



Central Purchase unit

National Institute of Technology Srinagar (J&K) -190006

Email: cpu@nitsri.ac.in

Document for Tender No.55 of 2019 Dated 26.02.2019

"Tender Notice for Invitation of bids for supply of Lab equipments for PG Lab of Physics Department"

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1. Sealed Bids are invited for supply of various equipment having detailed Specifications as given in Annexure –I, in a 2- bid format on the terms & conditions and as per the instructions given below from para-2, from interested eligible bidders:
- 2. Techno-Commercial Bid, Containing the following documents in Envelope- A:-**
 - (a) Proof of being Original equipment manufacturer or Distributor/Marketing agent/ Authorized dealer in the shape of copy of agreement and registration under law in force.
 - (b) *The OEM (Original Equipment Manufacturer) of offered product should be ISO 9001:2015 and ISO 14001:2015 certified or certified by any other national or international regulatory body or a reputed manufacturer. The products quoted must also be certified.*
 - (c) PAN card & Tax registration document of the firm.
 - (d) ITR's of previous 3-years.
 - (e) *Proof of annual turnover of the firm for last three years in such trade, which shall not be less than Rs.30.00 lacs., with at-least one such contract worth not less than Rs. 10.00 lacs or two such contracts worth Rs. 15.00 Lacs to reputed Institutes/ organizations/ Departments during last three years.*
 - (f) Proof of availability of after-sale support & service.
 - (g) Bid security for Rs. 0.50 lac in the form of CDR/BD/DD/TDR/FDR pledged to Officer In-charge, Central Purchase Unit NIT Srinagar (J&K) and tender document fee Rs.1,000/- in the form of DD, favoring of Director, NIT Srinagar. Tender without bid security /document fee shall be rejected.
 - (h) Bid form in the format given in Annexure-II duly filled.
 - (i) List of organizations/ Institutions where such equipment has been supplied & installed successfully during last 3-years.
- 3. Price Bid Containing the following in Envelope-B:-**
 - (a) Prices offered and quoted both in words & figures. Prices must be offered /quoted in the format enclosed as Annexure-III in INR only. The rates quoted should be covered with transparent tape.
 - (b) The rate quoted should be FOR NIT Srinagar (J&K).
 - (c) Bid price should be without over writing. However minor over writing should be clearly signed by the bidder. In case of any discrepancy between price quoted in figures and words, the price quoted in words will prevail. Bid price should be firm for the bid validity period.
 - (d) All duties, taxes and levies (GST or other charges) payable, must be included but quoted separately.
 - (e) As per SRO 129 of Government of Jammu & Kashmir, the institute is Exempted from State entry tax. The Institute will provide Entry tax exemption certificate to successful bidder with supply order. The
- 4. Validity of Bids**

Bids shall remain valid at least for 120 days from the date of opening of the bids.
- 5. Evaluation of Bids.**

(a) The purchaser shall first evaluate and compare the technical bids as per following criteria to determine the techno-commercially qualified bidders:

- (i) Properly filled and signed as per given formats
- (ii) Conform to terms and conditions and technical specifications.
- (iii) Are accompanied with Bid security and all other documents

(b) *In the 2nd step, the financial bids of only those bidders who qualify from the above process will be evaluated to determine the final successful bidder.*

6. Award of contract.

(a) Contract shall be awarded to the bidder whose bid is commercially-technically qualified and is offered at lowest reasonable evaluated price.

(b) Successful bidder shall be notified about the award of the contract through a supply order where- in terms and conditions of supply shall be incorporated.

7. Payment & Performance Guarantee:

100% payment shall be made after s receipt of goods and successful installation & commissioning. However a B/G for a value of 10% of bill amount shall be required as security deposit against performance guarantee for the warranty period.

8. Warranty and after sale service:

(a) All items shall carry comprehensive standard warranty of 02 years from the date of installation & commissioning as well as service support after expiry of warranty.

9. Settlement of disputes.

Settlement of disputes if any shall be subject to the jurisdiction of Srinagar Courts only.

11. Liquidated Damages.

If the bidder after accepting the purchase order of goods/equipments or services, fails to deliver any or all of the goods/equipments or to perform the services with-in the specified period, a penalty of 0.50%(half percent) of the price value of the item per week or part-thereof shall be imposed. The maximum penalty shall be limited to 10% of the cost. Once maximum is reached, NIT Srinagar shall proceed on its own to consider the termination of the supply order, on the risk & responsibility of the defaulting bidder.

12. Submission of Bids.

(a) ***The last date for submission of bids is 13.03.2019 up-to 4.00PM.***

(b) Bids should be properly sealed.

(c) The two envelopes A & B should be separately sealed and superscripted as Techno-Commercial Bid & Price Bid. On Each envelope the due date of submission, Name of equipment/item/department; tender number and name of bidder should also be written .

These two sealed envelopes should be sealed in a bigger Envelop with the address of the Tender receiving Officer; Tender Number; due date of submission, Name of equipment/item/department and name of bidder.

(d) Bids should be addressed to Officer In-charge, Central Purchase Unit NIT Srinagar (J&K)

(e) Bids not from Srinagar shall be dispatched sufficiently well in advance so as to reach the destination as per scheduled time & date. NIT Srinagar shall not be responsible for any delay caused by Post or Courier agency.

13. Bid opening.

(a) The Technical Bid (Envelope- A) will be opened first on 14.03.2019 at 2.30 pm in the office room of the undersigned in the administrative block of the Institute.

Price Bid (Envelope-B) of the qualified bidders as detailed above will be opened subsequently. Interested bidders can attend the Bid opening.

14. Notwithstanding above, the purchaser reserves the right to reject any or all the bids received in response to this N.I.T. or withdraw it without assigning any reasons thereof.

15. For any future information or corrigendum or addendum regarding this tender, please be in touch with our website: www.nitsri.ac.in.

16. any clarification may sought on the following emails:

- HOD Physics:
- Central purchase Unit: cpu@nitsri.ac.in

Officer In-charge
Central Purchase unit, NIT Srinagar
Email: cpu@nitsri.ac.in

N.B.

1. Before preparing your valuable bid kindly go through the document fully and take care of all the requirements.
2. Bidders from outside Srinagar may please send their Bids well in advance so that these are received in time.

No. NIT/CPU/18/4703

Dated 26.02.2019

Annexure-I
“Name &/Specifications of equipments ”

S. No.	Description of Item	Specifications	Quantity
1.	Electron Spin Resonance Spectrometer Complete in all respect with CRO.	<ol style="list-style-type: none"> 1. Helmholtz coils: ESR-HC. 2. ESR Samples: DPPH. 3. Built in digital frequency meter. 	02 No's
2.	Experimental setup for magnetoresistance complete in all respect.	<ol style="list-style-type: none"> (i) Four probe arrangement (ii) Sample: Ge crystal (n-type) (iii) DMR Probe Stand (iv) Magnetoresistance setup (v) Electromagnet, Model EMU-50V (vi) Constant current power supply (vii) Digital gauss meter 	02 No's
3.	NMR experiment complete in all respect with CRO.	Specifications: Probe connection: Four-pin lemo socket Coil pair: 0-250 mA, 0-1 V, BNC sockets Signal output: 0-1 V, BNC socket Frequency range: ESR approx. 45-75 MHz; NMR approx. 10-15 MHz	02 No's
4.	Zeeman Effect Experiment complete in all respect.	Complete in all respect including 16" LED Flat Panel monitor and CCD Camera	02 No's
5.	Study of Thermoluminescence of F-centers in Alkali Halide Crystals complete in all respect	Study of Thermoluminescence of F-centers in Alkali Halide Crystals, TLX-02 (a) Experimental set up for creating thermoluminescence oven (upto 200°C) with power supply, Digital Thermometer (RTD Sensor) and Black Box. (b) For measurement of thermoluminescence intensity. <ol style="list-style-type: none"> i. Photomultiplier tube-931 A/R1158. ii. PMT housing with biasing circuit and coaxial cables. iii. EHT power supply. iv. Digital nanometer. 	02 No's
6.	Measurement of dielectric constant at high temperature complete in all respect	Suitable for temperature upto 600°C, including highly stable PID controller and capacitance meter 1pF to 20000 µF.	02 No's
7.	Millikan Oil Drop Experiment complete in all respect.	Millikan Oil Drop Experiment, (LCD) TV measurement of electron charge by Millikan's experiment. The experiment comes complete with 16" LED Flat Panel monitor, timer, atomizer etc. The oil droplets can be seen on monitor ensuring convenience & accuracy.	02 No's
8.	Planck's Constant experiment by Photoelectric effect, complete in all respect.	Planck's constant by photoelectric effect: <ol style="list-style-type: none"> 1. Determination of Planck's Constant and Work Function of Materials by Photoelectric Effect. 2. To verify inverse square law of radiation using a Photoelectric cell. 	04 No's

9.	Franck's Hertz Experiment complete in all respect with a CRO.	Argon filled tetrode Filament Power Supply 3.6 - 4.3 continuously variable Power Supply for VG K 1 1.3 - 5V continuously variable Power Supply for VG A 2 1.3 - 15V continuously variable Power Supply for VG K 2 0 - 95V continuously variable Saw tooth waveform for CRO display Scanning Voltage: 0-80V Scanning Frequency: 115±20 Hz Multirange Digital Ammeter Display: 3½ digit, LED -7 -8 -9 Range: 10 , 10 & 10 A	02 No's
10.	Ionization potential setup complete in all respect.	Ionization potential setup (measurement of ionization potential of argon gas)	02 No's
11.	Four probe experiment complete in all respect	Resistivity of semiconductors by four probe method at different temperature and determination of the band gap.	04 No's
12.	Two probe experiment complete in all respect	Two probe method for resistivity measurement of insulator, TPX-200C (upto 10 ¹³ W.cm) at different temperature with USB based computer interface facility. The setup consists of the following: i. Two probe arrangement with built-in-thermocouple sensor, YPA-TPX-200 ii. Test sample: 50M resistance (not for experiment) iii. Oven unit (upto 200 ⁰ C), RM-oven-200 iv. High performance PID controller with computer interface, PID-TZ-C1 v. High voltage power supply, (0-200 & 0-1500V) vi. Digital picometer vii. Computer aided measurement module, SES-CAMM With suitable software for TPX-01C	02 No's
13.	Dependence Hall coefficient on temperature complete in all respect	Dependence Hall coefficient on temperature, HEX-22 The setup consists of following units: 9031 1 67900/- 67900.00 18% 12222.00 a) Hall effect setup b) Hall probe (Ge: P-type) with a small oven and a thermocouple c) Hall probe stand, HPS-HE22 d) Electromagnet, model EMU-50V e) Constant current power supply, f) Digital Gaussmeter	02 No's
14.	Study of the energy band gap and diffusion potential of P-N junctions complete in all respect.	The following studies can be carried out. (i) Reverse saturation current I and material 0 constant h (ii) (ii) Temperature coefficient of junction voltage dV/dt (iii) Energy band-gap VG0 (iv) Junction capacitance The experimental set-up consists of the following: (1) Study of P-N Junctions, Model PN-1 (a) 3½ digit DPM for current/ temperature measurement. (b) 3½ digit DPM for bias voltage/ junction voltage measurements. (c) To connect the diode – one for experiment 1 & 2 and other for experiment 3. (d) Two fixed frequency oscillators (5KHz & 20KHz) with the same output (200mV). (2) Temperature controlled oven with sensor, PNO-01 (3) PNJ-Sample (a) Transistor BC109 (base-emitter)-Si (b) Transistor AC128 (base-emitter)-Ge (c) Diode: IN 5408/IN 4002-Si	02 No's
15.	Apparatus for the measurement of susceptibility of solids by Gouy's method complete in all respect.	Apparatus for the measurement of susceptibility of solids by Gouy's method. The apparatus consists of: a) Digital balance, CA-44 b) Al. Samples and Glass Tube for power samples c) GMX-02 Trolley d) Electromagnet	02 No's

		e) Constant current power supply, DPS-175M f) Digital Gauss Meter	
16.	Magnetic Hysteresis loop tracer complete in all respect	Magnetic Hysteresis loop tracer Complete in all respect with a CRO	02 No's
17.	Study of hybrid parameters of a transistor complete in all respect.	Study of hybrid parameters of a transistor, Model HP-01 Accessories required: i. True RMS A.C. Millivoltmeter, Model ACM-103 ii. Multimeter	02 No's
18.	Characteristics of semiconductor diodes complete in all respect	Study of characteristics of semiconductors Diode Si, Ge, Zener and LED	02 No's
19.	GM Counter with end window complete in all respect	GM detector, stand for window and radioactive source kit (1 Gamma or 1 beta)	02 No's

Annexure-II
BID FORM

To,
Officer In-charge,
Central Purchase unit,
NIT Srinagar.

Ref: Tender No. _____ issued under No.: NITS/CPU/ 2019/.....
Dated..... for-----
ForDepartment

Sir,
With reference to above invitation for bids, we would like to say that we have gone through your bid document thoroughly and hence offer our competitive Technical/Price Bid in sealed envelope for the supply of various goods/equipment listed in your document.

The following documents constitute our Bid:

- Technical specification/ literature attached:- Yes/No
- Valid tax clearance certificate attached:- Yes/ No
- OEM/ Authorized Dealership / certificate attached Yes/ No
- Revenue stamp affixed. Yes/ No
- Rates covered with transparent tape:- Yes/ No
- Bid document fee deposited:- Yes/ No
- Call Deposit Receipt enclosed:- Yes/ No
- Bid price in Indian Rupees:- Yes/ No
- FOR Srinagar:- Yes/No
- Bid without correction/overwriting:- Yes/ No
- Price Bid schedule in the requisite format
- List of organization where this equipment has been supplied/Installed

Kindly feel free for any enquiries and clarifications.

Yours Sincerely

From M/S.....

Place:

Telephone No.....Email:

Date.....

Annexure-III

Price Schedule

S. No	Name of equipment/ Goods /item	Basic cost	GST	Any other tax	Total unit price	Quantity	Total Price
1							
2							
3							
4							
5							

