



**Al-Khwarizmi Institute of Computer Science
University of Engineering and Technology, Lahore**

**REQUEST FOR PROPOSALS
(RE-TENDER)**

PROCUREMENT OF EQUIPEMENT

(FOR Basis)

Estimated Price Rs. 10.13 million

TENDER PRICE - Rs. 1500/-

Last date of submission: 12th June , 2023 till 10:00 AM

FOR OFFICE USE ONLY

Serial No. _____

Sold to:- M/S _____

Date of Sale _____ **Bank Challan No.** _____ **Date** _____



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

TERMS AND CONDITIONS

OVERVIEW

KICS, UET, Lahore intends procurement of Equipment in “Human Centered Robotics Lab”. The supplier will be responsible for delivery, installation (if required), wherever required in KICS, UET, LAHORE.

1. Proposal instructions (for BOQs in FOR)

- 1.1 Single stage two envelope bidding procedure shall be applied in response to the RFP (Request for proposal). Each bid envelop shall comprise one envelope containing, separately, financial proposal and technical proposal (if any) plus “legible documents”. The financials of bids found technically non responsive shall be returned unopened to the respective bidders.
- 1.2 Responding organizations shall deliver two sealed copies “one original and one photo copy” of the “FINANCIAL & TECHNICAL PROPOSAL” till June 12th, 2023 up till 10:00 am, each copy being physically separate, bound, sealed and labeled. Proposals will not be accepted after the due time & date. Proposal shall be delivered at the address given below before time.

DIRECTOR KICS,
UNIVERSITY OF ENGINEERING AND TECHNOLOGY (UET),
LAHORE. PHONE: (042)-99250247

- 1.3 Proposals received after the submission deadline will not be entertained under any circumstances and will be returned unopened to the submitting vendor. It is the sole responsibility of the participating vendor to ensure that the proposals are delivered before the deadline.

Any queries regarding this proposal should be directed to the designated contact person listed below:

For General Details: Aqeel Muhammad Babar Manager Procurement & Admin Contact Number # 042 99250247 Email: aqeel.babar@kics.edu.pk	For Technical Details: Dr Ali Raza (PI) Email: aliraza@uet.edu.pk Contact # 03314030312
--	--



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

- 1.4 Price should be mentioned on FOR basis.
- 1.5 The bidders are not allowed to bid in partial. The equipment must be brand new and complete in all respects with original packing of manufacturer and strictly confirming to the given specifications.
- 1.6 The original Request for Proposal documents duly signed and officially sealed by the bidder must be submitted in whole with the proposals. Any conditional, ambiguous, incomplete, supplementary or revised offer after the opening of Bidding shall not be entertained.
- 1.7 Any overwriting/crossing, etc. appearing in the offer may be properly signed by the person signing the Bidding. All pages of the Bidding must be properly signed. Offer with any overwriting and discrepancy shall not be accepted in any circumstances.
- 1.8 Warranty for all equipment's, as approved by the manufacturers/suppliers, should not be less than one year.
- 1.9 A call deposit equal to 2% of the estimated bid price (**mentioned in the tender**) should be accompanying the bidding document as **Earnest Money** drawn in favor of **Treasurer UET, Lahore**. The bidding document shall not be considered without Earnest Money. Bank guarantee will not be accepted. The earnest money will be released after signing the Agreement.
- 1.10 The Successful Bidder's bill will deposit a total of 10% of the contract amount as **Performance Guarantee / Security Deposit**. The **Performance Guarantee / Security Deposit** will be returned after successful completion of Defect Liability/ Warranty Period, after repairing the defects in the equipment/ replacement found during the warranty period for FOC.
- 1.11 The Successful Bidder will deposit a blank stamp paper of value of 0.25% of the total offer/contract amount, purchased in the name of Director KICS (UET), Lahore.
- 1.12 Central Procurement Cell reserves the right to accept or reject all proposals by assigning any reason thereof.



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

- 1.13 The quantity of an order may vary depending on the quoted prices and the allocated funds.
- 1.14 The decision of the committee will be a binding on all concerned and can be appealed in the grievance committee.
- 1.15 KICS, UET, Lahore reserves the right to modify the conditions / specifications of the Bidding Document with written intimation to all the participants those who have purchased the Bidding Documents.
- 1.16 Delivery period will be (30) days from the date of issuance of purchase order/supply order.
- 1.17 Delivery, Installation and Training (where mentioned) be completed according to the agreed upon schedule of works.
- 1.18 In case the Bidders fails to execute the contract strictly in accordance with the terms and conditions laid down in the contract, the Security Deposit shall be forfeited and the equipment will be purchased at his own risk and expenses.
- 1.19 The equipment will be inspected at KICS, UET, LAHORE, and may get rejected if not found in accordance to the stated specifications.
- 1.20 KICS, UET, Lahore reserves the right to claim compensation for the losses caused by delay in the delivery of equipment i.e., 1% of contract amount on weekly basis maximum up to 10% of the contact amount.
- 1.21 It is the sole responsibility of the vendor to comply with local, national and international laws.
- 1.22 Successful bidders may be asked to bring their supplies for demonstration and specification test in the KICS, UET, LAHORE, at their own expenses and risk.
- 1.23 Where reference is made to any specific national or international standards, equal or higher quality will also be acceptable. In case, your offer conforms to standards other than quoted in the Bidding inquiry you are required to submit the followings along with your bid.



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

- One copy of those standards in English
- Evidence that the standards used is recognized and authoritative to ensure equal or higher quality.

In case the bidder does not submit the required evidence and a copy of each of the standards, its Bid may not be considered.

1.24 In case any supplies/material is found not in conformity with the specifications provided in the Bidding, either on account of inferior quality, defective workmanship, faulty design, faulty packing or is short supplied, or wrongly supplied, the supplier will replace the same free of charges or pay the full cost of replacement.

1.25 The all proposals submitted will become the property of the University.

1.26 Possessing/Providing Dealership Certificate.

2. Evaluation Criteria

All bids shall be evaluated on technical and financial responsiveness.

Technical evaluation process may include, but not limited to the consideration of the following with respect to the functional requirements given ahead:

- 2.1. Technical specifications of proposed equipment's
- 2.2. Best warranty of the equipment

Financial Evaluation process may include, but not limited to the consideration of the following:

- 2.3 Quoted price
- 2.4 CDR (2% of estimated price mentioned in the tender)

3 Required Information

Bidders are required to include the following documents/information in their technical proposals (all documents should be duly signed and stamped)

- i. The Name and Address
- ii. Profile of company (Including Financial Profile)



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

- iii. List of Pervious/Current customer of related equipment's, with contact person and telephone/fax#
- iv. Detailed product information/brochures
- v. Detailed product warranty/guarantee information
- vi. Attested copy of National Tax Registration Certificate
- vii. Attested copy of Sales Tax Registration Certificate
- viii. Detailed backup support plan
- ix. Bank letter of financial standing
- x. An Affidavit on Rs.100/- Stamp paper that currently they are not black listed or debarred by any Government/Semi Government department to participate in bidding and to supply equipment. Failure to submit such affidavit may lead to disqualification.
- xi. Any additional information the bidder may like to furnish e.g. repair/maintenance workshop owned by supplier and other concerned facility
- xii. Dealership Certificate.

In addition to the above, the proposal must include the following in the order given below:

- i. Detailed equipment specifications, proposed quantities duly filled on the Performa attached with this document
- ii. Detailed project implementation schedule which includes the delivery of equipment
- iii. Terms and Conditions
- iv. Equipment prices (FOR) duly entered.
- v. Validity period of the quoted price, i.e. 60 days
- vi. Educational discounts if available/applied to the quoted price

4 Terms and Conditions (FOR Basis)

- 4.1 All prices should be in PAK rupees exclusive of Taxes. GST and /or other Tax amount where applicable should be mentioned in separate column(s) and the total given in a separate column.



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

- 4.2 All prices should be valid for at least 60 days. Withdrawal or any modification of the original offer within the validity period shall entitle KICS, UET, LAHORE to forfeit the earnest money in favor of the KICS, UET, LAHORE and/or putting a ban on the future inquires or taking any other suitable action against the bidder.
- 4.3 Delivery of the items will be free of charge at the KICS, UET, LAHORE during the office hours with a copy of delivery challan.
- 4.4 Items being ordered should be brand new and according to order specification from the current production and covered under normal warranty/guarantee etc. as mentioned in the proposal. Brochures of the product details must be attached.

Name of Vendor.....

Authorized person.....

Authorized Signature.....

Stamp.....

Office address.....

Tel No.....

Fax No.....

(The filled in Bidding Document should be forwarded to KICS, UET, Lahore with covering letter).



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

DETAILED TECHNICAL SPECIFICATIONS on FOR Basis Equivalent OR Higher

SR.#	EQUIPMENT	QTY	UNIT COST	EST. COST (MN. PKR)
1	BLDC Motors	15	0.19	2.85
2	Fluidic actuators	5	0.15	0.75
3	Power-inclined Treadmill with Ergometer	1	0.62	0.62
4	Pneumatic directional control valves	10	0.1	1.0
5	Pressure regulators	4	0.275	1.1
6	Proportional pneumatic valves	4	0.41	1.64
7	Electro-pneumatic controllers	4	0.505	2.02
8	Cooling unit for soft-robotics	1	0.15	0.15
Total Equipment Cost PKR (Million)				10.13



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

DETAILED TECHNICAL SPECIFICATIONS on FOR Basis Equivalent OR Higher

#	Equipment with detailed general specifications	Detailed Specifications with Examples		Qty	Unit Cost	Est. Cost (Mn. Rs.)
1	BLDC Motors High power to size ratio, with Hall sensor and encoder	Motor 1	Frameless BLDC motor Model: RI-80 (T-motor) Weight (g): 470 Torque: 1.45Nm Incremental encoder: Model: PN series Weight (g): 200 Shaft type: Through hole Resolution (ppr): 2500 (Or Equivalent) For Example: PN72-E-6-C-2500-Q30-3			
		Motor 2	Frameless BLDC motor Model: RI-80 (T-motor) Weight (g): 470 Torque: 1.45Nm Incremental encoder: Model: PN series Weight (g): 200 Shaft type: Through hole Resolution (ppr): 2500 (Or Equivalent) For Example: PN72-E-6-C-2500-Q30-3			



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

		<p>Motor 3</p> <p>Frameless BLDC motor Model: RI-80 (T-motor) Weight (g): 470 Torque: 1.45Nm</p> <p>Incremental encoder: Model: PN series Weight (g): 200 Shaft type: Through hole Resolution (ppr): 2500 (Or Equivalent) For Example: PN72-E-6-C-2500-Q30-3</p>			
		<p>Motor 4</p> <p>Absolute encoder: Model: MP series Shaft type: Through hole Resolution: 20bit or higher For Example: MP55E14S S24R</p> <p>Electromagnetic Ultra-thin Brake Operating Volts: DC24V Through hole ~ 12mm to 28mm For Example: CDG1S5AA</p>			
		<p>Motor 5</p> <p>Absolute encoder: Model: MP series Shaft type: Through hole Resolution: 20bit or higher For Example: MP55E14S S24R</p> <p>Electromagnetic Ultra-thin Brake</p>			



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

		<p>Operating Volts: DC24V Through hole ~ 12mm to 28mm For Example: CDG1S5AA</p>			
	Motor 6	<p>Absolute encoder: Model: MP series Shaft type: Through hole Resolution: 20bit or higher For Example: MP55E14S S24R</p> <p>Electromagnetic Ultra- thin Brake Operating Volts: DC24V Through hole ~ 12mm to 28mm For Example: CDG1S5AA</p>			
	Motor 7	<p>Frameless BLDC motor Model: RI-50 (T- motor) Weight (g): 190 Torque: 0.45Nm</p> <p>Incremental encoder: Model: PN/PC series Weight (g): 200 Shaft type: Through hole Resolution (ppr): 2500 (Or Equivalent) For Example: PC58- E6C2500Q15-3</p>			
	Motor 8	<p>Frameless BLDC motor Model: RI-50 (T- motor)</p>			



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

		<p>Weight (g): 190 Torque: 0.45Nm</p> <p>Incremental encoder: Model: PN/PC series Weight (g): 200 Shaft type: Through hole Resolution (ppr): 2500 (Or Equivalent) For Example: PC58-E6C2500Q15-3</p>			
	Motor 9	<p>Frameless BLDC motor Model: RI-50 (T-motor) Weight (g): 190 Torque: 0.58Nm</p> <p>Incremental encoder: Model: PN/PC series Weight (g): 200 Shaft type: Through hole Resolution (ppr): 2500 (Or Equivalent) For Example: PC58-E6C2500Q15-3</p>			
	Motor 10	<p>Strain Wave Gear for attachment with BLDC Motor. Through hole: 28mm Ratio: 100:1 For Example: ADSD-32-100-C-I</p>			
	Motor 11	<p>Strain Wave Gear for attachment with BLDC Motor. Through hole: 28mm Ratio: 100:1 For Example: ADSD-32-100-C-I</p>			



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

		Motor 12	Strain Wave Gear for attachment with BLDC Motor. Through hole: 28mm Ratio: 100:1 For Example: ADSD-32-100-C-I			
		Motor 13	Strain Wave Gear for attachment with BLDC Motor. Through hole: 28mm Ratio: 100:1 For Example: ADSD-25-100-C-I			
		Motor 14	Strain Wave Gear for attachment with BLDC Motor. Through hole: 28mm Ratio: 100:1 For Example: ADSD-25-100-C-I			
		Motor 15	Strain Wave Gear for attachment with BLDC Motor. Through hole: 15mm Ratio: 100:1 For Example: ADFD-25-100-C-I			
		Total:		15	0.19	2.85
2	Fluidic actuators Pneumatic muscle, length 200mm, dia 20mm with valves and controller	Pneumatic actuators, with position sensing and mounts (Or Equivalent); Compatible with serial # 4 to 7 to be assembled into a fully integrated material handling system		5	0.15	0.75
3	Power-inclined Treadmill with Ergometer 4 HP drive system, 0 - 12 mph	4 HP drive system, 0 - 12 mph forward speed and 0-3 mph reverse speed control, -3% to 12% Incline control, 22" x 62" Tread belt, Max. user weight 400 lbs,		1	0.62	0.62



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

	forward speed and 0-3 mph reverse speed control, -3% to 12% Incline control, 22" x 62" Tread belt, Max. user weight 400 lbs, Orthopedic suspension system, Large touchscreen offering standard biofeedback displays and user-friendly control of the treadmill	suspension system, Large touchscreen offering standard biofeedback displays and user-friendly control of the treadmill (Or Equivalent)				
4	Pneumatic directional control valves 5/2 Double Solenoid, piloted DCVs (2), 5/2 Solenoid operated, piloted with spring return DCVs (2), 5/3 Double Solenoid piloted DCVs (2), 3/2 Solenoid operated DCVs with spring return (4)	DCV 1, 2, 3, 4	5/2 DCVs (Or Equivalent); Compatible with serial # 2, 5 to 7 to be assembled into a fully integrated material handling system			
		DCV 5,6	5/3 DCVs, (Or Equivalent); Compatible with serial # 2, 5 to 7 to be assembled into a fully integrated material handling system			
		DCV 7, 8, 9, 10	3/2 DCVs (Or Equivalent); Compatible with serial # 2, 5 to 7 to be assembled into a fully integrated material handling system			
		Total:		10	0.1	1.0



Al-Khawarizmi Institute of Computer Science University of Engineering and Technology, Lahore

5	Pressure regulators for low pressure regulation, proportional	Proportional pressure regulators, with all the standard peripherals (Or Equivalent); Compatible with serial # 2, 4, 6, 7 to be assembled into a fully integrated material handling system	4	0.275	1.1
6	Proportional pneumatic valves For adjustable positioning control applications, proportional	Proportional directional control valves with integrated sensors, mounting and connection cables (Or Equivalent); Compatible with serial # 2, 4, 5, 7 to be assembled into a fully integrated material handling system	4	0.41	1.64
7	Electro-pneumatic controllers Industrial grade modular EP controllers e.g. PLCs	Programmable electropneumatic controller (Or Equivalent), complete with auxiliary components, programming software, accessories & standard peripherals; Compatible with serial # 2, 4, to 6 to be assembled into a fully integrated material handling system; All the items from	4	0.505	2.02
8	Cooling unit for soft-robotics Freezing unit (- 10 Degrees C), approx. size of 1000 x 900 x 900 mm	Vertical freezing unit, no-frost, adjustable temperature, ~10Cu ft., 220V, shelved Compartment (Or Equivalent)	1	0.15	0.15
Total Estimated Equipment Cost PKR					10.13