about availability of spare parts for at least ten years.
	The quoted model must be available on the official website of the manufacturer otherwise the model will be considered obsolete and rejected.
	Submission of undertaking on legal valid and attested stamp paper of minimum Rs. 100/- that the firm is not blacklisted by the Procuring Agency (Specimen attached).
	Submission of undertaking in full compliance of specifications, execution schedule and delivery period mentioned in bidding documents.
Financial Strength	Company's Last; • 02 – Years FBR Annual Income Tax Returns • 01 – Year FBR Sales Tax Returns • 01 – Year Bank Statement
Technical Strength	• Local business history of the offered brand product. (Attach Purchase Order/ Contract for at least three (03) installations along with installation/ satisfactory performance reports (where applicable) for the same Purchase Order/ Contract issued within last five (05) years). • Relevant / equivalent category product local business history of the offered brand product. (Attach Purchase Order / Contract for at least three (03) purchase orders).

Note: Verifiable documentary proofs for all above requirements are required.

13. Financial Proposal Evaluation:

i. Technically qualified / successful bidder(s) / tender(s) shall be called for opening of the Financial Proposal(s). The financial proposals will be opened in the presence of the bidders at the time and venue indicated by the Procuring Agency accordingly.
ii. The technically eligible / successful bidder(s) / tenderer(s) or their authorized representatives shall be allowed to take part in the Financial Proposal(s) opening.
iii. Financial Proposal evaluation will be conducted under the Punjab Procurement Rules.
iv. The price quoted by the bidder on **C&F basis** will be inclusive of all insurance, clearing and Transportation/ Freight Charges and Quoting on **DDP basis**, the quoted price will be inclusive of all taxes, duties, levies, insurance, freight (transportation charges), etc

v. In cases of discrepancy between the cost/price quoted in Words and in Figures, the lower of the two will be considered.

14. Grievance Redressal:

i. Grievance petition(s) (if any) against the technical evaluation shall only be entertained as per the Punjab Procurement Rules, 2014 (as amended to date).
ii. In case, the complaint/grievance is filed after the issuance of the final evaluation report, the complainant cannot raise any objection on technical evaluation report.

15. Award Criteria:

i. At first step, eligible bidder(s) / tenderer(s) (Tender Eligibility) of this bidding document fulfilling the qualification and technical evaluation criteria will stand technically qualified.
ii. At second step, technically qualified and successful bidder(s) / tenderer(s) will be evaluated in the light of all Pre-Conditions, necessary requisites and shall be selected on lowest cost quoted as per rules and fulfilling all codal formalities.

16. Acceptance Letter:

As per provisions of Rule (55) of Punjab Procurement Rules, the Procuring Agency shall issue the Acceptance Letter to the successful bidder, at least after 10 days of announcement of bid evaluation reports (Ref. Rule-37 of PPRA Rules) and prior to the expiry of the original validity period or extended validity period of the Tender, which shall constitute a contract, until execution of the formal Contract.

17. Performance Guarantee:

i. Within ten (10) days of the receipt of notification of award from the Procuring Agency, the successful Bidder shall furnish the Performance Guarantee in accordance with the Conditions of Contract, in the Performance Guarantee Form provided in the Bidding documents, or in another form acceptable to the Procuring Agency.
ii. Failure of the successful Bidder to comply with the requirement of Clause (i) above shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid security along with other remedies available under PPR-14. After that, the Procuring Agency may decide to award the contract to the next lowest evaluated Bidder, keeping in view the Bid validity time, or call for new Bids keeping in view the concept of value for money as defined under rule-2(ae) read with Principles of Procurement as enunciated in rule-4 of PPR-14.

18. Inspection and Tests:

i. The Procuring Agency or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring Agency. Technical Specifications shall specify what inspections and tests the Procuring Agency requires and where they are to be conducted. The Procuring Agency shall notify the Supplier in writing, in a timely manner, of the identity of any representatives nominated for these purposes.
ii. The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s) (if so allowed by the Procuring Agency), all reasonable facilities and assistance, including access to drawings and production data,

shall be furnished to the inspectors at no charge to the Procuring Agency.

iii. Should any inspected or tested Goods fail to conform to the Specifications, the Procuring Agency may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Procuring Agency.

iv. The Procuring Agency's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Procuring Agency's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Procuring Agency or its representative prior to the Goods' shipment from the country of origin.

v. Nothing in this inspection and test clause shall in any way release the supplier from any warranty or other obligations under this Contract.

19. <u>Warranty</u>:

i. The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models selected by the Procuring Agency, and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the Procuring Agency's specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

ii. This warranty shall remain valid and the firm shall maintain the equipment for total comprehensive warranty period for complete system including parts, labor and any consumable parts (require for the functionality of equipment) i.e., battery, cell etc. after the Goods have been installed at the final destination and in installation certificate has been issued by the End-User. In case of goods not requiring installation, the warranty shall start when the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, or for comprehensive warranty period after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in bidding documents. The supplier will categorically mention the disposable / consumable items of the equipment / good in advance along with the tender submission, any item declaration as consumable/ disposable after the submission of bid/quotation will not be entertained/accepted.

iii. The Procuring Agency shall promptly notify the Supplier in writing of any claims arising under this warranty.

iv. Upon receipt of such notice, the Supplier shall, within the period specified and with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Procuring Agency.

v. If the Supplier, having been notified, fails to rectify the defect(s) within the period specified, within a reasonable period, the Procuring Agency may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring Agency may have against the Supplier under the Contract/relevant provision of PPR-14 including Blacklisting.

vi. The comprehensive warranty shall be monitored by the end user department of GC

Women University Sialkot.

Execution of Warranty:

i. A Log Book for the equipment shall be maintained by the Supplier Service Engineer in consultation with the end user department. This will include the name of the equipment, down time, preventive maintenance schedule, replacement of parts, down time etc.
ii. The Warranty will start from the date of acceptance of equipment properly installed, as per contracted specifications and handing over of related documents mentioned in bidding documents.
iii. Software and hardware up gradation of the computing system should be carried out as available during warranty period as recommended by the manufacturer.
iv. Manufacturer / Supplier shall be responsible for rectifying with all possible speed at their own expense any defect or fault in the system which may develop at any time during installation, commissioning period.
v. Manufacturer will guarantee the availability of spare parts and accessories for the system for ten years.
vi. The firm will be bound to make arrangements for availability of qualified technical staff in site for prompt execution/coordination of after sale services.
vii. The firm will bound to execute the installation / maintenance according to the installation / service protocol and will replace the components / kits recommended by the manufacturers for installation and Periodic Preventive maintenance.
viii. The manufacturer / supplier will be responsible for preventive maintenance of equipment as per manufacturers' Service Manuals and shall keep a check for electrical / magnetic / temperature and humidity conditions. Such a check should be made monthly and record should be maintained in the log book available with the end user.
ix. The supplier / manufacturers shall arrange certified training of the procuring agency nominated engineers / personnel for the service, maintenance, troubleshooting training of the supplied equipment from master trainer.

General Terms & Conditions

1. All pages of bidding documents are mandatory to be signed / stamped, meaning thereby bidder agrees to our terms & conditions mentioned herein, failing which the bid may be disqualified / rejected;
2. Bidders must quote specifications / technical / financial bid on the Letter Head of their company and each page of the bid and bidding documents must be signed and stamped;
3. The bidder shall clearly mention all information precisely regarding bid validity, delivery schedule and the schedule of technical data / literature. Any incomplete information as required shall render the offer for rejection;
4. Bidding organization must have relevant business experience for supply of quoted items to reputed Government organizations / departments. For evidence, copy of FBR returns, copy of supply / work orders may be submitted along with proposals;
5. In case of discrepancy between unit price and total, the unit / lower price shall prevail;
6. The bidder is required to offer competitive price;

7. Letter of Acceptance (LOA) will be issued to the successful bidder whose bid is determined to be technically responsive and financially lowest evaluated;
8. Successful bidder may provide **0.25%** of bid amount as Stamp Duty;
9. The bid shall contain no interlineations, erasures or over writing except as necessary to correct errors made by the bidder, in which case such corrections shall be signed by the person or persons;
10. The bidder will invariably provide warranty / guarantee of spare and consumables;
11. Successful bidder shall have to enter into contract agreement, where needed, on standard terms & conditions of bidding regarding items, technical specifications, their costs, delivery time, removal of defects, warranty, inspection & completion certification of qualitative and quantitative aspects, billing, payments, closing of contract and other necessary terms;
12. The bidder shall warrant that all goods supplied under Purchase Order shall be according to specifications given in Purchase Order;
13. The Procuring Agency shall promptly notify the bidder in writing, of any claims arising under this warranty;
14. Rejected items / goods shall be removed / replaced by the bidder immediately from the receipt of letter issued by the Procuring Agency;
15. The items / goods shall be supplied strictly in accordance with the specifications mentioned in the purchase / work order. In case the firm / bidder is held responsible for supplying the goods which fall below the standard specified in the purchase order, the firm / bidder shall be blacklisted and barred from participation in future tenders or fined or both. The UPC reserves the right to impose any amount of penalty and / or forfeit the bid security / performance security;
16. In case of any dispute the decision of the University Purchase Committee / Vice Chancellor will be final;
17. **Evaluation/Comparison will be carried out on one-item-package basis.**

C&F Terms & Conditions

The amount of Letter of Credit shall be paid to Beneficiary / Manufacturer / Supplier on production of the following non-negotiable documents.

i. Three original and two copies of the Supplier's/ Proforma Invoice showing purchaser as Director Purchase, GC Women University Sialkot, Pakistan, the Contract No., Goods description, quantity, unit price and total amount. Invoice must be signed in original stamped or sealed with company stamp or seal.

ii. Three Copies of packing list identifying content of each package.

iii. One original and two copies of the negotiable, clean, on board through bill of lading marked "freight prepaid" and showing purchaser as Director Purchase, GC Women University Sialkot, Pakistan.

iv. Copy of Insurance Certificate showing purchaser as the beneficiary;

v. The original manufacturer's warranty certificate covering all items supplied;

vi. One original copy of the Supplier's Certificate of origin covering all items supplied.

vii. Copy of Pre-Shipment inspection report furnished to Supplier by the procuring agency representative.

viii. Test / Inspection Certificate of manufacturers.

ix. Compliance Report of Internal Quality Standards.
x. Product model, serial numbers.
xi. Manufacturer's Guarantee Certificate to the effect that:

a) The goods supplied by them are strictly in conformity with the specifications stipulated in the bidding documents / contract.
b) The goods have been packed and marked suitable for transport by Sea, Rail, Road and Air in terms of the contract.
c) The stores supplied by them are brand new and absolutely free from any material or manufacturing defects.
d) Manufacturer's test certificate in respect of each consignment.

Payment:

i. The payment will be made 100% via establishing the Letter of Credit (LC) in favor of manufacturer / beneficiary / Supplier at sight and receiving shipping documents/ Bill of lading Insurance, Inspection certificate of the manufacturer, Country of origin, compliance of International standards of quality as per International Commercial Terms (INCOTERMS) of latest version. The LC shall be in PKR / Foreign currency as per the choice of the Procuring Agency. The payment will be made in the following manner through a letter of credit to be opened by the Procuring Agency:
ii. The Vendor will provide the Proforma Invoice for payment
iii. Furthermore, if charges incurred on extension of L/C to next quarter it will be on part of contracting firm.
iv. In case of PKR DDP Basis, 100% payment will be made by GC Women University Sialkot to the Successful Bidder after delivery and installation of goods and on receipt of the following documents:
    a. Bill
    b. Delivery Challan
    c. General Sales Tax Invoice
    d. Inspection/Completion report
    e. Bill of Entry (if applicable)
v. In Case of items quoted on DDP, if the bidder applies for no deduction of withholding tax, he will have to show the original Bill of Entry and CPR of the amount, deposited at the time of clearance, to the Audit Department of GCWUS.

Country of Origin:
Country of origin of goods could be from any geographical region of the world as per laws of Pakistan, unless otherwise any country of manufacturer mentioned in the specifications.

Establish Letter of Credit:
The supplier (contractor/ Vendor) shall be responsible to provide complete documentation before establishing the Letter of Credit e.g., NOC from relevant authority / free sale certificate along with allied documents, undertakings and relevant charges for pre-import approval and clearance of shipment at the time of import. Any delay due to non-availability of these documents shall be on part of the Supplier/contractor/Vendor.

Packing:

i. The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
ii. The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, and in any subsequent instructions ordered by the Procuring Agency.

Insurance:

The Goods supplied under the Contract shall be delivered on C&F as mentioned under which risk is transferred to the buyer after having been delivered, hence marine / plane and inland insurance coverage is responsibility is Supplier's / Sellers responsibility. The Supplier shall ensure insurance in advance in full on prevailing premium rates at the time of shipment of the Goods on the behalf of the Procuring Agency for which the cost is inclusive in the Contract Price.

Spare Parts:

As specified in bidding documents, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

a) Such spare parts as the Procuring Agency may choose to purchase from the Supplier, provided that this choice shall not relieve the Supplier of any warranty obligations under the Contract; and
b) In the event of termination of production of the spare parts:
i. Advance notification to the Procuring Agency of the pending termination, in sufficient time to permit the Procuring Agency to procure needed requirements; and
ii. Following such termination, furnishing at no cost to the Procuring Agency, the blueprints, drawings, and specifications of the spare parts, if requested.

Manufacturer will guarantee the availability of spare parts and accessories for the system for ten years.

SHIPMENT:
i. Material should be shipped through (Any Reputable Air Line / Shipping Co.)
ii. Number of Packages showing measurement / dimension of each package with description of goods.
iii. Net weight of each package with item wise break up of goods in the package.
iv. Gross weight of each package with item wise break up of goods in the package.
v. Volume of each package.

GC WOMEN UNIVERSITY SIALKOT

Directorate Purchase and Store

Tel# 052-9250649

www.gcwus.edu.pk

DEMURRAGE:

i. Should any demurrage charges be incurred due to the reasons mentioned below the same shall be deducted from your bills or recovered from you as a separate item.

ii. The negotiable shipping documents, complete in all respect shall be dispatched within 07 days of the consignment on ship, if the supplier fails to observe this condition and any demurrage has to be paid by **GC Women University Sialkot, Pakistan** on this account, the same will be recovered from your bills.

FORCE MAJEUERE:

i. The right of the **GC Women University Sialkot, Pakistan** to terminate the contract or to claim penalty or liquidated damages shall be subject to the judicious consideration of the following circumstances, provided that as a result of all or any of these events there has been delay in the Performance of the Order by the Manufacturer or Supplier, or the Order has become incapable of being performed.

   a. Act of God.
   b. Act of State, War or any Act of Enemy.
   c. Strikes lockout. Riots or Civil Commotion.
   d. Injunction granted by a lawful court of competent jurisdiction not resulting from any fault of the manufacturer or supplier.
   e. Provided further that you give notice to **GC Women University Sialkot, Pakistan** within 14 days of the happening of any such event.

Resolution of Disputes:

i. After signing the contract or issuance of purchase order, The Procuring Agency and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

ii. As per rule-68 of PPR-14, in the case of a dispute between the Procuring Agency and the Supplier, the dispute shall be referred for arbitration in accordance with the Arbitration Act 1940 and settled through arbitration. The Vice Chancellor GC Women University Sialkot or his nominee shall act as arbitrator. The decisions taken and / or award made by the Arbitrator shall be final and binding on the Parties.

GC WOMEN UNIVERSITY SIALKOT

Directorate Purchase and Store

Tel# 052-9250649

www.gcwus.edu.pk

iii.

AFFIDAVIT / UNDERTAKING

I, _____ S/O: _____ resident of _____

having CNIC No: _____ do hereby solemnly declare and affirms:

1. That the deponent is the sole Proprietor / CEO / Director / Manager of the firm M/s_____.
2. That my firm has never been blacklisted by Procuring Agency and is not a Tax defaulter anywhere in Pakistan.
3. That my firm has never been failed in completion of any Government or Semi Government contracts, whatsoever.
4. That my firm is not involved in any litigation with any Government or Semi Government Department and have not been adjudged an insolvent.
5. That no execution of decree or order of any court remains unsatisfied against me or my firm.
6. That we have not been convicted of any crime.
7. That undersigned affirm that the terms and conditions as contained in the bidding documents have been read and accepted.
8. That I am satisfied with all the proceedings of the GC Women University Sialkot.
9. That all above contents are true and correct. If all or any of the above contents found wrong or incorrect, I shall be responsible for the consequences and GCWU Sialkot may take any legal action against me or my firm and also cancelled the bid / contract and may also stop payments / and or forfeit the bid security / performance security.

Deponent

Verification: On _____ at_____ that all above affidavit / undertaking is true and correct to the best of my knowledge.

Deponent

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Foreign Manufacturer's Declaration Form

To be signed, stamped and on the letterhead of the Manufacturer and to be attached with Technical Bid

To: **Director Purchase, GC Women University Sialkot, Pakistan**

I declare that:

I am _____ the authorized representative of the firm M/s _____ specified in this bidding procedure as the "Manufacturer" for the purpose of service level agreement of equipment as per following detail;

Sr. No.	Name of Equipment	Name of Manufacturer	Production Country

- M/s _____ is our Distributor / Authorized Agent in Pakistan for the last _____ years. (Please attach copy of certificate(s))
- Our Firm will abide by all the rules and regulations, formulated by the office of the Director Purchase GC Women University Sialkot, Pakistan reference to this particular case and notify all changes and variations to the Product, its manufacturing status and change of Distributor / Authorized Agent.
- We confirm that our distributor M/s _____ has the requisite technical personnel and tools required to service / maintain the above-mentioned equipment.
- We hereby extend our full guarantee and warranty as per mentioned in the bidding documents for the goods offered for supply by the above firm against this Invitation to Bids.
- We *[name of the Manufacturer]* hereby confirm that we will provide the after sales services for the warranty period by our sole authorized agent/ distributor *[name of the Sole Authorized Agent/ Distributor]* and in case of change of agent, the after sales services will be provided directly by us or through the newly appointed sole agent/ distributor.
- We hereby confirm that the spare parts of the quoted model of the product will be available for a period of ten (10) years from the bid submission date.
- We hereby confirm that the quoted model of the product by *[name of Sole Authorized Agent/ Distributor]* manufactured by us will not be discontinued or become obsolete within three years from the bid submission date.
- The firm is not declared ineligible / blacklisted by Procuring Agency.
- All the information provided in pursuance with this declaration is current and correct.
- We are bound to give any information to the department regarding this tender which may approach through website _____ and email_____.

[Name and Signature of the authorized signatory for and on behalf of Manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its Bid.

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Format for Covering Letter on the Letter Head of the Firm

To

Vice Chancellor
GC Women University Sialkot.

Subject: **Laboratory Equipment (International) of Central Research Lab**

Dear Sir,

a) We are hereby submitting our Proposal, which includes the Technical Proposal and the Financial Proposal sealed in two separate envelopes.

b) Having examined the bidding documents and Appendixes we, the undersigned, in conformity with the said document, offer to provide the said items on terms of reference to be signed upon the award of contract for the sum indicated as per financial bid.

c) We undertake, if our proposal is accepted, to provide the items / services comprise in the contract / purchase order within time frame specified, starting from the date of receipt of notification of award.

d) We agree to abide by this proposal for the period of 180 days starting from the date of opening of technical bid and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

e) We understand that you are not bound to accept a lowest or any bid you may receive, and that you will not defray any expenses incurred by us in bidding.

Authorized Signature
(In full and initials)

Name and Designation of Signatory
Name of Firm and Address

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Technical Proposal Submission Form on the Letter Head of the Firm (Part of Technical Bid Envelope)

[Location, Date]

To

Vice Chancellor
GC Women University Sialkot.

Dear Sir,

We, the undersigned, offer to provide the goods / items / services in accordance with your request for proposal / bidding document.

We also confirm that the Government of Pakistan / Punjab has not declared us, or any, ineligible on charges of engaging in corrupt, fraudulent, collusive or coercive practices. We furthermore, pledge not to indulge in such practices in competing for or in executing the Contract, and we are aware of the relevant provisions of the Proposal Document.

We understand you are not bound to accept any Proposal you receive.

Authorized Signature

Name and Designation of Signatory
Name of Firm and Address

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Directorate Purchase and Store

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Financial Proposal Submission Form on the Letter Head of the Firm (Part of Financial Bid Envelope)

[Location, Date]

To

Vice Chancellor
GC Women University Sialkot.

Dear Sir,

We, the undersigned, offer to provide the goods / items / services in accordance with your request for proposal / bidding documents and our attached Financial Proposal is for the sum of (insert amount in words and figures).

Our financial proposal shall be binding upon us up to expiration of the validity period of the Proposal.

We also declare that the Government of Pakistan / Punjab has not declared us or any Sub-Contractors for any part of the Contract, ineligible on charges of engaging in corrupt, fraudulent, collusive, or coercive practices. We furthermore, pledge not to indulge in such practices in competing for or in executing the Contract, and are aware of the relevant provisions of the Proposal Document.

Authorized Signature

Name and Designation of Signatory
Name of Firm and Address

GC WOMEN UNIVERSITY SIALKOT

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Price Schedule / Financial Cost Sheet
Must be filled separately on the Letter Head of the Firm
(Part of Financial Bid Envelope)

Sr. No. ____

Sr. No.	Item Name, Description with Detail Specifications / Brands / Models etc.	Qty	Price Quoted in C&F Basis in USD		Price Quoted in DDP Basis in PKR	
			Unit Price	Total Price	Unit Price	Total Price

Total Cost (in words): _____

Note:

i. Standard Warranty (Where Applicable)
ii. Bidder must quote proper brands and models of the required items, bidders without quoting proper BOQ or brand / model will be rejected.

The Contract / Completion of Work duration shall be as prescribed in the bidding document, starting from the date of issuance of Letter of Acceptance or as per purchase order.

Date: _____

Place: _____

Authorized Signature
(In full and initials)

Name and Designation of Signatory
Name of Firm and Address

Note: No cutting or overwriting is allowed. Any cutting or overwriting may lead to rejection of the financial bid.

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Tender No: _____
(On E Stamp Paper of Rs: 100/-)

(To be typed on correctly valued stamp paper and to be issued by a scheduled bank operating in Pakistan).

Performance Warranty Bond Guarantee
No: _____
Date: _____
Amount: _____
Valid up to 1 year after the goods have been delivered installation / inspection to the final destination indicated in the Contract / Purchase Order.

GC Women University Sialkot

Dear Sir,

Performance Warranty / Bond Guarantee

As per request of M/s _____ We hereby issue our letter of Guarantee No. _____ in your favour on Account _____ for a sum not exceeding Rs: _____ (Rupees _____ being **10%** of the total value of Purchase Order/Bill No: _____ dated: _____ as a Performance Warranty / Bond Guarantee as per requirement and specifications mentioned in the order under the following terms and conditions:

1. This guarantee is available for payment, without recourse to the opener, against beneficiary's first written call to do so accompanied by written statement certifying that the opener failed to comply with the terms and conditions of the tender/order.
2. The Guarantee Bond shall terminate 1 year after the complete installation and inspection of the goods delivered to the final destination indicated in the contract / purchase order.

All claims under this guarantee must be submitted to us not later than the said validity date after which guarantee becomes automatically null and void, and the bank will stand discharged and released from all its liabilities hereunder.

Name of Bank

Sd/-
Officer (Seal) Manager

GC WOMEN UNIVERSITY SIALKOT

Directorate Purchase and Store

Tel# 052-9250649

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Schedule of Requirements

In schedule of items, wherever model number & category is mentioned the vendor may quote equivalent or higher specifications.

Laboratory Equipment (International) of Central Research Lab

This tender is on item wise basis.

Laboratory Equipment (International)

Sr. #	Items with Specifications	Qty.		
1	**Scanning Electron Microscope SEM** Specifications: Scanning Electron Microscope Filament: Pre-centered Tungsten Alignment: Automatic and Manual Automatic Gun Run-up: Sets the gun conditions automatically to optimum conditions or pre-set values. Objective Lens & Column Condenser Lens: High-precision zoom condenser lens Objective: Conical for focusing. Magnification Range Image magnification: ×5 to ×300,000 or better Screen magnification: ×15 to ×800,000 or better Resolution Minimum 3 nm at 30 kV HV SEI with Tungsten Filament or better 8.0 nm @ 3 kV SE with, W or better 15 nm @ 1 kV SE with, W or better 4 nm @ 30 kV BSE with, W or better (in low vacuum mode) Focus Dynamic Focus: For correction of focus on specimens with surfaces inclined Stigmator Control Automatic: Standard	1		

	Accelerating Voltage 0.3 to 30 kV or better Adjustment Continuously variable in steps Probe Current 1pA to 1µA or better Ports Minimum eight to nine or more ports on the chamber are provided including coplanar EDS, EBSD port for future upgrades. Stage 5-Axes Motorised Stage Drawer type door for easy access. X = 100 mm, Y = 90 mm, Z = 50 mm, T = 20° to 90°, R = 360° or better Quick-fit carousel minimum 9x7x sample holder or more for 13 mm diameter Pin/ Cylindrical type stubs. Stage control by SEM software and control panel Vacuum System Control All valves are fully automatic and electromechanical. Indication, vacuum ready, menu. Pressure may be displayed in Pa, torr, or mbar units. Rotary Pump 10 cubic meter/hr., or better Turbo Molecular Pump 250 liter/sec or better Modes: High Vacuum Mode Detectors Standard SE Solid State Backscattered Electron EDS Analysis System (Fixed Position), minimum 30 mm², 129eV, or better Detection range: Be (4) to 95 AM. Or better One PC Solution, separate Monitor. Software: Multi-point spectra Line scan, Mapping,			

	quantification Drift Correction during EDS analysis Large Area (7 × 6 mm or more) SEM imaging and Large area elemental Mapping (7 × 6 mm or more) (Montage) Live 3D image for representing shape of sample Image acquisition of Secondary image (SEI) and back scattered image (BEI) should be possible simultaneously Sputter coater Fully Automatic digital Gold Sputter Coater with touch screen LCD. Accessories Control Panel: Dedicated control panel with integrated keyboard according to language kit, and dedicated knobs for control and adjustment of frequently used SEM-parameters. Tungsten filaments 50Nos. Carbon Tape 5-8mm 2Nos. Carbon Paste Desiccator. Peltier Cooling stage or LV cooling Holder (Optional) System & Software System Control Microsoft® Windows® 11 based Desktop Computer core i7 14th generation or higher complete with keyboard, mouse, 27-inch LCD screen high-resolution IPS or OLED (QHD or 4K) panel, with 32 GB RAM, 1 TB SSD hard drive, 1TB HDD (additional hard drive), NVIDIA RTX card (e.g., RTX 3060/3070 or higher) or equivalent and wireless card User configurable system status display menu Automatic or manual control of a large number of functions including: Automatic Low Magnification Auto Filament Saturation Auto Brightness and Contrast			

	Auto Stigmator Auto Focus Auto Beam Alignment (Wobbler) User defined presets for many functions e.g. magnification Objective lens wobble (speed and amplitude are a user choice) Scan position indicator (user choice) Configured for two chamber scopes Design optimized for scanning electron microscopy 32k × 24k pixels Image Display and Record System Two 24″ Touch Panel LCD TFT monitor one for SEM and one for EDS system. **UPS** Compatible True online UPS and batteries provided along with the machine for backup support minimum 30 minutes (Non-refurbished) **Printer** Network Printer, Paper Size Letter, Legal, Executive, Statement, 8.50″ × 13″, Sheet Capacity 600 sheets Rated Black Speed 55 ppm, Networking Fast Ethernet, Capable of Dual Side Print **SEM Enclosure** A temperature- and environment-controlled enclosure for the SEM and related equipment, constructed with 12-mm glass panels and an aluminum frame, including a fixed roof. The enclosure must protect against vibration, dust, humidity, and other environmental factors to ensure optimal instrument performance. It shall allow safe, comfortable operator access for use and routine maintenance, and be equipped with a suitably rated air-conditioning/inverter system to maintain stable temperature and humidity in line with the operational requirements of high-precision SEM instruments **Warranty**			

	One year comprehensive warranty free service and parts is the sole responsibility of the supplier. Installation & Training Installation & training to the faculty personal full responsibility of the vendor free of cost at installation site from the factory certified engineer. Remote access option should be available at any time. Two person foreign training at manufacturer site including boarding & lodging. **Training:** Advance training at manufacture site for two persons. Local training for lab staff (As & when required).			
2	**Electrically Heated Muffle Furnace** Upto 1600°C maximum operating temperature Max Temp: 1600 ^{o}C Heat Zones: 1 Heat up time (Mins): 30 Chamber Volume: 5 Chamber Internal Dimensions H×W×D: 6×6×9 inch (152×152×228 mm) Furnace External Dimensions H×W×D: 22×20×26 inch (558×508×660 mm) Height with Door Open: 32 Inch (812 mm) Max Power 5877 Thermo Couple Type R	1		
3	**Multi-material XRAY DIFFERACTOMETER System (XRD)** Goniometer: Geometry: Vertical (θ-θ). Scan Speed: Between 0.001 to 1.60 deg/sec or better Min step size: 0.0001 or better. Diameter: Minimum diameter 500 mm or better. Goniometers having bigger diameter will be preferred for better resolution. 2 theta measurement range: -10 to +160 deg or better. Operation mode: Theta – Theta, keeping the sample in Horizontal and stationary position always. Data quality guarantee: Manufacturers must ensure the data quality guarantee on the angular position based on NIST sample. The same NIST sample should be in the scope	1		

	of supply for evaluation. X-RAY Generator: Maximum Output Power: 3 KW or higher. Input voltage range: 208 – 240 V Frequency: 50 Hz +/- 1% Stability for 10% input voltage variation: ±0.01 % or better Cooling Suitable Imported Air-cooled heat exchanger inside the XRD Cabinet is preferable and should be offered with capability to work at an ambient temperature of 48 deg C or more. X-RAY Tube: Power 2.2 KW or higher Anode Material Cu, LFF with ceramic/glass insulation. Tube Voltage Range 20 to 60 KV or better Tube Current Range 2 to 50 mA or better Voltage increment 1KV Current increment 1mA Focus Long Fine Focus. OPTICAL SYSTEM: Parabolic Multilayered Mirror: The Multilayered Parabolic Mirror for changing from Bragg & Brentano (BB) focusing optics to Parallel Beam (PB) optics and Vis-A-Vis with fully auto alignment facility through software to be offered in "OPTION" for Thin Film/SAXS/High Temperature measurement). Incident Slit: Computer Controlled and Programmable Motorized variable Divergence slit with a range of 0.05-7.00 mm,0.01 mm Step or better is to be offered. Receiving Slit:Computer Controlled and Programmable Motorized variable Receiving slit with a range of 0.05-20.00 mm,0.01 mm Step or better is to be offered. Soller Slits: Necessary Soller Slits are to be included in			

	the Primary (Incident) as well as Secondary (Receiving) side. Anti-scatter Slit: The X-ray beam optics should also include anti scatter slit for effective suppression of background scattering as well as to minimize air scattering at low angles Z-axis stage for height adjustment. Universal Z-attachment platform for the sample height alignment to keep sample surface always in horizontal position and at the center of diffractometer circle to have best possible sample exposure to incoming X-ray. Variable range = around [-10 mm to+2] mm with minimum 0.0005mm or less step. Fully Automatic optical Alignment Complete software controlled automatic alignment is needed. Automatic Alignment should be done by the software for the alignment of source height, source angle, mirror optic, crystal optic, slit height, sample surface and detector angle. Automatic Computer Control adjustment for detector high voltage and pulse height analyzer. Sample Chamber: Automatic Sample Chamber with 6 position or better High speed Semi Conductor Solid State 1-D Detector: Operation mode Easy Switching between 0-D and 1-D mode should be possible. Efficiency >98% for Cu radiation Active window 200mm2 or higher. Minimum no. Of Channels/Strips 192 or more. Spatial resolution (pitch): 75 micrometer or better Capture angle >3.7° 2θ angular coverage at 600 mm measurement circle diameter Maximum Global Counts Maximum 250,000,000 cps or better. Fluorescence suppression Suitable hardware/software for suppressing secondary fluorescence to be offered. The detector must be capable to work in normal mode or in			

	Fluorescence reduction mode without using and diffracted Beam Monochromator. Low Angle Data Capable to collect high quality data starting at angles as low as 0.15° 2Theta. Safety Features: The XRD system must be fully radiation protected as per the international radiation safety norms. The safety feature must include the following: • RADIATION ENCLOSURE: Open & Close Door System (with a Pb-contained Acrylic Resin Windows) • Lead equivalent: 0.5mm Pb equivalent. • Fail Safe Function: With a CPU Controlled function. • Warning Light: Installed independently on the top of the Radiation Enclosure. • Detection of abnormal cooling water (level, temperature, pressure). • Detection of abnormal XG over-load (output deviation, over-current). • Detection of abnormal tube voltage HIGH, LOW. Standard Software: PC based software packages to control all instrument parameters and should provide best algorithms for Solving analytical tasks. Should enable both Qualitative and Semi quantitative analysis based on Rietveld method. Easy simulation and automatic refinement / smoothening of measured data. Peak search, integrated intensity, K-alpha1 and k-alpha 2 separation. facility should be available Application Software for Powder: Crystallinity software, Lattice parameter refinement, Cell Indexing & Rietveld Analysis software package Database: ICDD database PDF-4+ of latest version with single license should be offered with minimum One years validity. The updates should be available free of cost During validity period Sample Stages and Sample Holders:			

	Sample Holders for Powder Sample: Aluminum Holders (perforated) [set of 20], Glass Sample Holder, 0.2mm depression [set of 20], Glass Sample Holder, 0.5mm depression [set of 20], SRM NIST Standard Sample Si-powder have to be offered. Also, necessary accessories to be provided for Liquid sample measurement. Low Background sample holder. One set (minimum 2-nos.) of Si low background sample holder is to be included. Thin Film Sample Stage: Automatic sample stage which should be included with auto alignment for auto Z- axis alignment for height adjustment, □-(Phi) axis for free rotation and χ-(Chi) axis for tilting of sample with automatic alignment procedure for measurement of thickness, density and roughness (XRR) of thin film sample using reflectivity software to determine thickness, density & roughness. The basic high resolution thin film attachment should include incident 2-bounce Ge (220)- channel cut monochromator to remove Kalpha2 doublet . INDIGENOUS ITEMS REQUIRED FOR XRD INSTALLATION TO OFFERED LOCALLY: (a) UPS and batteries with 30 mins back-up with 15KVA output power should be offered for XRD unit (Non-refurbished) (b) Microsoft® Windows® 11 based Desktop Computer core i7 14th generation or higher complete with keyboard, mouse, 27-inch LCD screen high-resolution IPS or OLED (QHD or 4K) panel, with 32 GB RAM, 1 TB SSD hard drive, 1TB HDD (additional hard drive), NVIDIA RTX card (e.g., RTX 3060/3070 or higher) or equivalent and wireless card **Printer** Network Printer, Paper Size Letter, Legal, Executive, Statement, 8.50″ × 13″, Sheet Capacity 600 sheets Rated Black Speed 55 ppm, Networking Fast Ethernet, Capable of Dual Side Print Warranty: Minimum One year warranty is to be offered for			

	the full system. The accessories should be offered in "Option" High Temperature Stage. Suitable furnace Based (not strip based) High Temperature Attachment for powder sample should be offered to do experiment at non-ambient condition. The High Temperature Attachment should be capable of attaining temperature from ambient to 1500□C or higher. The attachment must include automatic Programming Temperature controller and necessary vacuum pump & other necessary hardware including the water chiller. XRD Enclosure: A temperature- and environment-controlled enclosure for the XRD and related equipment, constructed with 12-mm glass panels and an aluminum frame, including a fixed roof. The enclosure must protect against vibration, dust, humidity, and other environmental factors to ensure accurate diffraction measurements and optimal instrument performance. It shall allow safe, comfortable operator access for use and routine maintenance, and be equipped with a suitably rated air-conditioning/inverter system to maintain stable temperature and humidity in line with the operational requirements of high-precision XRD instruments Training: Advance training at manufacture site for two person. Local training for lab staff (As & when required).			
4	**Atomic Force Microscope (AFM)** Scanner, camera, micrometer stage, active antivibration table and air flow protection integrated in a single device, Easy accommodation of the largest variety of different samples and sample holders up to100 mm in diameter and 10 mm in height, XYZ-Tip scanning system: scanning range at least 100 µm × 100 µm × 12 µm, Flexure-based XY scanner and decoupled piezo-based Z-scanner, Integrated manual sample positioning with 20 mm × 20 mm travel in XYZ-measurement noise level ≤ 40 pm (RMS, dynamic mode in air) Optical Z position sensor with a noise level ≤ 180 pm	1		

	Standard Operating modes: Imaging: contact mode, intermittent contact and non-contact modes, Phase Contrast, Magnetic Force, Force Modulation, Lateral Force, Standard Liquid mode Spectroscopy: Force-Distance, Amplitude-Distance, Phase-Distance, Lithography: static force, dynamic force, Automated parallel approach through integrated, motorized sample Z-stage, 5 mm travel distance with definable final end position AFM controller with fully digital internal data processing, 24-1bit ADC/DA Conversion depth, and programmable FPGA CPU, allowing high-speed data acquisition, dynamic filtering and analysis, and real-time signal monitoring directly from within the AFM control software, 32-bit CPU and multitasking operating system for parallel operations. USB interface between controller and PC, AFM laser operating at a wavelength between 645 and 655 nm, Possibility to have an ample choice of detachable cantilever holders with kinematic mount to accommodate standard commercially available cantilevers with or without alignment grooves as well as pre-mounted cantilevers. Self-alignment for cantilevers with alignment grooves to guarantee that laser is also automatically self-aligned on the cantilever back; manual laser adjustment must be possible for groove less and special cantilevers. Integrated CCD color video camera switchable for top or side view, with 5 MP digital resolution and optical resolution better than 2 μm, field of view 2.0 × 1.5 mm for top view and 2.4 × 2.4 mm for side view. Useable with sample in air and immersed in liquid, 4-fold digital zoom in 3 steps Integrated active antivibration table (min. 25 dB (94.0%) at 5 Hz, 40 dB (99.0%) above 10 Hz) with detection of non-adjustable external vibrations and consequent automatic re-measurement of the current scan line Integrated design: permanently connected measuring head, active vibration isolation, stage and video camera set-up Microsoft Windows compatible and freely available acquisition and analysis software with software updates included for the product lifetime. Includes Tools and cantilever (20 pieces) and test samples			

	for static force mode, phase contrast mode, magnetic force mode, spectroscopy mode 2 years warranties Installation and training on site, Must include branded & compatible PC Workstation core i7 or higher complete with mouse, Processor speed: 3.40 Ghz up to 3.90 GHz, Storage 500 GB SATA, RAM 4 GB with one year local warranty system with 24″ LED & LaserJet printer Network Printer , Paper Size Letter, Legal, Executive, Statement, 8.50" × 13", Sheet Capacity 600 sheets Rated Black Speed 55 ppm, Capable of Dual Side Print Networking Fast Ethernet Compatible branded UPS (Non-refurbished) **AFM Enclosure:** A temperature- and environment-controlled enclosure for the AFM and related equipment, constructed with 12-mm glass panels and an aluminum frame, including a fixed roof. The enclosure must protect against vibration, dust, humidity, and other environmental factors to ensure high-resolution imaging and optimal instrument performance. It shall allow safe, comfortable operator access for use and routine maintenance, and be equipped with a suitably rated air-conditioning/inverter system to maintain stable temperature and humidity in line with the operational requirements of high-precision AFM instruments **Training:** Advance training at manufacture site for two person. Local training for lab staff (As & when required).			
5	**Hybrid Mass Spectrometer (LC MS-MS)** Must have Hybrid MS/MS System which Must have option to work as LCMSMS (Standard) & GCMSMS system with just adding Optional APGC with GC System or Equivalent Firms must quote following Ionization Sources: ESI/APCI/ESCi for multiple sample types as standard MSMS must be compatible with APGC source for GCMSMS compatibility. (Optional) MSMS Detector: Photo-multiplier tube or equivalent with	1		

	10 years guaranteed life. MSMS Performance Specifications: Scan Speed:20,000 amu/sec or better MSMS Sensitivity:350,000:1 (ESI+, 1 pg on column injection of reserpine) MSMS Sensitivity: 200,000:1 (ESI-, 1 pg on column injection of chloramphenicol) Mass Range:5- 2000 amu or better Polarity Switching:15 msec or better Instrument detection limit – Positive Ion ESI <2.5fg Reserpine on Column injection Must include vacuum pump compatible with Hybrid LCMSMS system. Must include APGC & MSMS Reference Standards with LCMSMS Nitrogen Generator: Self-contained Nitrogen Generator with built-in Air Compressor. Quiet in operation, must utilizes membrane technology to selectively remove oxygen, moisture and other gases to leave clean, dry, phthalate free nitrogen System Control and Data analysis software - Suitable software for the control of all parts of the instrument including HPLC, all reservoirs, MS/MS and GC-MS /MS capabilities. It must have the ability to work with all scan types data (full scan, SIR/SIM, MRM data, etc) including the triggered modes routinely. Must include branded & compatible PC Workstation core i7 or higher complete with mouse, Processor speed: 3.40 Ghz up to 3.90 GHz, Storage 1 TB SSD, RAM 16 GB, keyboard, mouse, 24″ LCD screen with one year local warranty or equivalent LaserJet printer Network Printer, Paper Size Letter, Legal, Executive, Statement, 8.50″ × 13″, Sheet Capacity 600 sheets, Rated Black Speed 55 ppm, Capable of Dual Side Print, Networking Fast Ethernet or equivalent			

	Compatible Branded UPS along with batteries: 15 KVA with 30 minutes backup (Non-refurbished) Argon Gas Cylinder with Regulator One Year Comprehensive Warranty of Complete System Including Fluidic, Electronic and Mechanical Parts. Installation and operators training must be offered by Factory trained / Manufacturer trained engineers Two persons advanced training at manufacturer site for 3-4 days. <u>UHPLC:</u> Quaternary Gradient Solvent Management: The pump must be capable of delivering aqueous and organic solvents at operating pressures up to 9,500 PSI (655 bar) The pump must have integrated vacuum degassing of all mobile phase lines The pump must be able to support flow rates as low as 0.001 mL/min and as high as 5.000 mL/min over maximum operating pressure of 9,500 PSI (655 bar) The pump must have integrated and programmable pump seal wash The pump must be able to program gradient methods directly in terms of pH and percent organic and salt percentage. The pump must have a pressure pulsation of ≤1.0% or 25 psi, whichever is greater The pump must have a compositional precision of 0.15% RSD or +/- 0.04 min SD, whichever is greater The system must be dual flow path design and must have separate flow paths for HPLC & UHPLC Separations. The gradient delay volume, as measured at the lift-off point in a step gradient, must be ≤1,050 µL for one fluidic path and ≤750 µL for the second fluidic path Total system band spread (4σ) for the system must be ≤ 30 µL.			

	Sample Management with Sample Heating/Cooling: The injector must have an integrated and programmable needle wash The injector must aspirate samples with an accuracy of +/- 0.2 µL The sample compartment temperature must be settable from 4 to 40 ^{o}C The injector must have the ability to automatically dilute samples The injector must have the ability to automatically withdraw from several sample vials and dispense into a single vial The sample compartment must be able to accommodate both HPLC Vials and/or well plates (96 / 384 well) The injector linearity shall be equal to or better than 0.999 correlation coefficient over its entire injection Range Column Compartment The column compartment must be able to support columns up to 30 cm in length The column compartment must support up to 15 columns with optional column manager. The column compartment temperature range 4- 65 ^{o}C The system shall support record technology which documents the methods and usage of UHPLC columns, up to 50 sample sets, the minimum and maximum pressure and temperature, sample and injection totals for the column can be stored and accessed using UPLC system Console software. The record must be part of each individual column for traceability. <u>Software</u>: System must control mass spectrometry data with mass spectrometer upgradation. System qualification services (IQ/OQ) with original documentation. Advanced system control data acquisition, and custom reporting features of Software. <u>Accessories:</u>			

	Hybrid C18. 4.6×150, 2.5um (Carbon Load 18%, pH Range 1-12, 130A): 01 Nos. 2ml Glass vial Pre-slit septa- glass: 500 vials Certified Containers from any potential contaminants to eliminate chromatography ghost peaks associated with TOC. The Kit includes (4) 1 Liter bottles, (3) 500 mL bottles and 1 Cap Kit. Argon gas cylinder with regulator Comprehensive Warranty for one Year. Hybrid Mass Spectrometer Enclosure: A temperature- and environment-controlled enclosure for the Hybrid Mass Spectrometer (LC-MS/MS) and related equipment, constructed with 12-mm glass panels and an aluminum frame, including a fixed roof. The enclosure must protect against vibration, dust, humidity, and other environmental factors to ensure reliable mass spectrometric analysis and optimal instrument performance. It shall allow safe, comfortable operator access for use and routine maintenance, and be equipped with a suitably rated air-conditioning/inverter system to maintain stable temperature and humidity in line with the operational requirements of high-precision LC-MS/MS instruments Training: Advance training at manufacture site for one person. Local training for lab staff (As & when required).			
6	**<u>Gas Chromatograph with FID & APGC (with GCMSMS capability)</u>** Must include Atmospheric Pressure GC (APGC) source which must have capabilities to switch rapidly from LC/MS/MS to GC/MS/MS on a single instrument platform. The electro spray source must be interchanged with the APGC in a tool free operation. The ionization mechanism employed in APGC is typically less energetic than for electron impact. This results in spectra rich in molecular or quasi-molecular ion information ideal for compound confirmation. Additionally, in source	1		

	CID, or MS/MS can be used to induce fragmentation to aid structural elucidation of unknowns. By purposely combining a fast swap source and GC plinth in the instrument design, the APGC and heated transfer line can easily be moved away in LC mode. The APGC interface must be compatible with GC System. Must include GC System with Split/Splitless Injector for all types of capillary & packed columns. GC Must have advanced flow controls & built-in touch screen. Retention time repeatability <0.008 % or <0.0008 minutes Area repeatability <0.5 % RSD Operating temperature range suitable for all columns and chromatographic separations. Ambient temperature +4 to 450 °C Must include Split/Splitless injector with 0-150 psi electronic pneumatics control (EPC). Must include Flame ionization detector with electronic pneumatics control. Optimized for capillary columns. Autosampler: Must have 15 vials autosampler for GC Must include GC Column, DB-5MS 30m, 0.25mm, 0.25um Must have single software platform to perform GC-MSMS & LC-MSMS applications. **Gas Chromatograph (FID & APGC) Enclosure:** A temperature- and environment-controlled enclosure for the Gas Chromatograph equipped with Flame Ionization Detector (FID) and Atmospheric Pressure Gas Chromatograph (APGC) modules, constructed with 12-mm glass panels and an aluminum frame, including a fixed roof. The enclosure must protect against vibration, dust, humidity, and other environmental factors to ensure accurate chromatographic separation, stable detector performance, and optimal instrument operation. It shall allow safe, comfortable operator access for use and routine maintenance, and be equipped with a suitably rated air-conditioning/inverter system to maintain stable			

	temperature and humidity in line with the operational requirements of high-precision GC instruments Training: Local training for lab staff (As & when required).			
7	**Electro Chemical Work Station** A general purpose potentiostat that gives you the ability to run basic physical and electroanalytical techniques such as cyclic voltammetry, chronoamperometry, chronopotentiometry, pulse voltammetry, and square wave voltammetry, Impedance Spectroscopy, Corrosion studies, and charge discharge capabilities for battery research. Future upgrade for the multichannel instrument. Complete unit with allied accessories including EC Cell kit containing Working Counter and Reference electrode, and Must include branded & compatible PC Workstation core i7 or higher complete with mouse, Processor speed: 3.40 Ghz up to 3.90 GHz, Storage 1 TB SSD, RAM 16 GB, 24″ LCD with one year local warranty or equivalent LaserJet printer Network Printer, Paper Size Letter, Legal, Executive, Statement, 8.50″ × 13″ ,Sheet Capacity 600 sheets, Rated Black Speed 55 ppm, Capable of Dual Side Print, Networking Fast Ethernet. SYSTEM Potentiostat — Yes Galvanostat — Yes Zero Resistance Ammeter — Yes Floating (Isolated from Earth Ground) — Yes Cell Connections — 2, 3, or 4 Maximum Current — ±1 A Current Ranges — 9 (10 nA - 1 A) Current Ranges (including internal gain) — 11 Minimum Current Resolution — 3.3 fA Maximum Applied Potential — ±12 V Rise Time — <1 µs Minimum Time Base — 10 µs Noise and Ripple — <20	1		

	µVrms				
	CONTROL AMPLIFIER				
	Compliance Voltage (@ 1A)	±20 V			
	Output Current	>±1 A			
	Speed Settings	5			
	Unity Gain Bandwidth	980, 260, 40, 4, 0.4 kHz			
	EIS MEASUREMENT				
	Frequency Range	10 µHz - 20 kHz (Upgradeable to 2 MHz)			
	Impedance Accuracy	99%			
	Maximum AC Amplitude	2.33 V			
	Minimum AC Amplitude	50 µV			
	ELECTROMETER				
	Input Impedance	>10`12 Ω			
	Input Current (typical)	<20 pA			
	Bandwidth	>10 MHz			
	CMRR	>80 dB (10 kHz), >60 dB (1 MHz)			
	POTENTIAL				
	Applied Accuracy of setting	±1 mV ±0.2%			
	Applied Resolution	200 µV, 50 µV, 12.5 µV/bit			
	Measured Accuracy of reading	±1 mV ±0.3%			
	Measured Resolution	1 µV, 10 µV, 100 µV, 400 µV/bit			
	CURRENT				
	Applied Accuracy of range	±5 pA ±0.3%			
	Applied Resolution	0.0033% full-scale/bit			
	MEASURED CURRENT				
	Measured Accuracy	±5 pA ±0.3%			

	of range Measured Resolution 0.0033% full-scale/bit Bandwidth >10 MHz (1A - 100 µA) >1.5 MHz (10 µA) >0.15 MHz (1 µA) Local supply UPS capacity – 6kVA (Non-refurbished) **Electro Chemical Work Station Enclosure:** A temperature- and environment-controlled enclosure for the Electrochemical Workstation and related equipment, constructed with 12-mm glass panels and an aluminum frame, including a fixed roof. The enclosure must protect against vibration, dust, humidity, and other environmental factors to ensure stable electrochemical measurements and optimal instrument performance. It shall allow safe, comfortable operator access for use and routine maintenance, and be equipped with a suitably rated air-conditioning/inverter system to maintain stable temperature and humidity in line with the operational requirements of high-precision electrochemical instruments. Training: Local training for lab staff (As & when required).			
8	**Plant growth chamber:** Plant Growth Chamber 1000 liter Seed germination chamber in a tissue culture laboratory Heat/Cool/Horizontal light Temp. range:0 to 60 deg C Day/night light control 4,000-8000 lux Forced air circulation Internal Size:W85×D85×H140 cm, 4 shelve,W820×D820 mm It can also be used as: microbiology incubator, Type: Without Humidity, Growth	1		

	Volume (L): 1000 Internal Size (mm): W850×D850×H1400 Training: Local training for lab staff (As & when required).			
9	**Osmometer** Osmometer Measuring Range 0 to 3000 mOsmol/kg H_2O Resolution 1 mOsmol /kg 2 Sample Quantity 50µl to 100µl. Colorful LCD touch display with sample size 50 µl to 100 µl and measuring range up to 0 to 3000 mOsmol /kg H O at ambient 2 temperature 10 to 30°C. Features with on-screen display of molar concentration, freezing point, and osmolarity. At very low testing time it provides fast and accurate osmolality test results. Applicable in General medicine, Routine and research, Forensic medicine, Electron microscope. Features: Require 50 µl to 100 µl sample quantity Low testing time Colorful LCD touch display Equipped with dual cooling system Accurate calibration for any concentration bring solution to fit in measurement curve Automatic probe for up and down movement Convenient and Rapid analysis of data Automatic data processing and storage function with microcomputer control Transferring of data done through RS232 interface for computer and laboratory connection Excellent cooling system design with no heat transfer fluid Easy operation Rapid detection with suitable continuous detection. Training: Local training for lab staff (As & when required).	1		
10	**Spin coater:** Accommodating up to ø150mm wafers and 5″ × 5″ (127mm × 127mm) substrates and features a maximum rotational speed of 12,000 RPM (based on a ø100mm silicon wafer). N2 Process/Seal Purge: 60–70 PSIG (4–5 bar) of Nitrogen/CDA is required to pressurize the labyrinth-type motor seal. The gas must also purge the process chamber. The gas consumption must be very low, at 3 cubic feet per hour (0.085 m^3/hour) for the standard motor, and 20 cubic feet per hour (0.566 m^3/hour) for the High Performance motor. 10 feet (300 cm) of 3/16 inch (~4 mm) inside	1		

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<td>diameter × 1/4 inch (~6 mm) outside diameter PE tubing must be provided or equivalent.

Vacuum: 25–28 inches (~635–711mm) Hg of vacuum with a flow volume of 4.5 SCFM (0.127 cubic meters/minute) at 0 inches Hg is suggested. 10 feet (300 cm) of 3/8 inch (~9.5 mm) outside diameter × 1/4 inch (~6 mm) inside diameter PE tubing must be provided or equivalent.

Power: 95 to 240VAC, 47/63HZ, ~300 Watts

Spin coater enclosure:

A ventilated enclosure or fume hood constructed with 12-mm glass panels and an aluminum frame, including a fixed roof, designed to safely contain solvent vapors and protect against dust and humidity. It shall provide clean, stable conditions for uniform thin-film coating while allowing safe operator access and routine maintenance.

Training:

Local training for lab staff (As & when required).</td>
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<td>Dip Coater

Dip Coating Unit has been designed in such a manner which minimizes the operator’s effort. The variables like speed, duration, etc. are maintained accurately by computer control. Dip-coating process, includes five stages: immersion, start-up, deposition, evaporation and drainage. The coating thickness depends on various parameters like viscosity of the coating solution, immersion time, withdrawal speed, evaporation rate etc. Movements are achieved by a precision servo motor controlled linear stage. Adjustable stroke length and accurate speed control are the exceptional features of this model along with its capability of achieving a uniform coating. This is a compact, bench-top coating unit having structural rigidity and is free from vibrations.
<table>
<tr><td>Actuator</td><td>Servo motor</td></tr>
<tr><td>Drive mechanism</td><td>Lead screw</td></tr>
<tr><td>Speed control</td><td>Available</td></tr>
<tr><td>Power input</td><td>230V, 50Hz</td></tr>
<tr><td>PC connectivity</td><td>Serial port (RS 232)</td></tr>
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	<table><tr><td>Stroke length max.</td><td>100 mm</td></tr><tr><td>Maximum sample size</td><td>75 × 75 mm</td></tr><tr><td>Maximum load capacity</td><td>2 Kg</td></tr><tr><td>Drawing speed min.</td><td>18 micron / sec</td></tr><tr><td>Drawing speed max.</td><td>9000 micron / sec</td></tr><tr><td>Dimensions (appx.)</td><td>200 × 150 × 380 mm</td></tr><tr><td>Weight (appx.)</td><td>54 Kg</td></tr></table> Dip coater enclosure: A ventilated enclosure or fume hood constructed with 12-mm glass panels and an aluminum frame, including a fixed roof, designed to safely contain solvent vapors and protect against dust and humidity. It shall provide clean, stable conditions for uniform thin-film coating while allowing safe operator access and routine maintenance. Training: Local training for lab staff (As & when required).			
12	**Solar Simulator** 50 × 50 mm Class ABA AM1.5G Solar Simulator including AM1.5G Air Mass Filter, One 100 Watt Ozone Free Xenon Arc Lamp, Manual Shutter, Baseplate, Stand, and HEPA Filter. Including Calibrated Silicon Reference Cell, Tracer IV Measurement Software, DSSC and Other Edge Mounted Solar Cells, Keithley 2400 Source Meter. Solar simulator hood: A light-tight, ventilated hood covering the sample area and optical path. It shall include safe access doors, local exhaust to remove lamp heat, and optional dust filtration. The hood must not interfere with optical alignment or reduce the spectral and spatial uniformity required for Class ABA AM1.5G performance. Training: Local training for lab staff (As & when required).	1		

Note: Clarifications regarding the tender may be submitted through EPADS until 02.06.2026 (04:00 p.m.). Alternatively, interested parties may visit the GC Women

University Sialkot during office hours for seeking any further clarification about the work / specifications / samples of above item(s) before participating in the tender.