## MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

| No. F5(2453)ST/MNIT/CEE/2017 |                    | Phone: 0141-2713312,2713352 |
|------------------------------|--------------------|-----------------------------|
|                              |                    | Fax No.: 0141-2529078       |
| M/s                          |                    |                             |
|                              |                    |                             |
|                              | NOTICE INVITING QU | JOTATIONS                   |

1. Assistant Registrar (Stores & Purchase), Central Stores, MNIT, JLN Marg, Jaipur invites sealed tenders on behalf of Registrar, Sponsord Research, MNIT, Jaipur for the supply of "Pyrheliometer and Pyranometer with Sun Tracking" for "Centre for Energy and Environment" of this Institute in two bid system (Technical & Financial bids in separate envelop), as per schedule given below:

| Event                       | Date & Time                             |  |
|-----------------------------|---|--|
| Download of Tender          | 14.11.2017                              |  |
| Bid submission              | 05.12.2017 by 2.00 PM                   |  |
| Quotation will be opened at | 05.12.2017 at 3.00 PM                   |  |
| Earnest Money               | Rs.25,000/-                             |  |
|                             | (Kindly attached the RTGS details with  |  |
|                             | cancelled cheque along with the Earnest |  |
|                             | Money)                                  |  |

- 2. **THE RATES QUOTED SHOULD BE F.O.R. JAIPUR** inclusive of all charges e.g. packing, forwarding, transit insurance, for outside firms and free delivery at Institute stores in the case of local firms. The rates may also be quoted separately "ex-godown/F.O.R. dispatching station. In case of Ex-Godown rates, please mention your packing and forwarding charges.
- 3. As far as possible, quotations should be given for goods of India manufacture which are readily available. Foreign goods quoted and proposed to be supplied should be covered by normal import quota of the dealer. This institute is exempted from payment of custom duty.
- 4. Detailed specifications and "make" of each item should be clearly given supported by the illustrated pamphlets wherever possible. Quotations without specifying the make and other particulars may be rejected. The accessories included in the equipment should also be clearly mentioned.
- Losses or damage in transit will be in to the account of the supplier in case of rates F.O.R. JAIPUR.
   The supplier may, if he so desires, get the goods insured and include such charges in the tendered rate.
- 6. The payment for the ordered items would be made after the articles have been received and found in order. Payment will be made by RTGS. Kindly send the RTGS details and cancelled cheque along with the Invoice. The payment to foreign supplier will be made through FDD/Wire Transfer OR Letter of Credit as the case may be.

- 7. Your rates should be valid at least for three months from the last date of opening of bid.
- 8. All legal proceedings, if necessity arises to institute may be any of the parties (Institute or Contractor/Supplier) shall have to be lodged in the courts situated at Jaipur and not elsewhere.
- 9. The institute is not bound to accept the lowest tender and may reject any tender or any part of the tender giving justification for such an action.
- 10. The rates must be quoted item-wise by giving Serial No. of our enquiry letter.
- 11. The quotations should preferably be sent duly typed.
- 12. (a) The Penalty Clause is as under :-

Should the tenderer fail to deliver the goods within the period specified in the tender form the Institute may, at its discretion, allow an extension in time subject to recovery from the tenderer as agreed liquidated damages, and not by way of penalty, a sum equal to the percentage of the value of stores which the tenderer has failed to supply for period of delay as stated below: -

| (i)   | Delay up to one month                                   | 1%   |
|-------|---|--|
| (ii)  | Delay exceeding one month but not exceeding two month   | 2%   |
| (iii) | Delay exceeding two month but not exceeding three month | 5%   |
| (iv)  | Delay exceeding three month                             | 5% for each month and part there of subject to maximum 10% |

- (b) In case of failure to supply the goods within the prescribed time and in accordance with the specifications give in the Quotations, the institute shall be free to cancel the order and make purchases from the next higher tenderer or from the open market as the case may be. In that case the loss sustained by the institute shall be recovered from the defaulting supplier. The institute will be at liberty to recover the loss from the permanent earnest money/or any other pending claims of the supplier without prejudice to its general right to affect recovery from the supplier.
- 13. EARNEST MONEY: A Demand Draft/Banker's Cheque or Bank Guarantee of Rs. 25,000/- from a Commercial bank only in the name of the Registrar, M.N.I.T. and payable at Jaipur may please be sent along with your tender as Earnest Money without which no tender shall be considered.

  Cheques are not accepted as earnest money amount. No interest is paid by us on the amount of earnest money. Kindly attached the RTGS details with cancelled cheque along with the Earnest Money.
- 14. Successful Bidder has to Provide Performance security @ 10% of the equipment cost, valid for 01 Year + 2 months in the form of Bank's Guarantee/DD from a commercial bank within 15 days from the date of issue our Purchase Order.
- 15. While submitting the tender, the **GST Registration No.** & **E-mail Address** is to be mentioned by the bidder positively. Failing this, there bid will be treated as non responsive. & Kindly provide
- 16. Specification Enclosed.

Assistant Registrar (Store & Purchase)

## Specifications for Pyrheliometer, Pyranometerand Sun Tracking: Qty: 01 Nos

|   | Pyrheliometer                            | Pyranometer                              |
|---|--|--|
| Response time   | < 0.2 s                                  | < 0.2 s                                  |
| Spectral range  | 310 to 2700 nm                           | 310 to 2700 nm                           |
| Zero offsets (a) thermal radiation (at 200 W/m²) (b) temperature change (5 K/h) | 1 W/m <sup>2</sup><br>1 W/m <sup>2</sup> | 1 W/m <sup>2</sup><br>1 W/m <sup>2</sup> |
| Non-linearity (100 to 1000W/m²)  Field of view                                  | < 0.3%<br>5° ±0.2°                       | < 0.3%<br>180°                           |
| Slope angle   | 1° ±0.2°                                 |  |
| Measurement range   | 0 to 1500W/m <sup>2</sup>                | 0 to 1500W/m <sup>2</sup>                |
| Operating temperature range   | -40°C to +80°C                           | -40°C to +80°C                           |
| Ingress Protection (IP) rating  | 67                                       | 67                                       |
| Temperature response  |  | < 1% (-20°C to +50°C)                    |
| Directional response (up to 80° with 1000W/m² beam)                             |  | < 20W/m²                                 |

| Sun Tracker                      |   |  |  |  |
|----------------------------------|---|--|--|--|
| Pointing accuracy                | 0.2°  |  |  |  |
| Payload                          | Sufficient for 1 pyranometer and 1 pyrheliometer                |  |  |  |
| Angular velocity                 | 30°/s   |  |  |  |
| Rotation                         | 110° zenith, 540° azimuth                                       |  |  |  |
| Operating temperature range      | -20°C to +50°C  |  |  |  |
| Accuracy of bubble level         | < 0.1°  |  |  |  |
| Ingress Protection (IP) rating   | 65  |  |  |  |
| Communication interface          | RS-485 Modbus for external sensor/system RS-485 to host, Modbus |  |  |  |
|                                  | Wi-Fi, web based  |  |  |  |
| Data logging                     | Minute average  |  |  |  |
| GPS, location and time/date      | Standard  |  |  |  |
| Installation                     | Plug-and-play, Wi-Fi enabled device used                        |  |  |  |
| Restart after power interruption | Automatic   |  |  |  |

## **Important to NOTE:**

- The supplier should enclose the technical compliance statements against our technical specifications clearly mentioning for each point. The statement should be supported by relevant literature/data.
- Instrument should be quoted with two years warranty. The supplier should be authorized dealer /manufacturer of the quoted instrument and have sale minimum of atleast 2 nos of same make in India.
- If instrument is quoted through dealer, the dealer should be continued with supplying company for at least last six years. Please provide list of service engineers to serve this territory.

Assistant Registrar (Store & Purchase)