



# **Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology, Haripur**

**KHYBER PAKHTUNKHWA**

## **REQUEST FOR PROPOSAL (RFP) FOR “Supply of Research Lab Equipment”**

**Submission of Bids: Monday the December 07, 2020 @ 12:00 noon**

**Opening of Bids: Monday the December 07, 2020 @ 12:30 pm**

## Contents

Section 1. Letter of Invitation.....	3
Section 2. Instruction to Bidders (ITB) .....	4
A. GENERAL TERMS .....	4
B. PREPARATION OF BIDS.....	5
C. SUBMISSION AND OPENING OF BIDS.....	8
D. EVALUATION OF BIDS.....	10
E. AWARD OF CONTRACT.....	12
Section 3. Bid Data Sheet .....	14
Section 4. Evaluation Criteria .....	17
Preliminary Examination Criteria .....	17
Minimum Eligibility Criteria.....	17
Section 5a: Technical Specifications of the Required Goods .....	17
Section 5b: Special Terms and Conditions .....	29
Section 6: Returnable Bidding Forms / Checklist .....	31
Form A: Bid Submission Form .....	32
Form B: Joint Venture/ Consortium/ Association Information Form.....	33
Form C: Bidder Information Form .....	34
Form D: Qualification Form.....	36
Form E: Technical Bid Proposal Form.....	38
Form F: Specifications Compliance Form .....	40
Form G: Price Schedule Form .....	42
Annex – I: Integrity Pact .....	45
Annex – II: Draft Contract Sample.....	46

## Section 1. Letter of Invitation

The Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology (PAF- IAST), Haripur invites sealed bids from interested firms for the “Supply of Research Lab Equipment” under the following Lots.

- Lot.1: Atomic Absorption Spectrophotometer(AAS)**
- Lot.2: Total Organic Carbon, analyzer (TOC)**
- Lot. 3: GC-MS Quadrupole Mass Spectrometer with FID/TCD**
- Lot. 4: Scanning Electron Microscopy (SEM)**
- Lot. 5: Thermal Analyzers, Includes Thermogravimetric analyzer with DTA**
- Lot. 6 Fourier-transform infrared spectrometer (FTIR )**
- Lot. 7: X-ray Diffractometer (XRD)**

The bidder must be registered and duly recognized in Pakistan, and be registered with FBR; possess Manufacturer’s status or Distributor/ Dealer status with authorization from Manufacturer/ Principal specific for this tender, with sufficient financial, technical and human resources to take up the task assigned and complete the same within prescribed time limit on the finalization of contract with PAF- IAST.

Tender document containing instructions to bidders covering definitions, introduction/ background of the Project, scope of work, general terms and conditions, and special terms, procedure for submission of bids, opening of bid, evaluation criteria, and other related information, can be obtained against a written request on company’s letterhead, from Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology, Haripur – Pakistan. Cost of the document is Rs. 1000/- Non-refundable (Stationery charges) for each LOT separately. Tender document can also be downloaded from <http://www.paf-iast.edu.pk/> free of cost, however, It should also be submitted along with Pay Order/ Demand Draft of Rs. 1000/- (Stationery Charges). No bid will be accepted without Tender Document fee.

Bidder(s) interested in participating in the tender process are advised to submit their Bid Proposal(s), along with the Earnest Money amounting 2% of their Bid Value in the shape of CDR, in accordance with the instructions in this tender document. Bid Proposal(s) must reach PAF-IAST, Haripur on Monday the December 07, 2020 by 1200 hrs. Any late Bid(s) shall not be accepted and returned unopened. Accepted Bids will be opened on the same day at 1230 hrs, in presence of bidders who chose to attend. In case of sudden holiday on bid opening day, bids will be opened on next working day. The Tender shall be executed in accordance with KPPRA Rule 6 (2)(b) “Single Stage, Two Envelope Procedure”.

This advertisement is also available on PAF: IAST and KPPRA websites <http://www.paf-iast.edu.pk/> & <http://www.kppra.gov.pk> .

### **Project Director**

**Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology (PAF-IAST)**

**Hairpur – Khyber Pakhtunkhwa**

**Phone: 0995-645113-18 E-Mail: [procurement@paf-iast.edu.pk](mailto:procurement@paf-iast.edu.pk)**

## Section 2. Instruction to Bidders (ITB)

<b>A. GENERAL TERMS</b>	
1. Introduction	<p>1.1 Bidders shall adhere to all the requirements of this ITB, including any amendments made in writing by PAF-IAST. This ITB will be governed under Clause 6 (2)(b) "Single Stage, two Envelope Procedure" of Khyber Pakhtunkhwa Public Procurement Rules, 2014, as amended from time to time and instructions of the Government of Khyber Pakhtunkhwa received during the completion of the project.</p> <p>1.2 Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by PAF-IAST. The Institute is under no obligation to award a contract to any Bidder as a result of this ITB.</p> <p>1.3 PAF-IAST reserves the right to cancel the procurement process at any stage without any liability of any kind for PAF-IAST, upon notice to the bidders or publication of cancellation notice on PAF- IAST website.</p>
2. Fraud & Corruption, Gifts and Hospitality	<p>2.1 PAF-IAST strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of PAF-IAST vendors and requires all bidders/ vendors observe the highest standard of ethics during the procurement process and contract implementation.</p> <p>2.2 Bidders/ vendors shall not offer gifts or hospitality of any kind to PAF-IAST staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches or dinners.</p> <p>2.3 In pursuance of this policy, PAF-IAST:</p> <p>(a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question;</p> <p>(b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a PAF- IAST contract; or counseling or canvassing staff or elected representatives; or engaging in collusion with other bidders.</p>
3. Eligibility	<p>3.1 A Bidder should not be suspended, debarred, or otherwise identified as ineligible by any Government/ Semi-government/ or any other international Organization. Bidders are therefore required to disclose to PAF-IAST whether they are subject to any sanction or temporary suspension imposed by these organizations.</p> <p>3.2 It is the Bidder's responsibility to ensure that its employees, sub-contractors, service providers, suppliers and/ or their employees meet the eligibility requirements as established by PAF-IAST.</p>

4. General Terms	4.1	The Bidder should be registered with Sales Tax and Income Tax Department.
	4.2	The Bidder should have not been blacklisted by any Government/ semi Government organization.
	4.3	There should be no litigation against the bidder/ firm.

## B. PREPARATION OF BIDS

5. General Considerations	5.1	In preparing the Bid, the Bidder is expected to examine the ITB in detail. Material deficiencies in providing the information requested in the ITB may result in rejection of the Bid.
	5.2	The Bidder will not be permitted to take advantage of any errors or omissions in the ITB. Should such errors or omissions be discovered, the Bidder must notify the Project Director, PAF-IAST accordingly.
6. Cost of Preparation of Bid	6.1	The Bidder shall bear all costs related to the preparation and/ or submission of the Bid, regardless of whether its Bid is selected or not. PAF-IAST shall not be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.
7. Language	7.1	The Bid, as well as any, and all related correspondence exchanged by the Bidder and PAF- IAST, shall be written in the language(s) specified in the BDS.
8. Documents Comprising the Bid	8.1	The Bid shall comprise of the following documents and related forms of which details are provided in the BDS. All pages of the Bid shall be signed, stamped and properly paginated.
		<ul style="list-style-type: none"> <li>a) Returnable Forms as referred in Section 6 shall be properly filled in Ink or Typed. Forms filled in using a pencil shall not be considered and substantiate the annulment of the Bid Proposal.</li> <li>b) Documents Establishing the Eligibility and Qualifications of the Bidder;</li> <li>c) Bid covering Technical Specifications in detail, and covering Price Schedule;</li> <li>d) Bid Security, if required by BDS;</li> <li>e) Any attachments and/ or appendices to the Bid.</li> </ul>
9. Documents Establishing the Eligibility and Qualifications	9.1	The Bidder shall furnish documentary evidence of its status as an eligible and qualified supplier, using the Forms provided under Section 6 and providing documents required in those forms. In order to award a contract to a Bidder, its qualifications must be documented to PAF-IAST's satisfaction.
10. Technical Bid Format and Content	10.1	The Bidder is required to submit a Bid using the Standard Forms and templates provided in Section 6 of the ITB.
	10.2	Samples of items, when required as per Section 5, shall be provided within the time specified and unless otherwise specified by the Purchaser, at no expense to the Institute. If not destroyed by testing, samples will be returned at Bidder's request and expense, unless otherwise specified.
	10.3	When applicable and required in Section 5, the Bidder shall describe the necessary training program available for the maintenance and operation of the equipment offered as well as the cost to the Institute. Unless otherwise specified, such training as well as training materials shall be provided in the language of the Bid as specified in the BDS.
	10.4	When applicable and required in Section 5, the Bidder shall certify the availability of spare parts for a period of at least five (5) years from date of delivery, or as otherwise specified in this ITB.

<p>11. Price Schedule</p>	<p>11.1 The Price Schedule shall be prepared using the Forms provided in Section 6 of the ITB and taking into consideration the requirements in the ITB.</p> <p>11.2 Any requirement described in this ITB but not priced in the Price Schedule, shall be assumed to have been included in the prices of other activities or items, as well as in the final total price.</p>
<p>12. Bid Security</p>	<p>12.1 A Bid Security shall be provided in the amount and form indicated in the BDS. The Bid Security shall be valid for the duration as referred in BDS.</p> <p>12.2 The Bid Security shall be included along with the Bid. If Bid Security not found in the Bid, the Bid shall be rejected.</p> <p>12.3 If the Bid Security amount or its validity period is found to be less than what is required, PAF-IAST shall reject the Bid.</p>
	<p>12.4 In the event an electronic submission is allowed in the BDS, Bidders shall include a copy of the Bid Security in their bid and the original of the Bid Security must be sent via courier or hand delivery as per the instructions in BDS.</p> <p>12.5 The Bid Security will be forfeited by PAF-IAST, and the Bid rejected, in the event of any, or combination, of the following conditions:</p> <ul style="list-style-type: none"> <li>a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the BDS, or;</li> <li>b) In the event the successful Bidder fails: <ul style="list-style-type: none"> <li>i. to sign the Contract after PAF-IAST has issued an award; or</li> <li>ii. to furnish the Performance Security, insurances, or other documents that PAF-IAST may require as a condition precedent to the effectivity of the contract that may be awarded to the Bidder.</li> </ul> </li> </ul>
<p>13. Currencies</p>	<p>13.1 All prices shall be quoted in the currency indicated in the BDS. Where prices are quoted in different currencies, for the purposes of comparison:</p> <ul style="list-style-type: none"> <li>a) PAF-IAST will convert the currency quoted into the currency indicated in BDS, in accordance with the prevailing Inter Bank rate of exchange on the last day of submission of Bids; and</li> <li>b) In the event that PAF-IAST selects a Bid for award that is quoted in a currency different from the preferred currency in the BDS, PAF-IAST shall reserve the right to award the contract in the currency of PAF-IAST's preference, using the conversion method specified above.</li> </ul>
<p>14. Joint Venture, Consortium or Association</p>	<p>14.1 If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by an intent letter or an Agreement among the legal entities duly notarized, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between PAF-IAST and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture.</p> <p>14.2 After the Deadline for Submission of Bid, the lead entity identified to represent the JV, Consortium or Association Or any change in the constitution of the JV, Consortium or Association shall not be altered without the prior written consent of PAF-IAST/ Procurement Committee.</p>

	<p>14.3 The lead entity and the member entities of the JV, Consortium or Association shall abide by the provisions of Clause 15 herein in respect of submitting only one Bid.</p> <p>14.4 The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entities in the joint venture in delivering the requirements of the ITB, both in the Bid and the JV, Consortium or Association Agreement or Intent Letter. All entities that comprise the JV, Consortium or Association shall be cumulatively subject to the eligibility and technical qualification assessment by PAF-IAST as defined in Section 4: Evaluation Criteria.</p> <p>14.5 A JV, Consortium or Association in presenting its track record and experience should clearly differentiate between:</p> <ul style="list-style-type: none"> <li>a) Those that were undertaken together by the JV, Consortium or Association; and</li> <li>b) Those that were undertaken by the individual entities of the JV, Consortium or Association.</li> </ul> <p>14.6 Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials.</p>
<p>15. Only One Bid</p>	<p>15.1 The Bidder (including the individual members of any Joint Venture) shall submit only one Bid, either in its own name or as part of a Joint Venture.</p> <p>15.2 Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:</p> <ul style="list-style-type: none"> <li>a) they have at least one controlling partner, director or shareholder in common; or</li> <li>b) any one of them receive or have received any direct or indirect subsidy from the other/s; or</li> <li>c) they have the same legal representative for purposes of this ITB; or</li> <li>d) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this ITB process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.</li> </ul>
<p>16. Bid Validity Period</p>	<p>16.1 Bids shall remain valid for the period specified in the BDS, commencing on the Deadline for Submission of Bids. A Bid valid for a shorter period may be rejected by PAF-IAST and rendered non-responsive.</p> <p>16.2 During the Bid validity period, the Bidder shall maintain its original Bid without any change, including the availability of the Key Personnel.</p>
<p>17. Extension of Bid Validity Period</p>	<p>17.1 In exceptional circumstances, prior to the expiration of the Bid validity period, PAF-IAST may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing and shall be considered integral to the Bid.</p> <p>17.2 If the Bidder agrees to extend the validity of its Bid, it shall be done without any change to the original Bid.</p>

	17.3 The Bidder has the right to refuse to extend the validity of its Bid, in which case, the Bid shall not be further evaluated.
18. Clarification on ITB (from the Bidders)	<p>18.1 Bidders may request clarifications on any of the ITB documents no later than the date indicated in the BDS. Any request for clarification must be sent in writing in the manner indicated in the BDS. If inquiries are sent other than specified channel, even if they are sent to a PAF-IAST staff member, PAF-IAST shall have no obligation to respond or confirm that the query was officially received.</p> <p>18.2 PAF-IAST will provide the responses to clarifications through the method specified in the BDS.</p> <p>18.3 PAF-IAST shall endeavor to provide responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of PAF-IAST to extend the submission date of the Bids, unless PAF-IAST deems that such an extension is justified and necessary.</p>
19. Amendment in ITB	<p>19.1 At any time prior to the deadline of Bid submission, PAF-IAST may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of an amendment to the ITB. Amendments will be made available to all prospective bidders.</p> <p>19.2 If the amendment is substantial, PAF-IAST may extend the Deadline for submission of Bid to give the Bidders reasonable time to incorporate the amendment into their Bids.</p>
20. Alternative Bids	<p>20.1 Unless otherwise specified in the BDS, alternative Bids shall not be considered. If submission of alternative Bid is allowed by BDS, a Bidder may submit an alternative Bid, but only if it also submits a Bid conforming to the ITB requirements. Where the conditions for its acceptance are met, or justifications are clearly established, PAF-IAST reserves the right to award a contract based on an alternative Bid.</p> <p>20.2 If multiple/ alternative bids are being submitted, they must be clearly marked as "Main Bid" and "Alternative Bid"</p>
21. Pre-Bid Conference	21.1 When appropriate, a pre-bid conference may be conducted at the date, time and location specified in the BDS. All Bidders are encouraged to attend. Nonattendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be disseminated on the procurement website and/ or shared by email as specified in the BDS. No verbal statement made during the conference shall modify the terms and conditions of the ITB, unless specifically incorporated in the Minutes of the Bidder's Conference or issued/ posted as an amendment to ITB.
<b>C. SUBMISSION AND OPENING OF BIDS</b>	
22. Bid Proposal Submission	<p>22.1 22.1 The Bidder shall submit a duly signed and numbered all pages of the complete Bid in an Envelope sealed and marked as per ITB 22.6, and in accordance with <b>KPPRA Rule 6 (2)(b)</b>.</p> <p>22.2 The Outer Envelope should contain Two (02) separate sealed envelopes, one of which comprising the <b>Forms (A – F) and supporting documents</b> in accordance with requirements in the BDS, shall be marked as "<b>Technical Proposal</b>". Whereas, the other envelope containing the <b>Form G: Price Schedule Form</b> shall be marked as "<b>Financial Proposal</b>".</p> <p>22.3 The Bid Security as referred in BDS must be placed in the "<b>Financial Proposal</b>" but in a duly sealed envelope and marked as "<b>Bid Security</b>". However, an Affidavit stating that the Bid Security (without indicating the amount) has been placed in the Financial Proposal, should be enclosed in "<b>Technical Proposal</b>".</p>



	<p>Bid security envelop will be opened with financial proposal of Technically qualified bidders.</p> <p>22.4 Bid can be delivered either personally, or by courier as specified in the BDS.</p> <p>22.5 The Bid shall be signed by the Bidder or person(s) duly authorized to commit the Bidder. The authorization shall be communicated through a document evidencing such authorization issued by the legal representative of the bidding entity, or a Power of Attorney, accompanying the Bid. There should not be errors and/ or over-writings. Corrections (if any) should be made clearly and initialed with dates.</p> <p>22.6 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder fully accepts the General Contract Terms and Conditions.</p> <p>22.7 Hard copy submission by courier or hand delivery allowed or specified in the BDS shall be governed as follows:</p> <p>a) The signed Bid shall be marked "Original", and its copies marked "Copy" as appropriate. The number of copies is indicated in the BDS. All copies shall be made from the signed original only. If there are discrepancies between the original and the copies, the original shall prevail.</p> <p>(b) The Bid Proposals must be sealed and submitted in an envelope, which shall:</p> <ul style="list-style-type: none"> <li>i. Bear the name of the Bidder;</li> <li>ii. Be addressed to PAF - IAST as specified in the BDS; and</li> <li>iii. Bear a warning not to open before the time and date for Bid opening as specified in the BDS.</li> </ul> <p>If the envelope with the Bid is not sealed and marked as required, PAF-IAST shall assume no responsibility for the misplacement, loss, or premature opening of the Bid.</p>
<p>23. Deadline for Submission of Bids and Late Bids</p>	<p>23.1 Complete Bids must be received by PAF-IAST in the manner, and no later than the date and time, specified in the BDS. PAF-IAST shall only recognize the actual date and time that the bid was received by PAF-IAST.</p> <p>23.2 PAF-IAST shall not consider any Bid that is received after the deadline for the submission of Bids.</p>
<p>24. Withdrawal, Substitution, and Modification of Bids</p>	<p>24.1 A Bidder may withdraw, substitute or modify its Bid after it has been submitted at any time prior to the deadline for submission.</p> <p>24.2 A bidder may withdraw, substitute or modify its Bid by sending a written notice to PAF- IAST, duly signed by an authorized representative, including a Power of Attorney. The corresponding substitution or modification of the Bid, must accompany the respective written notice. All notices must be submitted in the same manner as specified for submission of Bids, by clearly marking them as "WITHDRAWAL" "SUBSTITUTION," or "MODIFICATION"</p> <p>24.3 Bids requested to be withdrawn shall be returned unopened to the Bidders, except if the bid is withdrawn after the bid has been opened.</p>

25. Bid Opening	<p>25.1 The Procurement Committee of PAF- IAST will open the Bid in the presence of Bidders’ representative(s) who choose to attend.</p> <p>25.2 The Bidders’ names, modifications, withdrawals, the condition of the envelope labels/ seals, the number of folders/ files and all other such other details as PAF- IAST may consider appropriate, will be announced at the opening. No Bid shall be rejected at the opening stage, except for late submissions, in which case, the Bid shall be returned unopened to the Bidders.</p> <p>25.3 In case of public holiday on bid opening day, bids will be opened on next working day.</p>
-----------------	---

#### D. EVALUATION OF BIDS

26. Confidentiality	<p>26.1 Information relating to the examination, evaluation, and comparison of Bids, and the recommendation of contract award, shall not be disclosed to Bidders, even after publication of the contract award.</p> <p>26.2 Any effort by a Bidder to influence PAF-IAST in the examination, evaluation and comparison of the Bids or contract award decisions may, at PAF-IAST’s decision, result in the rejection of its Bid and may subsequently be subject to consequences.</p>
27. Preliminary Examination	27.1 PAF-IAST shall examine the Bids to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, and whether the Bids are generally in order, among other indicators that may be used at this stage. PAF-IAST reserves the right to reject any Bid at this stage.
28. Evaluation of Eligibility and Technical Qualification	<p>28.1 Eligibility and Technical Qualification of the Bidder will be evaluated against the Minimum Eligibility/ Qualification requirements specified in the Section 4: Evaluation Criteria.</p> <p>28.2 In general terms, Bidders that meet the following criteria may be considered qualified:</p> <ul style="list-style-type: none"> <li>a) They are not included in the list of blacklisted or barred companies published on KPPRA website, any federal or provincial government department;</li> <li>b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments,</li> <li>c) They have the necessary experience, technical expertise, production capacity, quality certifications, quality assurance procedures and other resources applicable to the supply of goods and/ or services required;</li> <li>d) They are able to comply fully with the General Terms and Conditions of Contract;</li> <li>e) They do not have a consistent history of court/ arbitral award decisions against the Bidder; and</li> <li>f) They have a record of timely and satisfactory performance with their clients.</li> </ul>
29. Evaluation of Bid Proposals	29.1 The evaluation team shall review and evaluate the Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the BDS and other ITB documents. When necessary, and if stated in the BDS, PAF- IAST may invite technically responsive bidders for a presentation related to their Bids. The conditions for the presentation shall be provided in the bid document where required.

<p>30. Due diligence</p>	<p>30.1 PAF- IAST reserves the right to undertake a due diligence exercise, aimed at determining to its satisfaction, the validity of the information provided by the Bidder. Such exercise shall be fully documented and may include, but need not be limited to, all or any combination of the following:</p> <ul style="list-style-type: none"> <li>a) Verification of accuracy, correctness and authenticity of information provided by the Bidder;</li> <li>b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team;</li> <li>c) Inquiry and reference checking with Government entities with jurisdiction on the Bidder, or with previous clients, or any other entity that may have done business with the Bidder;</li> <li>d) Inquiry and reference checking with previous clients on the performance on on-going or completed contracts, including physical inspections of previous works, as deemed necessary;</li> <li>e) Physical inspection of the Bidder’s offices, branches or other places where business transpires, with or without notice to the Bidder;</li> <li>f) Other means that PAF-IAST may deem appropriate, at any stage within the selection process, prior to declaring the Bidder as Qualified.</li> </ul>
<p>31. Clarification of Bids</p>	<p>31.1 To assist in the examination, evaluation and comparison of Bids, PAF- IAST may, at its discretion, request any Bidder for a clarification of its Bid.</p> <p>31.2 PAF- IAST’s request for clarification and the response shall be in writing and no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by PAF-IAST in the evaluation of the Bids in accordance with the ITB.</p> <p>31.3 Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by PAF-IAST, may not be considered during the review and evaluation of the Bids.</p>
<p>32. Responsiveness of Bid</p>	<p>32.1 PAF-IAST’s determination of a Bid’s responsiveness will be based on the contents of the bid itself. A substantially responsive Bid is one that conforms to all the terms, conditions, specifications and other requirements of the ITB without material deviation, reservation, or omission.</p> <p>32.2 If a bid is not substantially responsive, it may be rejected by PAF-IAST and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.</p>
<p>33. Right to Accept, Reject, Any or All Bids</p>	<p>33.1 PAF-IAST reserves the right to accept or reject any proposal in response to the ITB, to render any or all of the proposals as non-responsive, and to reject all Proposals in response to the ITB at any time prior to award of contract, while assigning the reason(s) thereof.</p> <p>33.2 PAF- IAST shall not be obliged to award the contract to the lowest priced offer.</p>
<p>34. Nonconformities, Reparable Errors and Omissions</p>	<p>34.1 Provided that a Bid is substantially responsive, PAF-IAST may waive any nonconformities or omissions in the Bid that, in the opinion of PAF-IAST, do not constitute a material deviation.</p> <p>34.2 PAF-IAST may request the Bidder to submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price. Failure of the Bidder to comply with the request may result in the rejection of its Bid.</p>

	<p>34.3 For the Price Schedule that are submitted, PAF-IAST shall check and correct arithmetical errors as follows:</p> <ul style="list-style-type: none"> <li>a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of PAF-IAST there is an obvious misplacement of the decimal point in the unit price; in which case, the line item total as quoted shall govern and the unit price shall be corrected;</li> <li>b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</li> <li>c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail.</li> </ul> <p>34.4 If the Bidder does not accept the correction of errors made by PAF- IAST, its Bid shall be rejected.</p>
35. Bidder Grievance	35.1 PAF- IAST's grievance readdress procedure provides an opportunity for appeal to those persons or firms not awarded a contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the Bidder may lodge a complaint to the PAF-IAST's Grievance Readdress Committee.
<b>E. AWARD OF CONTRACT</b>	
36. Evaluation	<p>36.1 PAF-IAST will conduct the evaluation solely on the basis of response to this tender received from the firms.</p> <p>36.2 Evaluation shall be undertaken in the following steps:</p> <ul style="list-style-type: none"> <li>a) Preliminary Examination including Technical Specifications and other compliances</li> <li>b) Arithmetical check and ranking of bidders who passed preliminary examination by price.</li> <li>c) Evaluation of prices</li> </ul> <p>36.3 Price comparison shall be based on the landed price, including transportation, insurance and the total cost of ownership (including spare parts, consumption, installation, commissioning, training, special packaging, etc., where applicable)</p>
37. Integrity Pact	37.1 Bidders will also be required to submit a signed Integrity Pact on a stamp paper of appropriate value as part of their response. The text of Integrity Pact is available at Annex – I.
38. Award Criteria	<p>38.1 Prior to expiration of the period of Proposal validity, PAF-IAST shall award the contract to the Bidder that is found to be responsive to the requirements of the Technical Specifications and has offered the lowest price.</p> <p>38.2 PAF-IAST shall not be obliged to award the contract to the lowest priced offer, if the response is found deficient to the Technical Specifications and other compliances.</p> <p>38.3 In case of tie in Financial Bid Value, the Contract will be awarded to the bidder having more closest match to the Technical Specifications.</p>
39. Contract Signing	39.1 After the approval of any Work Award, a Contract Agreement on the stamp paper of appropriate value, shall be executed by PAF-IAST with Selected Bidder (i.e. Contractor) within 15 days from the date of issuance of Lol (Letter of Intent)/ Work Order.

	39.2 Failure to signing of Contract Agreement by the selected Bidder Firm with PAF-IAST within the stipulated time may constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security, if any, and on which event, PAF- IAST may award the Contract to the Second highest rated or call for new Proposals.
40. Right to Vary quantity at the Time of Award	40.1 At the time of award of Contract, PAF-IAST reserves the right to vary the quantity of goods and/ or services, without any change in the unit price or other terms and conditions.
41. Sample draft Contract	41.1 A sample draft Contract to be signed, containing applicable General Terms and Conditions can be found at Annex – II.
42. Performance Security	42.1 A performance security, if required in the BDS, shall be provided in the amount specified in BDS, well prior to the Contract signing by both parties. Where a performance security is required, the receipt of the performance security by PAF-IAST shall be a condition for rendering the contract effective.
43. Bank Guarantee for Advanced Payment	43.1 No Payment will be released in advance.
44. Liquidated Damages	44.1 PAF-IAST shall apply Liquidated Damages for the damages and/ or risks caused to PAF-IAST resulting from the Contractor's delays or breach of its obligations as per Contract. a) In case of delay, the Procurement Committee, PAF-IAST reserves the right to impose a penalty not exceeding 10% of the total amount of the Contract Value at the rate as referred in the Sample Contract at Annexure – II. b) If the Contractor fails to complete work as per PAF-IAST requirement, the Rector, PAF-IAST reserves the right to reject it altogether or impose a penalty not exceeding 50% of the total amount of the Contract. c) If the Contractor fails to provide supplies/ services as per PAF-IAST requirements, PAF-IAST may forfeit his earnest money as well as Performance Security, and the work will be done at the risk and cost of Contractor. d) In case of any dispute, matter will be referred to Rector, PAF-IAST whose decision will be binding on both the parties.
45. Force Majeure	45.1 "Force Majeure" means an event which is beyond the reasonable control of a party and which makes a party's performance of its obligations under the Purchase Order/ Work Order/ Contract impossible or so impractical as to be considered impossible under the circumstances, and includes, but is not limited to, War, Riots, Storm, Flood or other industrial actions (except where such strikes, lockouts or other industrial issues are within the power of the party invoking Force Majeure), confiscation or any other action by Government agencies. In all disputes between the parties as to matters arising pursuant to this Purchase Order/ Work Order/ Contract, the dispute will be referred to Project Director, PAF-IAST whose decision will be final.
46. Delivery of Goods	46.1 Contractor will be required to deliver the goods as per the Delivery Schedule referred in BDS without claiming any additional cost to the PAF-IAST at the designated site(s) and in quantities as referred in the Contract.
47. Payment Provisions	47.1 Payment will be made only upon PAF- IAST's acceptance of the goods and/ or services performed. The terms of payment shall be within thirty (30) days, after receipt of invoice, and certification of acceptance of goods and/ or services issued by the proper authority in PAF: IAST. Payment will be affected by bank transfer in the currency of the contract. 47.2 The Contractor shall provide all necessary supporting documents along with GST invoice, delivery challan and any other relevant documents as required by the PAF- IAST.

## Section 3. Bid Data Sheet

The following data for the goods and/ or services to be procured shall complement, supplement, or amend the provisions in the Invitation to Bid. In the case of a conflict between the Instructions to Bidders, the Bid Data Sheet, and other annexes or references attached to the Bid Data Sheet, the provisions in the Bid Data Sheet shall prevail.

BDS No.	Ref. to Section.2	Data	Specific Instructions / Requirements
1.		Background of the Project	<p>Pak-Austria Fachhochschule: Institute of Applied Sciences and Technology (PAF: IAST) is novel in its content and holistic in approach. The project concept is based on the slogan of “Skilling Pakistan” to create a high-quality technical education infrastructure. This unique educational institution in Pakistan will closely collaborate with several institutions in Austria and China and award multiple foreign degrees. This is a historic and visionary initiative as it is probably the first time that an institution will be established in Pakistan with many foreign universities giving degrees to students who study in it.</p>
2.		Objective	<p>The main objective of this Tender is to equip the PAF-IAST with necessary and advanced level of laboratory facilities, providing enabling environment to the students and faculty to perform their academic and research work in a conducive and productive environment and deliver beyond the expectations.</p>
3.		Scope of Work	<p><b>Supply of Research Lab Equipment</b>                      The required items in various Lots as referred in Section – 5 have been sought by PAF-IAST from a reputed Firms/ Companies. The supplier is expected to supply high quality products meeting the specification as stipulated in this ITB, which conforms to the international quality standards. The time specified for delivery, Installation and Commissioning in the tender form shall be deemed to be the essence of the contract and the Successful Bidder shall arrange within the specified period.</p> <p><b>Post-Delivery Warranty and Support Services</b>                      It is required that Manufacturer’s Warranty and Post-delivery Bidder’s Support Services for at least One (01) year from the date of commissioning at PAF-IAST be provided by the Supplier within the quoted cost of items.</p> <p>Moreover, additional Warranty and Support Services for next four (04) years should be quoted separately by the Bidder on annual payment basis. However, it will be at sole discretion of PAF-IAST to avail additional Warranty and Support Services in subsequent year(s) or otherwise.</p>
4.	7	Language of the Bid	English
5.	22, 23, 27	Submitting Bids for Parts or subparts of the Schedule of Requirements (partial bids)	<p>The Purchase Committee shall consider the Bids Lot-wise (i.e. package against each of the Lots) as referred in Section – 5. Any item not quoted in the respective Lot shall have reasonable grounds to reject the Bid for that Lot.</p>
6.	20	Alternative Bids	<b>Not Allowed.</b>

7.	21	Pre-Bid conference	November 20, 2020
8.	16	Bid Validity Period	<b>90 days</b>
9.	13	Bid Security/ Earnest Money (Refundable)	<p><b>Required in the amount of: 2% of the Bid Value of each Lot (separately) against which the Bidder is participating.</b> In case of options, earnest money shall be based on the maximum quoted price of the same items in the Lot.</p> <p><u>Acceptable Forms of Bid Security:</u> Denominated in Pak Rupees duly issued by a Pakistani Bank or branch of a Foreign Bank, in the form of <b>CDR</b> in favor of the <b>Project Director, PAF-IAST</b></p>
10.	42	Liquidated Damages	<p>Will be imposed as follows:</p> <p><b>Percentage of contract price per day of delay: as referred in Draft Contract Sample in Annexure – II.</b></p>
11.	40	Performance Security	Within one week of issuance of Lol/ Purchase Order and well prior to the signing of Contract, as <b>10% of the Contract value</b> for the duration of Warranty period referred in RFP.
12.	12	Currency of Bid	Pakistani Rupees (PKR) for DDP US Dollars for CIF
13.	31	Deadline for submitting requests for clarifications/ questions	<b>5 days</b> before the submission deadline
14.	31	Contact Details for submitting clarifications/ questions	<p>Focal Person in PAF: IAST:  <b>Dr. Fida Hussain/ Dr. Muhammad Muqet</b>  <a href="mailto:Fida.hussain@fcm3.paf-iaست.edu.pk">Fida.hussain@fcm3.paf-iaست.edu.pk</a>  <a href="mailto:Muhhammad.muqet@fcm3.paf-iaست.edu.pk">Muhhammad.muqet@fcm3.paf-iaست.edu.pk</a>  <b>0995-645112</b></p>
15.	18, 19, and 21	Manner of Disseminating Supplemental Information to the ITB and responses/ clarifications to queries	<p>Direct communication to prospective Bidders by email and/ or Posting on the PAF: IAST website:  <a href="mailto:Fida.hussain@fcm3.paf-iaست.edu.pk">Fida.hussain@fcm3.paf-iaست.edu.pk</a>  <a href="http://www.paf-iaست.edu.pk/">http://www.paf-iaست.edu.pk/</a></p>
16.	23	Deadline for Submission	<b>Monday the December 07, 2020 on or before 12:00 noon (PST)</b>
17.	22	Number of Set(s) of Bid	<p><b>Technical Proposal(s)</b></p> <ul style="list-style-type: none"> <li>- One (01) Original</li> <li>- One (01) Copy</li> <li>- Soft copy of Technical Proposal in a USB Flash Drive</li> </ul> <p><b>Financial Proposal(s)</b></p> <ul style="list-style-type: none"> <li>- One (01) Original</li> </ul> <p><b>Note: Bidders are required to prepare and submit the Proposal(s) against the Lot(s) separately in separate envelopes, in which they intend to participate.</b></p>
18.	22	Allowable Manner of Submitting	<input checked="" type="checkbox"/> Courier/ Hand Delivery

		Bids									
19.	22	Bid Submission Address	<input checked="" type="checkbox"/> <b>By Courier / Hand Delivery:</b> Convener Procurement Committee, PAF- IAST, Mang, Haripur								
20.	22	Electronic submission (email) requirements	Not Allowed								
21.	25	Date, time and venue for the opening of bid	Date and Time: <b>Monday the December 07, 2020 at 12:30 PM</b> Venue: <b>Conference Room, PAF-IAST, Mang, Haripur</b>								
22.	27, 36	Evaluation Method	Eligible and qualified bids meeting the PAF- IAST requirements and technically responsive as stipulated in this ITB								
23.		Evaluation Method for the Award of Contract	Lowest priced technically responsive.								
24.		Expected date for commencement of Contract	<b>January 2021</b>								
25.		Maximum expected duration of Contract	<b>60 months</b>								
26.	35	PAF: IAST will award the contract to:	<b>One Bidder Only against each Lot</b>								
27.	39	Type and Contract Terms and Conditions that will apply	PAF-IAST General Terms and Conditions for Contracts for Goods and/ or Services as per Sample at Annex – II.								
28.	46	Delivery, Installation and Testing/ Training	<table border="1"> <thead> <tr> <th></th> <th>Delivery</th> <th>Installation</th> <th>Testing/ Training</th> </tr> </thead> <tbody> <tr> <td>LOT # 1-7</td> <td>10-12 weeks</td> <td>2 weeks</td> <td>2 week</td> </tr> </tbody> </table>		Delivery	Installation	Testing/ Training	LOT # 1-7	10-12 weeks	2 weeks	2 week
	Delivery	Installation	Testing/ Training								
LOT # 1-7	10-12 weeks	2 weeks	2 week								



## Section 4. Evaluation Criteria

### Preliminary Examination Criteria

Bids will be examined to determine whether they are complete and submitted in accordance with ITB requirements as per below criteria on a Yes/ No basis:

- Appropriate signatures
- Power of Attorney
- Minimum Bid documents provided
- Bid Validity
- Bid Security submitted as per ITB requirements with compliant validity period

### Minimum Eligibility Criteria

Eligibility will be evaluated on a Pass/ Fail basis. If the Bid is submitted as a Joint Venture, there should be no more than two (02) companies in the Joint Venture and each company should meet the minimum criteria, unless otherwise specified.

ELIGIBILITY			
S. #	Subject	Criteria	Reference Returnable Form(s)
1.	<b>Bidder's Status</b>	Participating as <input type="checkbox"/> Individual Company <input type="checkbox"/> JV/ Consortium	Form B: Joint Venture/ Consortium/ Association Information Form
2.	<b>Legal Status</b>	Bidder is a legally registered entity in Pakistan. Bidder is/ are also registered with FBR for Income Tax and Sales Tax	Form C: Bidder Information Form
3.	<b>Location of Offices</b>	Bidder (Lead Bidder) has either declared office(s) in Islamabad/ Rawalpindi/ Peshawar or in Haripur. Alternately, if the Contract is awarded, the Bidder shall establish office in either of these cities.	Form C: Bidder Information Form
4.	<b>Principal's Authorization</b>	Bidder or at least one member of JV/ Consortium/ Association must be Authorized Partner/ Reseller/ Dealer for the supply and services of quoted goods/ services.	Form C: Bidder Information Form
5.	<b>Company in Operation</b>	Bidder (Lead Bidder) is in operation for at least Five (05) years.	Form C: Bidder Information Form
6.	<b>Financial Strength</b>	Average annual turnover over last 3 years no less than Rs. 100 million <i>(For JV/ Consortium/ Association, all Parties cumulatively should meet requirement).</i>	Form C: Bidder Information Form
7.	<b>Relevant Experience</b>	Minimum No. of Projects of similar nature, value, and complexity in last 3 years Two (05) projects <i>(For JV/Consortium/Association, all Parties cumulatively should meet requirement).</i>	Form C: Bidder Information Form
8.	<b>Eligibility</b>	Bidder(s) is not suspended, nor debarred, nor otherwise identified as ineligible by any Government/ Semi-government/ Autonomous organization in Pakistan, in accordance with ITB clause 3. Non-Blacklisting certificate will be required.	Form A: Bid Submission Form
9.	<b>Bankruptcy</b>	Bidder(s) has not declared bankruptcy, is not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Form A: Bid Submission Form
QUALIFICATION			

S. #	Attribute	Description	Max. Score	Criteria	Returnable Form(s)
<b>Section – I: General Corporate Profile</b>			<b>25</b>		
10.	<b>Bidder’s Footprints</b>	Number of offices/ services centers across the country	5	4+ offices fully operational for last five (05) year	Form C: Bidder Information Form
			3	3 – 4 offices fully operational for last five (05) year	
			1	< 3 offices fully operational for last five (05) year	
11.	<b>Bidder’s Human Resource Strength</b>	Number of full-time employees (documentary proof required)	8	100+ employees with at least 20% Technical staff with at least 10% having technical certification	Form C: Bidder Information Form
			6	51 – 100 employees with at least 20% Technical staff at least 10% having technical certification	
			4	26 – 50 employees with at least 20% Technical staff at least 10% having technical certification	
			2	20 – 25 employees with at least 20% Technical staff at least 10% having technical certification	
12.	<b>Financial Standing</b>	Annual Turnover averaged over last 3 years	7	2+ x Financial Strength	Form D: Qualification Form
			4	2 x Financial Strength	
			2	1.5 x Financial Strength	
13.	<b>Annual Tax Paid</b>	Annual Tax Paid averaged over last 3 years	5	Rs. 50+ million or more	Form D: Qualification Form
			3	Rs. 20-50 million	
			2	Rs. 10 million	
<b>Section – II: Business Profile</b>			<b>30</b>		
14.	<b>Relevant Experience</b>	Project(s) of similar nature, value and complexity completed. Min. No. of Projects=5	7	Min. No. of Projects + 5	Form D: Qualification Form
			5	Min. No. of Projects + 3	
			3	Min. No. of Projects + 2	
15.	<b>Public Sector Experience</b>	Project(s) delivered to government organizations	9	5 Projects worth \$1 million each	Form D: Qualification Form
			7	3 Projects worth \$1 million each	
			5	2 Projects worth \$1 million each	
16.	<b>Education Sector Experience</b>	Project(s) completed at education institutions.	9	2+ Projects	Form D: Qualification Form
			7	2 Projects	
			5	1 Project	
17.	<b>Experience in Haripur/ Abbottabad</b>	Project(s) completed in Haripur/ Abbottabad	5	Project worth 30 million in Haripur/ Abbottabad	Form D: Qualification Form
			3	Project worth 25 million in Haripur/ Abbottabad	
<b>Section – III: Manufacturer’s/ Product’s Strengths</b>			<b>10</b>		
18.	<b>Manufacturer’s Global Presence</b>	Countries having supplied the same Quoted items	5	No. of countries identified by Bid in consideration/ Max. No. of countries identified in all Bids * 10	Form E: Project Proposal Form

19.	<b>Manufacturer's Products Portfolio</b>	Various Products produced by the manufacturer beyond quoted items	5	No. of relevant Products mentioned by Bid in consideration/ Max. No. of Products referred in all Bids * 10	Form E: Project Proposal Form
<b>Section – IV: Registration &amp; Certifications</b>			<b>10</b>		
20.	<b>ISO 27001 Certified</b>	Bidder or the Lead Bidder in case of JV should be Certified	5	Copy of Valid Certificate	Form E: Project Proposal Form
21.	<b>Certification specific to quoted Products/ Solution</b>	Bidder or any of the JV Partners should possess them	5	Copy of Valid Certificate	Form E: Project Proposal Form
<b>Section – V: Presentation on Project Proposal</b>			<b>25</b>		
22.	<b>Project Management Approach</b>	Overall approach towards planning and implementing the project.	8	To be assigned by the Technical Committee	Form E: Project Proposal Form
23.	<b>Post-Commissioning Services</b>	Overall approach towards after-sale support and services.	7	To be assigned by the Technical Committee	Form E: Project Proposal Form
24.	<b>Distinguishing Features</b>	Distinguishing features of the quoted Product and/ or overall project proposed.	10	To be assigned by the Technical Committee	Form E: Project Proposal Form
<b>Grand Total</b>			<b>100</b>		
	<b>Technical Evaluation</b>	Bids shall be evaluated on both Eligibility and Technical Qualification Criteria. Bidders meeting the Eligibility Criteria and able to secure <b>70 percent</b> in Technical qualification shall be declared as Technically Qualified Bidders for the next step, i.e. Opening of Financial Bid.			
	<b>Financial Evaluation</b>	Detailed analysis of the price schedule based on requirements listed in Section 5 and quoted for by the bidders in Form F. Price comparison shall be based on the landed price, including transportation, insurance and the total cost of ownership (including spare parts, consumption, installation, commissioning, training, special packaging, etc., where applicable) Comparison with budget/ internal estimates. Tender will be awarded on <b>least-cost basis</b> .			

## Section 5a: Technical Specifications of the Required Goods

### Lot No. 1: Atomic Absorption Spectrophotometer [Qty: 01]

The equipment must come from a reputable brand in the market with direct manufacturer support - engineer, application, and logistics locally. It must have a strong track record for reliability, robustness, and reproducibility.

Specifications:

Analytical method

Flame

Measurement mode

Atomic absorption and flame photometry

Optics

Double-beam method

Background correction Dual

Monochromator

Mount/diffraction grating

Czerny-Turner mount, 1200-1800 Lines/mm, Blazed at 240 nm

Wavelength range, setting

190 to 900 nm, Automatic spectral peak setting

4 steps ( 0.2, 0.4, 1.3, 2.6 nm)

Detector

Photomultiplier

Light source

Number of lamps, turn-on current

4 -8, Lamps holder, multi lamps simultaneous lightning

Lamp positioning

Automatic position setting, fine adjustment function

Ignition method Pilot flame automatic ignition

Burning condition setting Automatic flow rate setting of combustion gas

Safety monitoring function

Optical flame monitoring, flame sensor error detection, fuel/auxiliary gas pressure monitoring, drain liquid monitoring, cooling water flow monitoring, flash-back shock absorption, Safety monitoring function safety fire extinguishing at power failure (buffer tank method), flow stop check at flame turnoff, prevention of restart at reconnection of power, N<sub>2</sub>O select safety mechanism

Fully computer control for gases safety interlock to shut down all gases

Full size Gas Cylinder for Acetylene along with Regulator, two complete sets.

Full size Gas Cylinder for Nitrous Oxide along with Regulator two complete sets.

Quiet oil-less air compressor,

Fume extraction system: Includes fan/Blower, hood, pipes, clips, and required meter of Ducting and or any other thing necessary.

Hollow cathode lamps – One each Zn, Cu, Fe, Mn, Pb, Ni, Cd, Cr, Co, Si, Na, Ca, K, B, Mg, Mo, Ag, As, , Se, Au with All necessary standards and reagents.

Air-acetylene burner + Nitrous oxide -acetylene burner 04 number reach.

Autopipette

4 variable volume autopipette in the most popular and universal volumes (0.5-10 µL, 2-20 µL, 20-200 µL, and 100-1000 µL), pipet stand for 4 pipettors, tips (200 each), and accessories

Burner cleaner cards 100 numbers

Nebulizer cleaner. 100 numbers

Sample uptake capillary– nebulizer (30cm long)10 numbers

Laptop computer i7 + printer 01 set.

Software

The instrument control software must be an original licensed software.

#### **Quality Control software**

Must provide complete licensed Quality Control software package that includes the following minimum protocols: QC blank, QC standard, QC spike, Duplicates, Precision (replicate %RSD), Correlation Coefficient and Detection Limit.

Stabilizer and UPS,(at least 30 minutes back up) one number each

Safety Features Automatic, Gas Leak Check / Automatic Air-N<sub>2</sub>O Switching / Flame Monitor / Gas Pressure Monitor / Drain Tank Level Monitor/Automatic Flame Extinction etc.

Installation, commissioning, operation, service and maintenance training of the faculty staff.

Extended warranty for 05 years.

#### **Lot No. 2: Total Organic Carbon Analyzer [Qty: 01]**

The equipment must come from a reputable brand in the market with direct manufacturer support - engineer, application and logistics locally. It must have a strong track record for reliability, robustness and reproducibility.

#### **Specifications**

**MAIN DEVICE (Using High - Temperature Catalytic Combustion Oxidation/NDIR Method)**

**Multi-Functional Sample Pretreatment & Injection System**

**Autosampler**

**Optional Kits**

**Data Management and Acquisition System**

#### **Main Device:**

Automatic and simultaneous determination of the following:

TC, TOC, NPOC (TOC measurement via acidification and sparging), IC, and Option: POC, TN.

Enable extremely wide measurement range from ppb to ten thousand ppm level. Measurement range:

TC: 0 to 30,000 mg/L, IC: 0 to 35,000 mg/L, TN: 0 to 10,000 mg/L (option), POC: 0 to 500 mg/L (option).

Repeatability: TC, IC, CV 1.5 % max. or  $\pm 4$   $\mu\text{g/L}$  max

Detection limit: TC, IC: 4  $\mu\text{g/L}$ .

High organic recovery capacity. Use 600-900°C combustion catalytic oxidation method to analyze all organic compounds.

Suitable for liquid samples even with high content of particles and suspended solids, gas and solid samples with corresponding accessories.

Shall have a short measuring time (4 minutes minimum).

Create multi-point calibration curve from single standard by using same injection volume.

Can add stat or priority samples at any time to the analysis schedule without interrupting operation.

Easy-to-use dedicated keyboard and highly visible TFT color LCD screen for standalone model.

Equipped with energy saving mode

Carrier gas purification kit

Gas sample injection kit

POC measurement kit

Nitrogen carrier gas kit

Nitrogen Gas filled cylinders O<sub>2</sub> with regulator and hosing etc,

#### **Multi-Functional Sample Pretreatment & Injection System:**

Automatic sample injection using a syringe pump and slide type injection mechanism.

Shall have built-in automatic dilution function to minimize the influence of matrix and extend catalyst and combustion tube service life by reducing sample salinity, acidity and alkalinity.

Low sample injection volume for testing: 10 to 2,000  $\mu\text{L}$  variable

Equipped with automatic sample acidification and sparging for IC removal.

Pre-treatment inside analyzer to prevent atmosphere pollution.

#### **Autosampler:**

Auto sampler must be equipped with multiple options (capacity and number of vials) with sufficient number of vials.

magnetic stirrers agitate the sample in the vials to prevent the settling of suspended solids

4 variable volume autopipette in the most popular and universal volumes (0.5-10  $\mu\text{L}$ , 2-20  $\mu\text{L}$ , 20-200  $\mu\text{L}$ , and 100-1000  $\mu\text{L}$ ), pipet stand for 4 pipettors, tips (200 each), and accessories

Stabilizer and UPS, (at least 30 minutes back up) one number each

Laptop computer Core i7 + printer 01 set.

The instrument control software must be an original licensed software.

Installation, commissioning, operation, service and maintenance training of the faculty staff.

Extended warranty for 05 years.

**Optional:**

Bench top Nitrogen Generator with all standard accessories (complete set)

Producing 99.99% pure Nitrogen,

Capacity 35-50 L/min

### Lot No. 3: GC- with FID, TCD and GC-MS [Qty: 01]

The equipment must come from a reputable brand in the market with direct manufacturer support - engineer, application and logistics locally. It must have a strong track record for reliability, robustness and reproducibility.

The system should be configured for FID & TCD & separate GC with MS.

**Specifications**

**GC with FID/TCD and GC-MS Quadrupole Mass Spectrometer**

Scan modes: Full Scan; Selected Ion Monitoring (SIM),

- Standard ionization mode: Electron Ionization (EI)
  - Optional ionization modes: Chemical Ionization (CI) including PCI and NCI
  - Ion source: Auto-aligning EI or CI (optional)
  - Source temperature: 100 °C to 300 °C
  - Filament and emission current: dual filaments; up to 200  $\mu\text{A}$
  - Electron energy: adjustable from 10 to 150 eV
  - Mass range (m/z): 10 to 1050 Da
  - Scan rate: up to 20,000 Da/sec
  - Minimum dwell times: 1 ms
  - Resolution: user adjustable from Unit (0.4 Da) to 2 Da, also with three user selectable settings (Unit, Standard, Open)
  - Transfer line temperature: up to 350 °C
  - 
  - Detector: Electron multiplier
  - Carrier gas filled cylinders with regulator two sets (Helium/Nitrogen).
  - Hydrogen/Argon gas filled cylinders with regulator two sets.
  - Gas Sampling assembly and gas sample injection system to support online connection with the reactor (for CO<sub>2</sub>, CO, water gas etc.)
  - GC Columns Qty.10 for different applications.
1. Column Oven
- Operating temperature range: ambient + 4°C to 450°C
  - Oven temperature set point resolution must be 0.1°C.
  - Fast cooling of oven temperature

**Split/Splitless Injection Unit for GC Detectors Qty 2**

Maximum operating temperature : 450 °C

**Direct Injection Unit Qty1**

Supported capillary columns 50 µm to 530 µm I.D.

Maximum operating temperature : 450 °C

**Flame Ionization Detector (FID)**

Minimum Detectable Quantity (MDQ) : < 1.4 pg C/s (dodecane) •

Linear dynamic range:  $1 \times 10^7 (\pm 10\%)$

Flow rate settings: Makeup: 0 to 100 mL/min H<sub>2</sub>: 0 to 100 mL/min Air: 0 to 1000 mL/min

Max acquisition rate: 2 ms (500 Hz) Max operating temperature: 450 °C Automatic flame out detection and reignition

**Thermal Conductivity Detector (TCD)**

A detector that senses changes in the thermal conductivity of the eluting sample. It can detect all compounds aside from the carrier gas.

Sensitivity: > 20000 mV × mL/mg (decane) Dynamic range:  $1 \times 10^5$  Max operating temperature: 400 °C

Max acquisition rate: 2 ms (500 Hz)

Flow rate settings: Makeup (He, H<sub>2</sub>, N<sub>2</sub>, Ar): 0 to 20 mL/min

**Auto sampler**

Multifunctional, high throughput sampler which can accommodate up to 150 samples (vials to be provided 300)

Sample volume injection should be in the range of 0.1 ~ 8.0 µl

Number of syringe pumping: 0 ~ 20 with pre-wash and post-wash after injection of samples.

Additional sampling micro syringes, tubing,

4 variable volume autopipette in the most popular and universal volumes (0.5-10 µL, 2-20 µL, 20-200 µL, and 100-1000 µL), pipet stand for 4 pipettors, tips (200 each), and accessories

**Database/Library**

NIST Library for pesticide analysis

Library for organics, Flavors and Fragrance.

Installation, commissioning and training of the faculty staff.

Extended warranty for 05 years

Laptop Computer: Core i7, one each with GC-FID,/TCD and GC-MS

**Optional**

**Nitrogen Generator with air supply:**

Purity: more than 99.995%.

**Hydrogen Generator:**

Purity: more than 99.995%.

## Lot No. 4: Scanning Electron Microscopy (SEM)

The equipment must come from a reputable brand in the market with direct manufacturer support - engineer, application and logistics locally. It must have a strong track record for reliability, robustness and reproducibility.

**Specification:**

**Scanning Electron Microscope:**

- High Vacuum, low vacuum and Extended low vacuum for dynamic range of samples.
- Energy Dispersive X-ray Analysis with live color elemental composition
- Sputter Coating System
- UPS
  
- Electron Optics System

- Accelerating voltage shall be available for at least 30kV or better.
  - The electron gun type Tungsten filament
  - The Secondary image resolution shall be guaranteed 3.0nm or better at Acc. 30kV in High Vacuum
  - Large probe current for analysis up to 2 $\mu$ A or better continuously adjustable
  - Magnification 5x to 1,000,000x or better
  
  - Electron Detectors – SE and BSE
- System shall be equipped with the Secondary electron detector for High vacuum, for low vacuum and for extended low vacuum,  
The back scattered detector shall be equipped as each one for the high vacuum mode and low vacuum mode.
- CCD IR Camera for chamber view
  - Color Navigation camera for stage navigation
  - Specimen Chamber
  - Eucentric goniometer stage with all five axes motorized control.
  - The specimen chamber should accommodate sample with diameter of 120mm or more with full rotation in X and Y direction
  - The stage movements shall be X: 110mm or more, Y: 100mm or more, Z: 60mm or more, tilt: minus 15 to 90, Rotation: 360 continuous
  - Dry nitrogen cylinder for purging the chamber
  - Software – user friendly, preferably MS Windows based
  - User guidance for beginners should be part of the system.
  - Mapping software for large area acquisition with resolution greater than 16Kx16K with automatic stitching and tiling.
  - Online diagnostic support should be available.
  - Drift compensation should be part of the software to avoid drifts in imaging
  - Interlaced scanning for charge mitigation
  - Function
  - The acquisition of Secondary image, back scattered image and chamber view shall be simultaneous.
  - The Stage navigation system with camera for searching the field of view shall be equipped.
  - The chamber camera for checking inside of specimen chamber shall be equipped.
  - Auto functions such as auto focus, auto contrast and brightness, auto stigmator shall be equipped.
  - Energy Dispersive X-ray Spectrometer (EDS) with complete software for elemental mapping, line profiles and image analysis
  - A LN2 free EDS detector
  - Energy resolution shall be 129 eV or better Detectable element range shall be Be4 to U94 at least.
  - Set of Standard samples for quantitative analysis
  - Integrated Live color imaging based on elemental composition must be part of the system.
  - Sputter Coater system
  - A suitable sputter coating system with minimum 2 Au/Pd targets
  - UPS - True Online UPS to support the system.
  - Miscellaneous:
  - Laptop Computer: Core i7,
  - 200 Tungsten filaments, carbon and copper conductive tapes of various size, conductive carbon and silver paste and Rotary pump oil
  - Operation & maintenance manuals
  - Soft copy of the operation & maintenance manuals should be provided
  - Availability of spares parts The vendor has to guarantee that all the spares parts for the offered SEM and attachments will be available for at least next 10 years
  - Installation & training
  - Onsite installation, demonstration of all specifications quoted.
  - Pre-installation requirement (civil & electrical EMI and gas, etc.)
  - Should be mentioned along with offer. Free survey of vibration and EMI at site and provide the results of the survey and the necessary modifications if required for achieving best results



- Vibration isolation system, EMI active cancellation system.
- Mandatory requirement:
- Testing of the samples supplied by us to validate the specifications.
- Installation, commissioning, maintenance and troubleshooting training of the faculty staff.
- Extended warranty for 05 years

### Lot No. 5: Thermal Analyzers, Includes Thermogravimetric analyzer with DTA

#### Thermal Analyzers, Includes Thermogravimetric analyzer with DTA

TGA / SDTA or DTA or DSC system that should have the option of multi sensors to simultaneously measure heat flow (DSC) in addition to weight change and the capability for analyzing evolved gas using TGA-FTIR, TGA-MS and TGA-GC/MS systems. Should also have gas switching for purged gas & Mass Flow controllers both for purged and cell gas.

#### Specifications:

- Working range: RT to 1500°C
- Accuracy:  $\pm 0.5^\circ\text{C}$
- Furnace temperature resolution: 0.002 K°C
- Heating rate: 100°C / min
- Cooling rate: 20 °C / min
- Appropriate cooling system for controlled experiment in heating-cooling mode
- Factory calibrated for temperature and balance and also for the Tau lag calibration to minimize the effect of different heating rate during the experiment.
- Laptop Computer: Core i7, Complete system
- Installation, commissioning, maintenance and troubleshooting training of the faculty staff.
- Extended warranty for 05 years

### Lot No. 6 FTIR

#### Specifications

The system should comprise of the following specifications

Michelson interferometer, with dynamic alignment, high stability

Include top-mounted DLaTGS

0.25 cm<sup>-1</sup> resolution with variable aperture or better

Signal to noise ratio: 45000:1 peak to peak or better

Tungsten-Halogen white /high energy ceramic light source

Should be upgradeable to include ATR Built-in, wide range diamond ATR

Should have option to expandable with the GC-IR and NIR modules

Compatible with Continuum FT-IR Microscope and TGA Accessory

Ready for ABX automatic beam splitter changer

Sealed and Desiccated with KBr/KRS sample compartment windows

Standard Software

Original Licensed software support for spectrometer and modules

Auto Analyze feature to perform and report TQ prediction,

searching, Qcheck or Peak Labelling immediately after collection.

Automatic atmospheric suppression to remove H<sub>2</sub>O and CO<sub>2</sub>

interferences (without any standards requirement)

System Performance verification (SPV) monitors system status

TQ Professional for quantitative and qualitative method development prediction and deployment.

Full-featured report generator and electronic laboratory notebook

Full array of data conversion and correction tools such as:

Kubelka Munk, Kramers Kronig and Advanced ATR correction

Complete set of spectral data processing tools

Automation

Microprocessor controlled optical bench digital speed control automatic gain selection, aperture changer, and advance system check.

XT-KBr On-Axis Beam splitter

Default Transmission & Single Bounce Diamond ATR

Transmission Starter Kit for Liquid & Solid Sampling

Reference Libraries

Polymer, Polymer Chemicals, Kidney Stones, Art Media, Fiber, Organic Reagents, Organic reagents Solid, Inorganic Reagents, Surfactant, Minerals, Georgia State Crime Laboratory & Vapour Phase.

Standard Purge System

Should include Purge Regulator, tubing and spectrometer attachment

Data station computer

Laptop computer Core i7,

UPS

Suitable UPS should be included

- Installation, commissioning, maintenance and troubleshooting training of the faculty staff.
- Extended warranty for 05 years

#### **Lot No. 7: X-ray Diffractometer (XRD)**

**X-ray Diffractometer Specifications.**

**X-Ray Generator & Tube:**

**Long Fine Focus X-ray Tube.**

**X-ray generator of minimum 1.0kW**

**Output stability: + 0.01% per 1 % mains variation.**

**X-ray tube with ceramic insulation**

**Cu anode**

**Voltage step width: 1kV.**

**Current step width: 1mA.**

**Facility to rotate the tube from Line Focus to Point Focus without disconnecting utilities. Procedure should be given in writing with documentary proof from manuals.**

**Goniometer:**

**The goniometer should be vertically mounted and should be  $\theta$ - $\theta$  type only. All basic as well as application specific modules should be supplied pre aligned in all 3 axes so that they can be mounted on the goniometer arm(s) without any need for realignment. The most modern advanced technology to eliminate realignment like PREFIX (Pre-aligned Fast Interchangeable) should be provided. The goniometer movement should be via DC Servo Drive and should have dual optical sensors to eliminate any inaccuracies in positioning on account of vibrations, backlash or positioning errors. There should be no need for alignment when mounting and demounting sample stages and optical modules for thin film, SAXS and non-ambient measurements. The goniometer should further have the following features and specifications:**

**Angular accuracy: +0.00250 or better.**

**Angular reproducibility: +0.00010 or better.**

**Scan speed: 0.001 – 1.270 /sec or better.**

**Slew speed: 120/sec or better.**

**2 $\theta$  movement range: 0 - 1400 2 $\theta$  or better.**

**Step size: +0.00010 or better.**

**Goniometer linearity: Should be < 0.0260 for 2theta using LaB6.**

**Optics:**

Optics should be provided with an option of all programmable divergence, receiving and anti-scatter slits. These slits should facilitate measurements from  $<1\text{deg } 2\text{-theta}$  and should be provided as part of basic unit. The optics should be capable of being operated in standard focusing/Bragg-Brentano geometry as well as parallel beam geometry for thin film measurements. The changeover between these geometries to fulfill various applications should be very easy without the need for any user realignment, preferably with minimal manual intervention.

2 types of sample stage should be provided. One flat sample stage and another Reflection cum Transmission Spinning Sample Stage. This Spinning stage should be able to take samples between foils for measurement of samples in transmission geometry. This should be part of basic unit. The spinning stage should have a controlled programmable phi rotation.

**Detector:**

Latest Fast Solid State multi strip array area detector with following minimum specifications:

Count rate linearity over whole detector without saturation  $\geq 3 \times 10^9$  cps. The detector should be able to handle up to minimum 1 terra count levels.

Dark noise over whole detector  $\leq 0.5$  cps.

Detector should be useful for following applications –

Fast high resolution powder diffraction & Structure Refinement.

Thin film measurements and grazing angle studies

Small angle x-ray scattering and particle size measurements

The detector should operate in 0D, 1D and 2D mode. In 2D (Area detector) mode should have the capability to give data in form of Debye Scherer rings and convert the same to normal diffractograms.

The detector should not use any external cooling and vendor to confirm that the same does not require any gas for operations.

Detector technology should not require any re-gassing (refilling of gas) / refurbishing. If required, then the same should be clearly brought out in the quotation. Any such costs of re-gassing (refilling) / refurbishing and associated costs for a period of 10 years will be to the vendor's account.

Detector should not require any constant recurring recalibrations.

Detector secondary Monochromator to be quoted as option to remove sample fluorescence.

**Computer Control Unit:**

A desk top PC (all in one 23 Inches) should be provided for all operations of the XRD with minimum Core i7 processor, DVD-RW drive facility, 1TB SSD, >16MB DDR RAM, Windows operating system. A color printer should be provided.

**Software:**

\*General - The software should be capable of simultaneous diffractometer control, data collection and analysis, peak search, search-match, profile fitting and elaborate pattern treatment such as data smoothing, background subtraction,  $k\alpha_2$  stripping, etc.

\*Licensed software should be provided.

\*ICDD PDF2 database should be included.

\*Crystallographic Software – Rietveld based quantitative phase analysis software. The software should be able to have different algorithms for Monoclinic and Triclinic crystal structures. Software should be able to determine lattice parameters. Further functions to be covered are as below

-Qualitative analysis

-Phase quantification by RIR method

-Peak/Line Profile analysis

-Lattice parameter determination

-Crystallite size determination

-%age Crystallinity Determination

-Phase quantification based on Rietveld method

-Unit Cell determination

-Space Group Determination

-4 methods of search for cells – DICVOI, ITO, TREOR, McMaille.

-Le Bail fit for refinement of unit cell dimensions, sample height, preferred orientation and relative peak intensities.

-Electron density Fourier Mapping

-Ab-initio Structure Determination Method

**-Systematic non parametric analysis patterns through cross co-relation method.**

**\*All software should be provided with minimum of 10 user licenses. The software should be able to be loaded on 10 different PC's including laptops at any point of time without connecting to LAN.**

**Accessories of thin films and saxs measurements.**

**Extended warranty: 5 years with parts & labor services.**

**UPS: True Online UPS to support the system.**

**Note:**

1. PAF-IAST may re-adjust the quantities within the total quantities specified against the specifications of same genre in any of the Lots.
2. The Bidder shall indicate in their offer,
  - a. detailed specifications of their offered product(s),
  - b. standard accessories,
  - c. make and origin, as part of confirming Compliance as per the format given in Form – D.
3. The Unit Price, Total Bid Price, and Additional Warranty Price of the quoted items shall be indicated as per the given format in Form – G.

## Section 5b: Special Terms and Conditions

---

### Standard

- The goods supplied must be capable of functioning properly under the climatic conditions of Haripur.
- There shall be no deviation from specification and country of make as provided with each item. In case of any ambiguity in specification/ accessories needed for the full functioning of the equipment, the firm must clear it with the Procurement Committee. However, the decision of the Procurement Committee will be final.
- The goods with standard accessories supplied under this tender shall conform to the standard maintenance in the technical specification.
- Visit to already installed and operational equipment if required as per Section 5, shall be provided within the time specified and unless otherwise specified by the Purchaser, at no expense to the Institute. The PAF-IASST may ask the bidders to carry out testing/analysis of samples (to be provided) to evaluate the performance of already installed and operational unit of similar specifications.

### Training

- The firm supplying the item/ equipment(s) will demonstrate the operation/ working of the supplied goods to the satisfaction of PAF- IASST and provide training. Suppliers are advised to provide details on formal training for the LOT(s) covering aspects as mentioned below, but not limited to, as required in Form – E (Section 3).

LOT(s)	
Level	<b>1 to 7</b>
Basic	Demonstrate the operations/ working to end users; Identify the do's and don'ts; and aspects deem necessary for long-life functioning of supplied goods.
Hands-on	Demonstrate technical features; Elaborate technical configuration(s) performed for integration with the overall setup; Documented guidelines for generating reports using software and/ or systems' interface
Advanced	Provide trainings to Operators for troubleshooting and smooth operations using system manuals

- The Bidder shall be responsible for all the necessary training programs available for the operation, maintenance and troubleshooting of the equipment at no additional cost to the institute. Unless otherwise specified, such training as well as training materials shall be provided in the language of the Bid as specified in the BDS.

### Calibration of item/equipment

- The supplier will install the good(s) in the presence and satisfaction of the Procurement Committee, if need be. In case of any defect in the supplied good(s) or if it is not in accordance with the desired specification(s), the goods will be changed at the cost of the supplier.

### Warranty/ Guarantee

- The Supplier will give comprehensive onsite warranty/ guarantee that the goods/ stores/ articles would continue to conform to the description and quality as specified for a period of at least One (01) year and additional four (04) years as Extended Warranty from the date of delivery, installation and commissioning of the said goods/ stores/ articles to be purchased and that notwithstanding the fact that the purchaser may have inspected and/ or approved the said goods/ stores/ article, if during the aforesaid period, the said goods/ stores/ articles, be discovered not to conform to the description

and quality aforesaid or have determined (and the decision of the Procurement Committee in that context will be final and conclusive), the PAF: IAST will be entitled to reject the said goods/ stores/ articles or such portion thereof as may be discovered not to conform to the said description and quality, on such rejection the goods/ articles/ stores will be at the supplier's risk and all the provisions relating to rejection of goods etc. shall apply.

- The Supplier shall, if so called upon to do, replace the goods etc., or such portion thereof as is rejected by Procurement Committee, otherwise the supplier shall pay such damage as may arise by the reason of the breach of the condition herein contained. Nothing herein contained shall prejudice any other right of the Procurement Committee in that behalf under this contract or otherwise.
- The Supplier shall also replace equipment, in case it is found defective which cannot be put to operation due to manufacturing defect, etc. In case of equipment specified by the Procurement Committee, the supplier shall be responsible from carrying out annual maintenance and repairs on the terms and conditions as may be agreed. The supplier shall also be responsible to ensure adequate regular supply of spare parts needed for a specific type of equipment whether under their annual maintenance and repairs contract or otherwise. In case of change of model, supplier will give sufficient notice to the Procurement Committee who may like to purchase spare parts from them to maintain the equipment in perfect condition.

## Section 6: Returnable Bidding Forms / Checklist

---

This section serves as a checklist for preparation of your Bid. Please complete the Returnable Bidding Forms in accordance with the instructions in the forms and return them as part of your Bid submission. No alteration to format of forms shall be permitted and no substitution shall be accepted.

Before submitting your Bid, please ensure compliance with the Bid Submission instructions of the BDS 22.

### **Bid Proposal:**

<b>Have you duly completed all the Returnable Bidding Forms?</b>	
✦ Form A: Bid Submission Form	<input type="checkbox"/>
✦ Form B: Joint Venture/Consortium/ Association Information Form	<input type="checkbox"/>
✦ Form C: Bidder Information Form	<input type="checkbox"/>
✦ Form D: Qualification Form	<input type="checkbox"/>
✦ Form E: Bid Proposal Form	<input type="checkbox"/>
✦ Form F: Specifications Compliance Form	<input type="checkbox"/>
✦ Form G: Price Schedule Form	<input type="checkbox"/>
<b>Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?</b>	<input type="checkbox"/>

## Form A: Bid Submission Form

(To be Submitted in an envelope duly sealed and marked as Technical Proposal)

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	PAF: IAST-RLE-ITB-111-20		

We, the undersigned, submit our Bid for the award of contract to supply the goods and related services required for [Insert Title of goods and services] in accordance with your Invitation to Bid No. [Insert ITB Reference Number]. We hereby submit our Bid, which includes this Bid proposal.

We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/ Consortium/ Association members or subcontractors or suppliers for any part of the contract:

- a) is not under procurement prohibition by any of the Government/ Semi-government/ Autonomous organization;
- b) have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any Organization in Pakistan;
- c) have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against us that could impair our operations in the foreseeable future;
- d) undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, with the PAF: IAST, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the PAF: IAST.

We declare that all the information and statements made in this Bid are true and we accept that any misinterpretation or misrepresentation contained in this Bid may lead to our disqualification and/ or sanctioning by the PAF-IAST.

We offer to supply the goods and related services in conformity with the Bidding documents, including the PAF-IAST General Conditions of Contract and in accordance with the Schedule of Requirements and Specifications.

Our Bid shall be valid and remain binding upon us for the period specified in the Bid Data Sheet.

We understand and recognize that you are not bound to accept any Bid you receive.

I, the undersigned, certify that I am duly authorized by [Insert Name of Bidder] to sign this Bid and bind it should PAF- IAST accept this Bid.

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

*[Stamp with official stamp of the Bidder]*



## Form B: Joint Venture/ Consortium/ Association Information Form

(To be Submitted in an envelope duly sealed and marked as Technical Proposal)

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	PAF: IAST-RLE-ITB-111-20		

To be completed and returned with your Bid if the Bid is submitted as a Joint Venture/Consortium/Association.

No	Name of Partner and contact information <i>(address, telephone numbers, fax numbers, e-mail address)</i>	Proposed proportion of responsibilities (in %) and type of goods and/or services to be performed
1	[Complete]	[Complete]
2	[Complete]	[Complete]
3	[Complete]	[Complete]

<b>Name of leading partner</b> (with authority to bind the JV, Consortium, Association during the ITB process and, in the event a Contract is awarded, during contract execution)	[Complete]
--	------------

We have attached a copy of the below referenced document signed by every partner, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture:

Letter of intent to form a joint venture      **OR**     JV/Consortium/Association agreement

We hereby confirm that if the contract is awarded, all parties of the Joint Venture/Consortium/Association shall be jointly and severally liable to PAF: IAST for the fulfillment of the provisions of the Contract.

Name of partner: \_\_\_\_\_

Name of partner: \_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of partner: \_\_\_\_\_

Name of partner: \_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## Form C: Bidder Information Form

(To be Submitted in an envelope duly sealed and marked as Technical Proposal)

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	PAF: IAST-RLE-ITB-111-20		

<b>Legal name of Bidder</b>	[Complete]
<b>Legal address &amp; Branch Offices</b>	[Complete]
<b>Year of registration</b>	[Complete]
<b>Bidder's Authorized Representative Information</b>	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
<b>Are you a PAF: IAST registered vendor?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, [insert PAF- IAST vendor number]
<b>Countries of operation</b>	[Complete]
<b>No. of full-time employees</b>	[Complete]
<b>No. of Technical Staff</b>	
<b>Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):</b>	[Complete]
<b>Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):</b>	[Complete]
<b>Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)</b>	[Complete]
<b>Does your organization demonstrates significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies, education, vocational trainings, social responsibility towards people with Special needs, or membership of trade institutions promoting such issues</b>	[Complete]

**Contact person that PAF: IAST may contact for requests for clarifications during Bid evaluation (Only Lead Bidder)**

Name and Title: [Complete]  
Telephone numbers: [Complete]  
Email: [Complete]

**Please attach the following documents:**

1. Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods and/ or services being procured.
2. Proposed timetable for delivery, installation and commissioning plan for the required and quoted items to PAF: IAST after the award of Contract.
3. Certificate of Registration of the business.
4. Principal's Authorization Letter in favor of Bidder to participate in this Tender.
5. A proofing document confirms the offered warranty for at least One (01) year, supported by the manufacturer's certificates, if applicable.
6. A proofing document confirming supply of same or similar items of this magnitude to various clients/ customers in Pakistan.
7. Proven records of no less than the required Projects of similar nature/ value/ complexity in which delivery and services were extended.
8. Full detailed description of the specifications of the proposed items in addition to catalogues clearly showing the proposed specifications responding to the requirements.
9. Supporting photos of the proposed items, if applicable.
10. Quality certifications: ISO 9001:2015 (if applicable)
11. Latest Audited Financial Statements (Income Statement and Balance Sheet) including Auditor's Report for the past (3 years).

**Note: To be filled in by each partner in case Bid is submitted as a JV/ Consortium/ Association**

## Form D: Qualification Form

(To be submitted in an envelope duly sealed and marked as Technical Proposal)

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	PAF: IAST-RLE-ITB-111-20		

If JV/ Consortium/ Association, to be completed by each partner.

### Previous Relevant Experience

Please list all Projects successfully completed in the last 3 years, covering following aspects;

- Scope of the projects/ assignments.
- Activities performed for the successful completion of the project.
- Support Services Contracts in hand with SLA for the supplied goods.

List only those assignments for which the Bidder was legally contracted or sub-contracted by the Client as a company or was one of the Consortium/ JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by PAF- IAST.

Project name & Country of Assignment	Client & Reference Contact Details	Contract Value	Period of activity and status	Types of activities undertaken

Bidders may also attach their own Project Data Sheets with more details for assignments above.

### History of Non-Performing Contracts

<input type="checkbox"/> Non-performing contracts did not occur during the last 3 years			
<input type="checkbox"/> Contract(s) not performed in the last 3 years			
Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value in US\$)
		Name of Client: Address of Client: Reason(s) for non-performance:	

### Financial Standing

Annual Turnover for the last 3 years	Year	PKR
	Year	PKR
	Year	PKR

**Latest Credit Rating (if any), indicate the source**

--

Financial information (in PKR equivalent)	Historic information for the last 3 years		
	Year 1	Year 2	Year 3
	<i>Information from Balance Sheet</i>		
Total Assets (TA)			
Total Liabilities (TL)			
Current Assets (CA)			
Current Liabilities (CL)			
	<i>Information from Income Statement</i>		
Total / Gross Revenue (TR)			
Profits Before Taxes (PBT)			
Net Profit			
Current Ratio			

Attached are copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following condition:

- a) Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
- b) Historic financial statements must be audited by a certified public accountant;
- c) Historic financial statements must correspond to accounting periods already completed and audited. No statements for partial periods shall be accepted.

## Form E: Technical Bid Proposal Form

(To be submitted in an envelope duly sealed and marked as Technical Proposal)

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	PAF: IAST-RLE-ITB-111-20		

The Bidder's Bid should be organized to follow this format of the Technical Bid Proposal. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same may be viewed as non-responsive.

### SECTION 1: Qualification, capacity and expertise

- 1.1 Bidder's general organizational capability: management structure, financial stability and project financing capacity, project management controls, extent of work to be subcontracted (if so, provide details).
- 1.2 Bidder's relevance of specialized knowledge and experience on similar engagements done in the region/ country. Bidder should submit a detailed description of the projects executed (quantities, value, beneficiary)
- 1.3 Manufacturer's strengths covering the regional/ global market presence, hi-tech products portfolio, manufacturing capacity, R&D activities resulting in national and international patents, quality control and assurance practices, and international certifications in relevant areas.

### SECTION 2: Management Structure and Key Personnel

- 2.1 Describe the overall management approach toward planning and implementing the project. Include an organization chart for the management of project describing relationship of key positions and designations.
- 2.2 Provide CVs for key personnel that will be provided to support the implementation of this project using the format below. CVs should demonstrate qualifications in areas relevant to scope of goods and/or services.

#### Format for CV of Proposed Key Personnel

<b>Name of Personnel</b>	[Insert]
<b>Position</b>	[Insert]
<b>Nationality</b>	[Insert]
<b>Language proficiency</b>	[Insert]
<b>Education/Qualifications</b>	<i>[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]</i> [Insert]
<b>Professional certifications</b>	<i>[Provide details of professional certifications relevant to the scope of goods and/or services]</i> ✦ Name of institution: [Insert] ✦ Date of certification: [Insert]
<b>Employment Record/ Experience</b>	<i>[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position and location of employment.]</i> [Insert]

I, the undersigned, certify that to the best of my knowledge and belief, the data provided above correctly describes my qualifications, my experiences, and other relevant information about myself.

**SECTION 3: Scope of Supply, Technical Specifications and Training(s)**

This section should demonstrate the Bidder's responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the requirements/specifications. All important aspects should be addressed in sufficient detail.

- 3.1 A detailed description of how the Bidder will deliver the required goods and services, keeping in mind the appropriateness to local conditions and project environment. Details how the different service elements shall be organized, controlled and delivered.
- 3.2 Explain whether any work would be subcontracted, to whom, how much percentage of the requirements, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team.
- 3.3 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
- 3.4 Details on post-deployment trainings on-site hands-on training for all LOTs.

**SECTION 4: Registration & Certifications**

This section should demonstrate the Bidder's responsiveness towards its registration with the relevant national body and international organizations Certifying the bidder's qualifications with respect to Quality and Project Management.

- 4.1 Provide a copy of valid registration with the Pakistan Engineering Council (if applicable).
- 4.2 Provide a copy of valid Certificate issued by International Organization for Standardization certifying the bidder's compliance and practices towards quality management principles and standards in their offered products/ solutions and services.
- 4.3 Provide a copy of valid Certificate issued by International Organization for Standardization certifying the bidder's compliance and practices towards information security management principles and standards in their offered products/ solutions and services.

**SECTION 5: Warranty and Support Services**

This section should demonstrate the Bidder's responsiveness to the post-commissioning warranty and support services of the goods supplied, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the requirements. All important aspects should be addressed in sufficient detail.

- 5.1 A detailed description of how the Bidder will provide the Warranty claims to the users, keeping in mind the span and complexity of the project in context of local conditions and project environment.
- 5.2 Explain whether any services or work would be subcontracted, to whom, how much percentage of the requirements, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team.
- 5.3 Details how the post-delivery/ deployment Support Services will be provided to the users keeping in consideration the criticality of systems, and dependency of university administration and operations on such systems.

## Form F: Specifications Compliance Form

(To be submitted in an envelope duly sealed and marked as Technical Proposal)

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	PAF: IAST-RLE-ITB-111-20		

The Bidder's Bid should be organized to follow this format of the Technical Bid Proposal. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same may be viewed as non-responsive.

Goods and services to be Supplied <i>(based on the <b>Technical Specifications</b> provided in Section 5a &amp; Section 5b)</i>	Your response Compliance with specifications		
	Comply (Yes/ No) <i>(If No, indicate discrepancies)</i>	Quoted Specifications	Type/ Model no. & Country of Origin
<b>Required Items</b>	<b>Offered Items</b>		



<b>Lot No. 1: Atomic Absorption Spectrophotometer</b>			
			(Bidders are required to attach Compliance Comparison Sheet supported by Product Data Sheet against the Specifications provided in Section – 5)
<b>Lot No. 2: Total Organic Carbon Analyzer</b>			
			(Bidders are required to attach Compliance Comparison Sheet supported by Product Data Sheet against the Specifications provided in Section – 5)
<b>Lot No. 3: GC-MS Quadrupole Mass Spectrometer with FID/TCD</b>			
			(Bidders are required to attach Compliance Comparison Sheet supported by Product Data Sheet against the Specifications provided in Section – 5)
<b>Lot No. 4 -Scanning Electron Microscopy (SEM)</b>			
			(Bidders are required to attach Compliance Comparison Sheet supported by Product Data Sheet against the Specifications provided in Section – 5)
<b>Lot No. 5: Thermal Analyzers, Includes Thermogravimetric analyzer with DTA</b>			
			(Bidders are required to attach Compliance Comparison Sheet supported by Product Data Sheet against the Specifications provided in Section – 5)
<b>Lot No. 6 Fourier-transform infrared spectrometer (FTIR )</b>			
			(Bidders are required to attach Compliance Comparison Sheet supported by Product Data Sheet against the Specifications provided in Section – 5)
<b>Lot No. 7: X-ray Diffractometer (XRD)</b>			
			(Bidders are required to attach Compliance Comparison Sheet supported by Product Data Sheet against the Specifications provided in Section – 5)

## Form G: Price Schedule Form

(To be Submitted in a separate and sealed envelope duly marked as Financial Proposal)

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	PAF: IAST-RLE-ITB-111-20		

[The Bidder is required to prepare the Price Schedule following the below format. The Price Schedule must include a detailed cost breakdown of all goods and related services to be provided.]

We, the <<Name of Bidder>>, hereby submit our Financial Bid for the Supply of Items as below. We assure you of our full compliance to the required specifications, delivery schedule and other terms without any deviation and/ or reservations. We reiterate our acceptance to the terms and conditions of the RFP. Our Financial proposal as below is submitted for your kind consideration;

### QUOTED PRICE IN PKR (DDP)

Quoted Items in compliance to the Technical Specifications as referred in Section – 5a and Section – 5b	Quantity (a)	Unit Price [in Rs.] (b)	GST [in Rs.] (c)	Total Price [in Rs.] $d=a*[b+c]$
<b>Lot No. 1.</b>				
Atomic Absorption Spectrophotometer(As per specifications)	1			
<b>LOT #2:</b>				
Total organic Carbon analyzer	1			
<b>LOT #3:</b>				
GC-MS Quadrupole Mass Spectrometer with FID/TCD	1			
<b>LOT #4:</b>				
Scanning Electron Microscopy (SEM)	1			
<b>LOT #5:</b>				
Thermal Analyzers, Includes Thermogravimetric analyzer with DTA	1			
<b>LOT #6:</b>				
Fourier-transform infrared spectrometer (FTIR )	1			
<b>LOT #7:</b>				
X-ray Diffractometer (XRD)	1			

### QUOTED PRICE IN USD (CIF)

Quoted Items in compliance to the Technical Specifications as referred in Section – 5a and Section – 5b	Quantity (a)	Unit Price [in USD] (b)	Total Price [in USD] $c=a*b$
<b>Lot No. 1.</b>			
Atomic Absorption Spectrophotometer(As per specifications)	1		
<b>LOT #2:</b>			
Total organic Carbon analyzer	1		
<b>LOT #3:</b>			
GC-MS Quadrupole Mass Spectrometer with FID/TCD	1		
<b>LOT #4:</b>			
Scanning Electron Microscopy (SEM)	1		
<b>LOT #5:</b>			
Thermal Analyzers, Includes Thermogravimetric analyzer with DTA	1		
Fourier-transform infrared spectrometer (FTIR )	1		
X-ray Diffractometer (XRD)	1		

## Extended Warranty Price (at discretion of PAF-IAST)

### QUOTED PRICE IN PKR (DDP)

Annual Warranty & Support Services beyond Standard Warranty of the Quoted Items	2 <sup>nd</sup> Year (in PKR)	3 <sup>rd</sup> Year (in PKR)	4 <sup>th</sup> Year (in PKR)	5 <sup>th</sup> Year (in PKR)
<b>LOT #1:</b>				
1. Atomic Absorption Spectrophotometer				
<b>LOT #2:</b>				
1. GC-MS Quadrupole Mass Spectrometer with FID/TCD				
<b>LOT #3:</b>				
1. Liquid Chromatograph & Mass Spectrometer ( L C MS)				
<b>LOT #4:</b>				
1. Field Emission-Scanning Electron Microscopy (FESEM)				
<b>LOT #5:</b>				
1. Thermal Analyzers, Includes Thermogravimetric analyzer with DTA				
<b>LOT #:6</b>				
1. Fourier-transform infrared spectrometer (FTIR )				
<b>LOT #: 7</b>				
1. X-ray Diffractometer (XRD)				

### QUOTED PRICE IN USD (CIF)

Annual Warranty & Support Services beyond Standard Warranty of the Quoted Items	2 <sup>nd</sup> Year (in USD)	3 <sup>rd</sup> Year (in USD)	4 <sup>th</sup> Year (in USD)	5 <sup>th</sup> Year (in USD)
<b>LOT #1:</b>				
2. Atomic Absorption Spectrophotometer				
<b>LOT #2:</b>				
2. GC-MS Quadrupole Mass Spectrometer with FID/TCD				
<b>LOT #3:</b>				
2. Liquid Chromatograph & Mass Spectrometer ( L C MS)				
<b>LOT #4:</b>				
2. Field Emission-Scanning Electron Microscopy (FESEM)				
<b>LOT #5:</b>				
2. Thermal Analyzers, Includes Thermogravimetric analyzer with DTA				
<b>LOT #:6</b>				
2. Fourier-transform infrared spectrometer (FTIR )				
<b>LOT #: 7</b>				
2. X-ray Diffractometer (XRD)				

Total Bid Value in Figures (including Extended Warranty Price): PKR \_\_\_\_\_

Total Bid Value in words (including Extended Warranty Price): PKR \_\_\_\_\_

---

Name & Designation of Authorized Person: \_\_\_\_\_

Signature: \_\_\_\_\_ (Please affix company stamp here)

**Note: Quoted price must be inclusive of all taxes and duties.**

## Annex – I: Integrity Pact

The Bidders will be required to submit the below text on stamp paper after filling in the details and duly signed as well as stamped, as part of their Technical Proposal.

**DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC**  
**PAYABLE BY THE SUPPLIER OF GOODS, SERVICES & WORK IN CONTRACTS WORTH**  
**RS. 10.0 MILLION OR MORE**

(To be filled by the bidder as a part of technical proposal)

Contract Number: \_\_\_\_\_ Dated: \_\_\_\_\_

Contract Value: \_\_\_\_\_

Contract Title: \_\_\_\_\_

\_\_\_\_\_ hereby declare that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business partner.

Without limiting the generality of the forgoing, \_\_\_\_\_ represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or 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 nature 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 consultant fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatever from GoP, except that which has been expressly declared pursuant hereto.

\_\_\_\_\_ 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.

\_\_\_\_\_ accept full responsibility and strict liability for making any false declaration, not making full discloser, 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 right and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, \_\_\_\_\_ agrees to identify 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 time the sum of any commission, gratification, bribe, finder's fee or kickback given by \_\_\_\_\_ as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever from GoP.

\_\_\_\_\_  
[Buyer] [Seller / Supplier]

# Annex – II: Draft Contract Sample

Available at PAF: IAST website at <http://www.paf-iastr.edu.pk/downloads>