



**TENDER DOCUMENTS**

**PHYSICS LAB EQUIPMENT**

**NUTECH/SCM/Physics Lab-2019/TD-033**

**NATIONAL UNIVERSITY OF TECHNOLOGY**

## **TENDER NOTICE**

**National University of Technology (NUTECH)**

**NUTECH/SCM/Physics Lab-2019/TD-033**

Sealed bids are invited from Government / FBR Registered Firms for the procurement of Physics laboratory equipment for NUTECH Technology Labs.

1. Tender documents containing terms & conditions and detailed specifications of items can be downloaded from NUTECH website "<https://nutech.edu.pk/d-p.php>" w.e.f **12 Feb 2019**.
2. Quotations shall be submitted as per requirement of the tender documents.
- a. Bidders will be required to submit bank draft/PO equal to 5% of quoted value as Bid Bond in favor of National University of Technology (NUTECH).
3. Sealed bids with detailed specification should reach on the following address latest by **1130 hours on 04 Mar 2019**. Late submission will not be entertained.
4. Bids will be opened at **1200 hours on 04 Mar 2019** at SCM Office.
5. Project is to be completed in 75 days from the date of award of contract.
6. Submit Rs 1500/- as Tender fee in favour of NUTECH, **Bank Alfalah Acct:5546-5001002354**. Please attach bank receipt with technical offer. Offers will not be entertained without payment of processing fee.

**Deputy Director (Supply Chain Management Office)**  
**NATIONAL UNIVERSITY OF TECHNOLOGY (NUTECH) JPROAD, SECI-12,**  
**ISLAMABAD**  
**Tel: 0092-51-5476768, Ext :178**



## NATIONAL UNIVERSITY OF TECHNOLOGY

### SUPPLY CHAIN MANAGEMENT OFFICE

#### INVITATION TO TENDER

**Submission Date/Time** 04 Mar 2019 at 1130 hours

1. NUTECH desires to procure the list of item(s)/Store(s) as per **Annexure-A**. Interested bidders are requested to send their bids through courier or deliver at NUTECH under two separate sealed envelopes (placed together in third envelope), marked clearly, "Technical Offer" and "Commercial Offer", respectively to the undersigned, latest by or before above mentioned due date. If due to any unforeseen circumstances, NUTECH establishment remains closed, then the last date of submission will be extended to next working day.
2. Please also note that Technical Offer should contain Annexes-A & B duly filled in (supported with relevant technical literature /details/ catalogues etc) and receipt of tender processing fee. Commercial Offer will contain Annexure-C and bid bond. Please ensure no space is left blank in the annexes.
3. Following must be noted for this IT (Invitation to Tender):-
  - a. 2 x copies of technical offer are to be provided.
  - b. Annexes A, B and C must be signed and stamped. Attach only relevant documents.
  - c. Please complete all document as per given format. Do not use any other format or letter head. Offer may be rejected if given format is not followed.
  - d. Validity of offer will be 90 days.
  - e. Delivery period will be 75 days from the date of award of contract.
  - f. Tender(s) must be accompanied with a Bid Bond in agreement of faithful compliance of the conditions of Contract/Purchase Order. This amount will be equivalent to 5% of the total quoted value. In case of non-acceptance of any offer, the Bid Bond will be returned to the bidder by fastest possible means. The Bid Bond amount submitted by the successful bidder will however, be refunded on effective termination of Contract/ Purchase Order. (The Bid Bond will be forfeited in case of default by the bidder from his commitments made through his offer). Submission of Bid Bond is mandatory, otherwise your offer will be rejected.
  - g. 2 years warranty against 5% bank guarantee will be required from the successful bidders from the date of commissioning.

h. Rates should be quoted on Free Delivery basis at NUTECH Islamabad.

4. We reserve the rights to accept or reject any or all tenders as a whole or in part without assigning any reason whatsoever. The decision in this regard will be firm, final and binding on all bidders.

DD (Supply Chain Management)



**NATIONAL UNIVERSITY OF TECHNOLOGY**

**SUPPLY CHAIN MANAGEMENT OFFICE**

**TECHNICAL OFFER**

**Annex A**

User Reference No **Physics Lab Eqpt-002** Date: **21-01-2019**

**Technical Specification**

Ser	Nomen/ Experiment	Description	Country of Origin	A/U	Qty Req	Bidder Compliance			Tech Scrutiny to be done by user	
						Yes	No	Alternate Offer	Accepted	Rejected
									Reason of Rejection	
1	Characteristic curves of solar cells	Solar battery (12 V), 4 cells with cable and connectors, rheostat (330 Ohm , 1.0A), filament lamp (220V/120W), digital multimeter etc	North American & Europe	Nos	5					
2	Temperature dependence of diodes and resistors	power supply DC (12 V), immersion thermostat (230 V), resistor (4.7 kOhm), connecting wires (32 A, 500 mm, 32 A, 750 mm, 32 A, 750 mm) etc.	North American & Europe	Nos	5					
3	Dielectric constant of different materials	Plate capacitor (d 260mm), plastic plate (283 x 283 mm), high value resistor (10 MOhm), voltmeter(0.3-300 V DC, 10-300 V AC), capacitor (220nF/250V), connecting cords (32 A, 500 mm) etc.	North American & Europe	Nos	5					
4	Viscosity of Newtonian and non-Newtonian	Rotary viscometer(15 - 2,000,000 mPas), support rod with hole, stainless steel (10 cm), magnetic stirring bar (30 mm),	North American & Europe	Nos	2					

	liquids	cylindrical, spring balance holder, Acetone (250 ml), Glycerol (250 ml), liquid paraffin (250 ml), Castor oil (250 ml) etc.							
--	---------	--	--	--	--	--	--	--	--

### Special Instructions

Description	Bidder			Tech Scrutiny to be done by User		
	Yes	No	Alternate Offer	Accepted	Rejected	Reasons of Rejection
<b>Environment Conditions:</b> (a) Temperature range: 4°C to +50°C (b) Relative humidity: 0-50% non-condensing						
<b>Warranty period:</b> Two years from the date of commissioning. A warranty sticker is to be pasted on each item by the Supplier / OEM highlighting Name of Firm, Contract No and date, Description of Store and Warranty validity.						
<b>Training Notes:</b> Supplier will provide a set of handouts for training on operation and maintenance of the equipment.						
<b>Publications:</b> Supplier is to provide hard and soft copies (CD) of following manuals. (a) <b>Operational / Maintenance manual:</b> - Qty 01 with Equipment and additional Qty 02 for record purposes and should consist of following sections:- (1) <b>Equipment Description /Operation:-</b> (a)Specifications (b)Description (c)Operation (2) <b>Servicing:-</b> (a)Maintenance Schedule (b )Adjustment / test						

<p>(c)Removal / Installation procedure (d)Tools Used</p> <p>(3) Trouble shooting guide (4) Cleaning requirements (5) Shipping and receiving (6) Storage requirements</p> <p>(b) <b>IPB</b> (Illustrated Parts Breakdown Manual) should have full parts description along with detailed diagrams (exploded view). (c) <b>Experimental manuals</b> which must contain the list and procedure of the experiments that equipment can perform.</p>						
<p><b>Spares / Technical Support:</b></p> <p>(a) Supplier to have in-country spares / technical support and ensure spares and technical support / assistance for next 10 years (b) Comprehensive list of spares required for scheduled maintenance of Equipment is to be provided (c) Any software provided must have its license (d) Software upgrade support must be provided free of cost for 10 x years with renewed license at every upgrade (e) Supplier must also provide calibration service for at least 5 x years after commissioning</p>						
<p><b>Additional Spare / Replaceable parts:</b></p> <p>(a) Replaceable spare / parts during scheduled inspections are to be identified and provided as per requirement along with equipment sufficient to cater five years consumption. (b) All specialized / standard tools required for inspection / repair / servicing must be supplied along with equipment.</p>						
<p><b>Physical Inspection Criteria:</b> 100% physical inspection of store will be carried out before commissioning of the equipment for following details:-</p> <p>(a) For physical damage, scratches and deformity. (b) Accessories /components as per contractual specifications. (c) Technical Manuals (Operation manual, user guide, IPBs).</p>						

<p>(d) Quality certificate and calibration certificate by the OEM</p> <p>(e) OEM certificate and verifiable documents by the supplier that store has been procured from certified source and is factory new and from latest production.</p> <p>(f) Brand name and country of origin.</p>						
<p><b>Commissioning:</b></p> <p>(a) Commissioning of the equipment will be carried out by OEM rep at his own cost and risk at designated place at NUTECH.</p> <p>(b) Any special requirement for installation, operation and commissioning must be specified in the offer by the supplier.</p>						
<p><b>Training:</b> 01 week OEM operational/ maintenance training at NUTECH.</p>						
<p><b>Improvement and Safety Measures:</b></p> <p>Any improvement and safety measures suggested by NUTECH during commissioning are to be resolved by the supplier / manufacturer at no extra cost.</p>						
<p><b>Liability of Supplier:</b></p> <p>(a) OEM certificate of authorized dealership Supplier is to provide original OEM certificate of subject equipment bought directly from the manufacturer and being an authorized dealer.</p> <p>(b) In case the equipment supplied is not compatible with specifications, the supplier will be obliged to call his representatives at his own cost for consultation and corrective action .</p> <p>(c) Examine all apparatus for defects before supplying.</p>						
<p><b>Special Notes:</b></p> <p>(a) Additional requirements for the maintenance of equipment (if any) must be intimated by the supplier in technical offer.</p> <p>(b) Supplier must provide the list of organizations using same equipment in Pakistan (if any).</p> <p>(c) Equipment must be a standard product of OEM available at web address of OEM.</p> <p>(d) In case of premature failure of the equipment, OEM has to replace / rectify the item free of cost. Required transportation charges would be borne by the supplier.</p>						



<p><b>Glass Wares:</b> All glass-wares must be of good quality, scratch free and should be supplied in appropriate packaging.</p>						
<p><b>Circuit Design and Protection:</b> Safe design, protection circuit, malfunctioning protection and/or fire protection into the complete system for safety and reliability of the experiment must be provided.</p>						
<p><b>Equipment Labeling:</b> All packages containing equipment of any kind must be labeled so that the contents can be identified by others. The label must also contain the issuance date and the name of the responsible person.</p>						

<p>Name_____</p> <p>Designation_____</p> <p>Firm Name_____</p> <p>Signature_____</p>
--



**NATIONAL UNIVERSITY OF TECHNOLOGY**  
**SUPPLY CHAIN MANAGEMENT OFFICE**

**TECHNICAL OFFER**

**Annex B**

User Reference No **Physics Lab Eqpt-002** Date: **21-01-2019**

**Please fill in the following essential parameters:**

1. Validity of Offer: \_\_\_\_\_ Days (Should not be less than 90 days)
2. Delivery Period: \_\_\_\_\_ Days (After Placement of order)
3. Country of Origin: \_\_\_\_\_
4. Warranty/Guarantee: \_\_\_\_\_ Months from the date of final acceptance of the stores.

**General**

GST No: \_\_\_\_\_ (Please enclose copy)

NTN/CNIC: \_\_\_\_\_ (if exempted, please provide valid exemption certificate)

**Payment Terms:**

1. 50 % advance payment (Against valid bank Guarantee)
2. 50% Payment after delivery, installation /commissioning, user satisfaction certificate

**Details of Payment Recipient**

(1) Name/Title: \_\_\_\_\_

(2) Address: \_\_\_\_\_

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

Official Seal: \_\_\_\_\_

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

Designation: \_\_\_\_\_



**NATIONAL UNIVERSITY OF TECHNOLOGY**  
**SUPPLY CHAIN MANAGEMENT OFFICE**

**FINANCIAL OFFER**

**Annex C**

User Reference No **Physics Lab Eqpt-002** Date: **21-01-2019**

Ser	Nomen/ Experiment	Description	A/U	Qty Req	Unit Price (Rs) (excluding GST)	GST (If applicable)	Custom Duty (Rs) (If applicable)	Total amount (Rs)
1	Characteristic curves of solar cells	Solar battery (12 V), 4 cells with cable and connectors, rheostat (330 Ohm , 1.0A), filament lamp (220V/120W), digital multimeter etc	Nos	5				
2	Temperature dependence of diodes and resistors	power supply DC (12 V), immersion thermostat (230 V), resistor (4.7 kOhm), connecting wires (32 A, 500 mm, 32 A, 750 mm, 32 A, 750 mm) etc.	Nos	5				
3	Dielectric constant of different materials	Plate capacitor (d 260mm), plastic plate (283 x 283 mm), high value resistor (10 MOhm), voltmeter(0.3-300 V DC, 10-300 V AC), capacitor (220nF/250V), connecting cords (32 A, 500 mm) etc.	Nos	5				
4	Viscosity of Newtonian and non-Newtonian liquids	Rotary viscometer(15 - 2,000,000 mPas), support rod with hole, stainless steel (10 cm),	Nos	2				

		magnetic stirring bar (30 mm), cylindrical, spring balance holder, Acetone (250 ml), Glycerol (250 ml), liquid paraffin (250 ml), Castor oil (250 ml) etc.						
				<b>Total</b>				

Bid Bond Ref \_\_\_\_\_

Total Value \_\_\_\_\_

\*Custom duty is to be quoted separately.

\*\*Bid Bond to be attached with Annex C. Copy of Bid Bond be attached with  
Technical offer without showing its value)

Firm Name _____ Signature _____ Name _____ Designation _____
---