

# GOVERNMENT COLLEGE UNIVERSITY FAISALABAD



**TENDER DOCUMENT No. PHY-02/2023**

**Supply of Lab Equipment for Department of Physics under Project No. 20-15247/NRPU/R&D/HEC/2021-2020, TITLED entitled “Fabrication of Ge based perovskite/silicon tandem solar cell with deep I-R absorption”**

**Tender Fee: Rs. 1000/-**

Sealed Tenders are invited from the well reputed firms / suppliers, who are registered with Tax Departments for supply of Lab Equipments for NRPU project No.20-15247/NRPU/R&D/HEC/2021-2020, TITLED entitled “Fabrication of Ge based perovskite/silicon tandem solar cell with deep I-R absorption” at Department of Physics, GCUF.

## **GENERAL TERMS & CONDITIONS**

### **1. Tender Opening Date & Procedure:**

- 1.1 The procurement shall be completed in accordance with Punjab
- 1.2 Procurement Rules 2014, on **Single Stage - Two Envelope** Bidding Procedure.
- 1.3 Bids in complete conformity with Tender Documents will be dropped in Tender Box placed at the office of undersigned, not later than **22-11-2023** on **02:00 P.M** which shall be opened on same day at **02:30 P.M** in Treasurer’s Office.

#### **Note:**

- Tender Number must be mentioned on envelope.
- Both Technical and financial proposal shall be written on the letter head of the company/ firm along with other prescribed documents.

### **2. Tender Fee, Bid Security and Performance Security:**

- 2.1 The Bid must be accompanied by Tender Fee of Rs:1000/- (non refundable) in shape of Call Deposit Receipt (CDR) in original and Bid Security of 2% of Estimated Price of Rs.2,800,000/- (refundable) in shape of Call Deposit Receipt (CDR) in original.
- 2.2 CDRs must be in favor of Treasurer, Government College University, Faisalabad. The rates / bids should be inclusive of all applicable Govt. Taxes.

### **3. Validity of Offers.**

- 3.1 Offers shall be valid for 120 days from the date of submission of bids.
- 3.2 Withdrawal / modification of the original offer within the validity period shall entitle the University to forfeit Bid Security.

3.3 Sales Tax Number and NTN Number must be mentioned on the letter head and bidding documents.

#### **4. Failures and Terminations:**

No offer of a supplier / firm will be considered if:-

- 4.1 Bid received without Bid Security / Call Deposit or less CDR than the required.
- 4.2 Bids received not in accordance with specifications of Tender Documents.
- 4.3 Bid received later than the date and time fixed for tender.
- 4.4 Tender is incomplete in any respect or is unsigned.
- 4.5 Offer is ambiguous and the offer is conditional.
- 4.6 Offer from a firm which is black listed at any level.
- 4.7 Any erasing / cutting / overwriting etc.
- 4.8 If offer is not accompanied by Authorization letter from the manufacturer specific to this tender.
- 4.9 The supplier fails to deliver the consignment within specified delivery period strictly in accordance with the terms and conditions as laid down in the Purchase Order.
- 4.10 Situation warranted, then University is authorized to forfeit the bid Security and the firm may also be black listed.

#### **5. Other special conditions:**

- 5.1 The decision of the Vice Chancellor of Government College University, Faisalabad, would be final & binding on both the parties and not challengeable in any court of law.
- 5.2 10% performance security under the rules shall be deducted from the final bill of the successful bidder as per PPRAx Rules 2014 and shall be released upon successful completion of warranty period of 1 year.
- 5.3 All Government Taxes will be deducted according to applicable rules.
- 5.4 The University may reject all bids/proposals at any time prior to the acceptance of a bid or proposal as per PPRA Punjab rule 35, however upon bidder request the ground of rejection will be communicated to the concerned but no justification will be given as per PPRA rule 35 (2).

***Dr. Kashif Javaid***

Principal Investigator

Project No. 20-15247/NRPU/R&D/HEC/2021-2020

Department of Physics

Government College University, Faisalabad.

0300-7268442

## TENDER DOCUMENT No. PHY- 02/2023

|                  | Parts/Parameters                 | Specifications OR Equivalent                                                                           | Quantity  | Equipment Cost including Taxes (Rs.) |
|------------------|----------------------------------|--------------------------------------------------------------------------------------------------------|-----------|--------------------------------------|
| <b>GLOVE BOX</b> | Material Thickness               | 20mm                                                                                                   | <b>01</b> |                                      |
|                  | Open Door                        | Round door (Left side) diameter : 300mm, Transition chamber (right side) : 160mm                       |           |                                      |
|                  | Gloves Dimension                 | 145*800*3.0 mm                                                                                         |           |                                      |
|                  | Transition chamber vacuum degree | 0 ~ -0.1Mpa (2.5-stage vacuum table), packing more than 12 hours                                       |           |                                      |
|                  | Using a gas                      | Argon, helium, nitrogen gas (purity 99.95%) or more                                                    |           |                                      |
|                  | Operation box size               | 700 * 450 * 500mm                                                                                      |           |                                      |
|                  | Transition box size              | 240 * 240 * 240mm                                                                                      |           |                                      |
|                  | Accessories                      | vacuum gauge : 2pcs vacuum valve : 6pcs<br>Power supply board : 1pcs Air pipe : 1set<br>Gloves : 1pair |           |                                      |

|                                       | Parts/Parameters | Specifications OR Equivalent                                                                                | Quantity  | Equipment Cost including Taxes (Rs.) |
|---------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------|
| <b>IV- MEASUREMENTS PROBE STATION</b> | Maximum Power    | 600W                                                                                                        | <b>01</b> |                                      |
|                                       | Maximum Current  | 30A                                                                                                         |           |                                      |
|                                       | Maximum Voltage  | 500V                                                                                                        |           |                                      |
|                                       | Measurements     | ISC, VOC, P <sub>MAX</sub> , I@MPP, V@MPP,                                                                  |           |                                      |
|                                       | Calculations     | FF, STC                                                                                                     |           |                                      |
|                                       | Operation modes  | MPP Tracking and IV curve Tracing                                                                           |           |                                      |
|                                       | Limitations      | For three or four terminal measurements, it may matter which terminals use the two high-quality positioners |           |                                      |
|                                       | Applications     | Typical measurements of current-voltage measurements for diode and solar cell characterization              |           |                                      |

**Note:**

1. The Installation facility for functioning of the equipment will be provided by the firm.
2. Country of Origin: China or Equivalent.
3. Local made equipment shall be rejected.

Please contact Dr. KASHIF JAVAID, Principal Investigator for any inquiry regarding the specification of Tender.

**Details of Call Deposit Receipt (CDR)**

**Signature**\_\_\_\_\_

No. \_\_\_\_\_ Amount \_\_\_\_\_ Name of Bidder\_\_\_\_\_

Bank\_\_\_\_\_Branch\_\_\_\_\_City\_\_\_\_\_ NIC No \_\_\_\_\_

Name of Firm & Address\_\_\_\_\_ Ph. No. \_\_\_\_\_

N.T.No.\_\_\_\_\_ Sales Tax No. \_\_\_\_\_

**Issued By:**

**Dr. Kashif Javaid**

Principal Investigator

Project No. 20-15247/NRPU/R&D/HEC/2021-2020

Department of Physics

Government College University, Faisalabad.

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