

PONDICHERRY UNIVERSITY

Tender document for supply of Equipment

Item no.1: Power Meter

Item no.2: Photomultiplier Tube with HV Supply

Under DST-SERB Project EMR/2017/000320 Department of Physics Pondicherry University

NOTE

For further details and submitting bid please see CPP portal

https://eprocure.gov.in/epublish/app

CONTENTS

| S.No | Content | Page No. |
|------|---|----------|
| Ι | Terms and conditions under two bid system | 2 |
| II | Check list to be submitted along with the Technical bid | 7 |
| | Description & Technical Specifications of Instrument | 8 |
| III | Power Meter Photomultiplier with HV Supply | 9 |
| | | |
| IV | Annexure- I (Bidder's Warranty) | 10 |
| V | Annexure-II (Bank Guarantee) | 11 |
| | | |

TERMS AND CONDITIONS (UNDER TWO BID SYSTEM)

I. Instructions to the Bidder: -

1. Purchase of Tender Document

The Tender document can be downloaded from the website https://eprocure.gov.in/eprocure/app

2. Tender Document fee and EMD to be submitted

| S.No | Equipment | Tender Document fee ₹ | E.M.D ₹ | |
|------|-------------------------------------|-----------------------------|------------|--|
| 1. | Power Meter | 2 500/ | 22 800/ | |
| 2. | Photomultiplier Tube with HV Supply | 2,500/- | 22,800/- | |

3. Last Date & Time for submission of Tender Documents

03.10.2019 at 2.00 p.m and it will be opened on 04.10.2019 at 3.00 p.m

4. Submission of tender Document

Tender (**technical bid and price bid separately**) must be submitted through CPP Portal addressed to "Prof. V V Ravi Kanth Kumar, Principal Investigator, DST Project, Department of Physics, Pondicherry University, R.V Nagar, Kalapet, Puducherry-605 014, India" positively before the scheduled time.

5. Payment of EMD & Tender Document fee:

The Tender must be accompanied with EMD (refundable) and Tender document fee (non-refundable), as stated above, by means of a separate Demand Drafts, in favour of the Finance Officer, Pondicherry University, payable at Puducherry.

6. Quoting the Core price & Tax, Duties, Discount etc.

The taxes / duties / discounts, if applicable, are to be explicitly and separately shown in the bid and under no circumstances these components shall be added to the basic price and shown as single price. All the components of taxes, if applicable, should be shown explicitly and separately.

7. Electrical Power

All equipment must operate at 230V/50 Hz single phase and / or equivalent three phase electrical power.

8. The validity of the Quotation

The validity of the quotation should be for at least 365 days from the opening date of the tender.

9. Late Bids

The offers will not be considered if received after the bid closing date and time.

10. Invalid quotes

The offers received through telex / tele-fax / e-mail will not be accepted by the University under any circumstances.

11. No unsolicited correspondence

No unsolicited correspondence shall be entertained after the submission of the offer.

12. Purchase Agreement

If an order is placed with the firm, the purchase shall be governed by an agreement as per the University rules in force at the time.

13. Additions in terms and conditions

Additional terms and conditions will be incorporated in the purchase order, if needed, to safe guard the interests of the University.

14. Non-transferable

Tender is not transferable.

15. Power to reject the offer

Any offer containing incorrect and incomplete information shall be liable for rejection.

Pondicherry University reserves the right to accept / reject any offer in full or in part or accept any offer other than the lowest offer without assigning any reason thereof. *However, deficiencies on any one or, more of the following crucial criteria will be a material factor, for consideration other than the Lowest Quotation:* -

- a) Total Number of installations of the similar Equipment in the premier Research Institutes in India.
- b) Availability of Service Network in India, especially in Chennai or Bengaluru.
- c) Valuable feedback from the present users about the performance, service support, accuracy of result, etc.
- d) Any other techno commercial information which is deemed fit to be important in the opinion of the University.

II. Price Schedule

- **16.** The bidder who is capable of supplying the entire solutions for the instrument quoted as per the list of ITEMS mentioned in the schedule, is alone need to submit their quotation.
- **17.** The rates should be quoted for a single unit.
- **18.** The price should include the delivery and installation at the Department of Physics, Pondicherry University, Puducherry and training charges (if any).
- **19.** In price bid no other documents like technical manuals, number of installations, Customer list etc. must be there. All such documents must be enclosed in the technical bid.

III. Eligibility:

- **20.** The firm must have the requisite domain expertise with regard to supply, installation and post-sale service of the items they are quoting.
- **21.** The firm should have been in existence for at least **six years** as on the date of this document and must have sufficient number of installations at least three orders of the similar equipment in the premiere Research/academic institutes in India.
- **22.** The firm should have nation-wide Service Network all over India, especially in Chennai or Bengaluru.
- **23.** The feedbacks from the present users of the similar equipment about the performance, service support, accuracy of result, etc. are to be submitted along with the Tender Document.
- 24. Any other techno commercial information, pertaining to this particular Equipment, principal suppliers, technical background and capability, local agents' background on Scientific Equipment Business, etc. may also be appended along with testimonials and documentary proof.

IV. Conditions of Contract: -

- **25.** The offer must be in English. The rates should be indicated both in figures and words against item specified in the given Annexure. It is preferable that the price be quoted in Indian Rupees or in US Dollars or in major foreign currencies.
- 26. The total cost should be quoted for FOB as well as CIF Pondicherry University, Puducherry.
- **27.** The price quotes under FOB and CIF should also include the expected installation cost in the University Laboratory at Puducherry and also cost of consumables which are required for the main equipment for initial operation upto a reasonable period.

- **28.** In case of the Principal supplier of Foreign country unable to meet the conditions stated at para no.4, the local agent / dealer should fulfil the above said conditions in respect of Local Insurance, Freight, safety transport and installation, etc.
- **29.** The prices quoted shall remain firm until equipment is supplied to the Department of Physics, Pondicherry University, Puducherry.
- **30.** The University has been granted the benefit of exemption from the payment of the Central Excise Duty and Customs Duty by the Department of Scientific and Industrial Research (DSIR), India, vide their Notification No. 10/97 dt. 01-03-1997 and 51/96 dt. 23.07.96 respectively.

In respect of

- a. Scientific and technical instruments, apparatus, equipment including computers.
- b. Accessories and spare parts of goods specified in (a) above and consumables.
- c. Computer software, compact disks, CD ROM, Recording magnetic tapes, microfilms, micro-chips etc.
- d. Prototypes.

Customs duties at Indian port, if any, will be to the account of the University.

- **31.** Infra-structural, power and any other requirement for satisfactory installation and commissioning of the whole system must be provided, at least 120 days in advance of the installation to be commenced. All drawing for electrical connections, electrical safety items piping work etc. must be provided in detail.
- **32.** Complete technical specifications and literature, including process flow, to be included with the quotation. Manufacturers of various major parts/equipment must be mentioned explicitly.
- **33.** A clear statement regarding availability of after-sales service and availability of spareparts for next 10 years should be included.
- **34.** Please give a recent customer list (within last five years) with contact details including email address.
- **35.** If the tenderer have an authorized representative/agency in India, the technical ability of the agency to take care of the problems in the system, if developed later within the warranty and outside the warranty period has to be provided clearly. The responsibility of the Indian agent also must be clearly specified.
- **36.** The bidder from abroad shall obtain, if required, export permission from the appropriate authorities in his country or the country of origin for items to be shipped to India in case of items to be imported. The University shall provide necessary information if required for this purpose.
- **37.** The bidder from within India shall obtain the requisite approval for Imports etc., if required.
- **38.** Warranty: The material covered under the purchase order, when installed, shall be warranted for the quality, workmanship, trouble free operation and performance for a

period of at least 36 months from the date of installation and the system into **operation** at the Pondicherry University, or at least 42 months from the date of receipt of the last lot of the consignment in India. (A signed Bidder's Warranty as per Annexure – I has to be submitted along with the Bid Document)

If any item covered under warranty fails, the same shall be replaced free of cost including all the applicable charges including shipping cost both ways.

39. Payments terms:

Normally a letter of Credit will be opened for 100% FOB/CIF price on receipt of order acknowledgement. However, 90% of the LC amount will be paid after receipt of the proof of the shipment of the consignment with necessary documents as per the purchase order.

Balance of 10% of the LC amount shall be made after satisfactory installation and commissioning and against submission of the Installation & Commissioning certificate, duly accepted by the purchaser, and a performance bond of 10% of the total contract / purchase value in the form of bank guarantee (obtained from Nationalized Bank of India) for the duration of the Warranty period. (Refer Annexure – II for Bank Guarantee Format)

Bank charges in India shall be borne by the purchaser and outside India shall be borne by the contractor / supplier.

- **40.** In case of any dispute in respect of the tender, all legal matters shall be instituted within the jurisdiction of the place where the purchaser ordinarily resides.
- **41.** No Agency commission will be paid to any authorized agent in India.
- **42.** Liquidated damages: Timely supply of the ordered items, installation, commissioning (wherever is applicable) and training etc. is the essence of the contract. In case of failure to supply within the time specified in the Purchase order, a penalty/LD of 0.5% of the total value per week or a part thereof shall be levied subject to a maximum of 7.5% in respect of items which are not supplied. The decision of Pondicherry University shall be final in this regard.
- **43.** The training should be provided by the firm on the specimen and operation of the equipments for a minimum period of three weeks from the date of installation with an expert team for two persons.

For any clarification with respect to technical specifications, please contact Prof. V V Ravi Kanth Kumar, Principal Investigator, Department of Physics, Pondicherry University, Puducherry. Email: ravi.phy@pondiuni.edu.in, vv_ravikanth@yahoo.com

Tel:+91 413-2654406 Mob : +91 9487436539

For CPP Portal clarification : eProcurement Cell, Chief Secretariat, Puducherry-605 001 Tel : 0413-2233262 / 2220225

| | | To be submitted by the firm | To be verified by the Pondicherry University |
|----|---|--|---|
| 1 | Name of the firm and address | | |
| 2 | Two sealed covers (Technical bid / Commercial bid) | | |
| 3 | Earnest Money Deposit (EMD) | Name of the bank: | |
| 4 | Tender Document Fee | Name of the bank: Amount: Date: | |
| 5 | GST Registration Copy | | |
| 6 | Income Tax Returns details for the last three years. | | |
| 7 | Letter of Authorization from the Original Equipment Manufacturer (OEM) Distributor | | |
| 8 | Tenderer should be in the business of similar products atleast for 6 years as on the date of submission of the bid. Proof to be submitted | | |
| 9 | A list of customers with contact details to whom supply were made during last 3 years may be furnished | | |
| 10 | Name of the service engineer to be deployed and his Contact No. | 1. Name & Cell No. | |

Checklist is to be submitted along with the Technical bid

Signature of the authorized person of the firm

Committee Members:

II. Descriptions& Technical Specifications of Instruments required

Item 1: Power Meter

Technical Specification for Power meter and compatible detector

- a) Model Number/specific company make if mentioned is for indicative purpose only. Components of equivalent or better than mentioned may be quote
- b) All the components/items must be supplied by single vendor for want of compatibility
- c) CE Certification Required

| S.NO. | Specification desired | Value/Limit | | | |
|--------|---|--|--|--|--|
| Power | · meter | | | | |
| 1. | Display Mode | Digital and Analog | | | |
| 2. | Measureable Power range | 100 pW to 100 kW | | | |
| 3. | Spectral compatibility range | 200 nm to 1100 nm for Photodiode | | | |
| | | 200 nm to 20 μ m for thermal detectors 200 nm to 20 μ m for pyroelectric detectors | | | |
| 4. | Sampling Rate | 15 Hz for photo diode and thermopile detectors 500 Hz for pyroelectric detectors | | | |
| 5. | Sensor Compatibility | Photodiode, Thermal and Pyroelectric | | | |
| 6. | Power | → Rechargeable Li ion batteries with more than 10 hours' operation between two charging cycles → Compatible charger | | | |
| 7. | Refresh rate | 15 Hz | | | |
| 8. | Accuracy | ±0.5% or better for both digital and analog | | | |
| 9. | Other features | → Handheld → Must have USB 2.0 computer interface → PC interface through software, which should be provided with the instrument → Statistics mode should be available | | | |
| Detect | <u>cor</u> | | | | |
| 1. | Detector Type | Photodiode | | | |
| 2. | Spectral range | 400 nm – 1100 nm | | | |
| 3. | Maximum measureable power with attenuator | 2 W | | | |
| 4. | Linearity | ±0.5% | | | |
| 5. | Rise time | Less than 3 micro second | | | |
| 6. | Sensor diameter | 11 mm or larger | | | |
| 7 | Attenuator | → OD3 → Built in | | | |
| 8. | Other Requirements | Must be compatible with the power meter above | | | |

Item 2: Photomultiplier Tube with HV Supply

Technical Specifications for Photomultiplier Tube (PMT)

- d) Model Number/specific company make if mentioned is for indicative purpose only. Components of equivalent or better than mentioned may be quote
- e) All the components/items must be supplied by single vendor for want of compatibility
- f) CE Certification Required

Photomultiplier Tube with Housing DC or Pulsed operation for

- i. Spectrophotometers, Fluorescence and Laser Applications
- ii. Photon counting

(Two separate quotes for DC operation and Photon counting applications may be quoted)

- Wavelength Range : 180-1050nm (peak at Visible Range around 400-500nm)
- Cathode : Luminous Sensitivity (typ) 600 µA/lm
- Radiant Sensitivity (typ) 3.6 x10⁴ A/W
- Anode : Luminous Sensitivity (typ) 300 µA/lm
- Gain $: 5 \times 10^5$
- Anode Dark Current : 1nA (typical)
 : 20 per second (in Photon Counting applications)
- Rise time: : 2ns

2 Appropriate Base pin socket Assembly and Voltage divider network (for the PMT quoted)

3 Appropriate High Voltage Supply with connecting and power cables for Quoted PMT **4**. Preamplifier:

- 4 Channels with gain of 5 at each stage Bandwidth DC to 350 MHz for amplifying inputs from low level light from Photomultiplier tubes and avalanche photodiode
- Operating Voltage at 230 V AC, 50 Hz

ANNEXURE - I

BIDDER'S WARRANTY

The Registrar, Pondicherry University, Puducherry invited Bid Document for Supply of Sophisticated Instruments at Department of Physics, Pondicherry University and M/s._____

thereinafter referred to as "The Bidder" having carefully studied all the bid documents, Specifications, etc. accompanying the tender for supply of the ______ (Name of the Instrument) and desirous to submit the bids as per the Tender Document advertised vide Notification -Tender No...... dated.....

DO HEREBY WARRANTY THAT

- 1. The bidder is familiar with all the requirements of the bid documents.
- 2. The bidder has investigated the site and satisfied, he regarding the character and scope of the work and local conditions that may affect the supply or its Performance.
- 2. The bidder is satisfied that the supply can be performed and completed as required in the contract.
- 4. The bidder accepts all risk directly or indirectly connected with the performance of the contract.
- 5. The bidder has had no collusion with other contractors, with any of the men of Pondicherry University, Puducherry, or with any other person in preparation of the bid.
- 6. The bidder has not been influenced by any statement or promise of the Officials of Pondicherry University, Puducherry but only by the bid documents.
- 7. The bidder is financially solvent.
- 8. The bidder is experienced and competent to perform the contract to the satisfaction of the Co-ordinator, Central Instrumentation Facility, Pondicherry University, Puducherry.
- 9. The statements submitted with the bid are true.
- 10. The contractor is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.
- 11. All the terms & conditions of the Supply Order will bind the bidder once his quote is accepted and supply order issued.

Signature of the Bidder

ANNEXURE - II

BANK GUARANTEE

Pondicherry University Bharat RatanaDr. B R Ambedkar Administrative Building R Venkataraman Nagar Puducherry 605 014

| This guarantee made on this | day of | 201_ by |
|---|----------------------------|---------------------|
| Bank having its Registered Office at | | and one of its |
| branches at | _ (hereinafter referred to | as "the Guarantor" |
| which expression shall, unless it be repugnant to | the subject, meaning or | context thereof, be |
| deemed to mean and include its successors an | nd assigns) in favour o | f the Pondicherry |
| University, Puducherry 605 014 represented b | by its Registrar, having | his office at R. |
| Venkataraman Nagar, Kalapet hereinafter referr | ed to as the "University" | which expression |
| shall include his successors in office for an amo | unt not exceeding Rs | (Rupees |
| only) at the requ | uest of M/s | |

(more fully described hereunder)

| 2. | Whereas | the | University | has | placed | work | Order | No: | PU/ |
|-------|---------|-----|------------|-----|--------|--------|-------|-----|--------------------------------|
| dated | | | for | | | | | | with |
| M/s | | | | | | | | | having its office |
| at | | | | | | | | i | and hereinafter referred to as |
| 1 (() | | 1. | 1 . | 1 | 11 • 1 | 1 .1 . | | | 1 . |

the "Contractor" which expression shall include their successors and assigns.

3. And whereas the Contractor has accepted and agreed to execute the work as per the work order as per undertaking / agreement dated ______ within the time stipulated and in the manner specified therein.

4. And whereas the University has called upon the Contractor to furnish Bank Guarantee for the sum of Rs. _____ (Rupees ______ only) for fulfilment of the said work as specified in the work order and as agreed to by the Contractor.

5. And whereas the Contractor has requested the Guarantor herein to furnish an irrevocable and unconditional Bank Guarantee in favour of the University for an amount of Rs._____ as guarantee towards execution of the work as agreed to by the contractor to the University.

6. Now, therefore, we _____ Bank, the Guarantor herein, do hereby irrevocably and unconditionally Guarantee the payment to the University the sum not exceeding Rs._____ (Rupees______ only) in the event of any breach, failure, neglect or inability on the part of the Contractor in the execution of the said work, on demand without reference of the matter to the Contractor and without any prior consent of the Contractor, at all times throughout the period of execution of the work, without demur, cavil or argument or delay.

7. The Guarantor agrees and undertakes that the decision of the University as to whether the contractor has committed any breach of the obligation with respect to the wok to be

executed, and the quantum of amount therefore payable by the Contactor to the University in that regard, shall be final, binding and conclusive as against the Guarantor and the Guarantor shall make payment accordingly, on demand by the University.

8. The Guarantor further agrees and undertakes to pay to the University the amount demanded by the University irrespective of and not withstanding any dispute raised by the Contractor in any suit or proceeding before any judicial forum relating to the Contracted work and the Guarantor's liability under this Guarantee shall be absolute and unequivocal.

9. This Guarantee is issued subject to the condition that the liability of this Guarantor under this guarantee is limited to the maximum of Rs._____ (Rupees ______ only) and the guarantee shall remain in full force up to ______ and cannot be invoked otherwise than by a written demand or claim by the University for the payment of the said amount by the Guarantor on or before______ or any extended date as decided by the University.

10. This University shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the contracted work or to extend time for performance of the work by the Contractor. Any change to the contracted work shall not in any way release the Bank (Guarantor) from liability under this Guarantee and we waive notice of any such change. The University shall have full liberty to forbear or enforce any of the terms and conditions of the contracted work.

11. This Guarantee shall not be affected by any legal limitation, disability or other circumstances relating to the Contractor or the Guarantor.

12. This Guarantee shall be valid for the period upto ______ and shall extend further and beyond ______ for such period as determined by the University.

13. The Guarantor undertakes not to revoke this guarantee except with the previous consent of the University in writing.

14. Notwithstanding anything contained herein:

- This guarantee shall be valid upto ______ and for such further period as determined by the University for fulfilment of the contract.
- We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ______ or such extended period / date.

In witness whereof, this Guarantee has been executed by ______ for an on behalf of the Bank (Guarantor) on the day, month and year first above written.

NAME OF THE BANK (GUARANTOR): ADDRESS:

SIGNATURE AND SEAL