



Central Purchase unit

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

Fax:- 0194-2420475 email: CPU@nitsri.ac.in

Document for Tender Notice No. 44 of 2018 Dated 16.01.2019

"Tender Notice for Invitation of bids for the supply of equipment for Student's Practical Process in Dynamics & Control lab of Chemical Engg. Department.

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1. 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. 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.40.00 lacs., with at-least one such contract worth not less than Rs. 10.00 lacs or two such contracts worth Rs. 20.00 Lacs to reputed Institutes/ organizations/ Departments during last three years.*

(f) Proof of availability of after-sale support & service centre at Srinagar.

(g) Bid security for Rs. 0.50 lacs 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 quoted separately. GST as applicable to Educational & Research Institutes shall be charged. Any document required

for this purpose from us must be mentioned in the offer which shall be provided along-with the Supply order.

- (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% (90% + 10%) payment shall be made after successful receipt of goods in good condition and accepted as per prescribed specifications by the nominated committee and after successful installation & commissioning. 10% will however be retained 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 06.02.2019 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 07.02.2019 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:

- Lab In-Charge: marather_nit@yohoo.co.in
- 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/ 4614

Dated 16.01.2019

Annexure-I
“Technical Specifications ”

S.No	Description of Equipment	Specifications	Quantity
1.	FIRST-ORDER AND SECOND-ORDER SYSTEM	Thermometer Range -10 – 0 – 100 ⁰ C Thermometer with thermowell Range -10 – 0 – 100 ⁰ C ‘U’ tube manometer Tube ID 5 mm ‘U’ tube manometer Tube ID 22 mm Heating bath Size 1.25BSP, 315mmL, SS304. Heater Type Electrical 2 coil, Capacity 3 KW Timer Type cyclic Beeper Time setting Range 2-10sec Mini compressor Type Diaphragm Spares: water manometer mercury manometer thermo well Spare Tubing Heating bath beeper for recording observations and timer for heater on-off operation. The base plate for mounting / tabletop mountable. Spare parts as may be required over period of time Chemicals Working manual (with video).	01
2.	TEMPERATURE MEASUREMENT SYSTEM	Thermometer Type Mercury in glass, Range (-)10 – 110 ° C Bimetal thermometer Dial 100 mm, Range 0-100 Deg C Temperature sensors Type PT 100, Sheath dia 6 x 100 mm long Thermistor, Sheath dia 6 mm x 100 mm long Temperature sensor Type K, Sheath dia 6 mm x 100 mm long with Aluminium head. Temperature Indicator Range 100 Deg C, Input thermocouple (K type) Temperature Transmitter Type Head mounted two wire, Input RTD PT100, Range 0–100 Deg C, Output 4–20 mA Digital milivoltmeter Range 0-200mVDC, Display 4.1/2 digit Multimeter Display 3.1/2 digit, Compensating cable Type K Thermocouple connector Type K Hot water bath Capacity 0.5 lit, 500W, non corrosive Ice bath Capacity 0.300 lit. Power supply Output 24V DC Beeper Time setting Range 2-10sec	01

3.	TWO TANK INTERACTING LIQUID LEVEL SYSTEM	<p>Process tank Material stainless steel , Circular, graduated level scale (2 no. s) Tank Capacity 2.5 to 3.5 ltr. Supply Tank Material stainless steel capacity 20 ltr. Overhead Tank Material stainless steel capacity 5 ltr. Water circulation FHP pump, standard make Piping SS, PVC Size ¼ “. Flow measurement Rotameter</p>	01
4.	TWO TANK NON INTERACTING LIQUID LEVEL SYSTEM	<p>Process tank Material stainless , Circular, graduated level scale (2 no. s) Tank Capacity 2.5 to 3.5 ltr. Supply Tank Material stainless steel capacity 20 ltr. Overhead Tank Material stainless steel capacity 5 ltr. Water circulation FHP pump, standard make Piping SS, Size ¼ “. Flow measurement Rotameter</p>	01
5.	I/P AND P/I CONVERTER	<p>Pressure Transmitter Type Two wire, Range 0–1 bar, Output 4–20 mA I/P converter Input 4-20mA, Output 3-15 psig Signal Isolator Input: 4 to 20mA, output 4-20mA Digital Calibrator Measure/source, milliamp/millivolt mode Air regulator Range 0-2.5 kg/cm2 Air filter regulator Range 0-2.5 kg/cm2 Pressure gauge Range 0-2.5 kg/cm2(2No), Range 0-7 kg/cm2(1Nos) Mini compressor Air supply : Clean, oil and moisture free air, pressure 2 Bar, consumption 50 LPH</p>	01
6.	TEMPERATURE CONTROL TRAINER	<p>Type of control SCADA Control unit Digital indicating controller with Ethernet communication Temperature sensor Type RTD, PT100 Heating control Proportional power controller (SSR), Input 4-20 mA, Capacity 20 A. Heater Type Electrical 2 coil, Capacity 3 KW Rotameter 6-60 LPH Process tank SS304, Capacity 0.5 lit, insulated Computer: Laptop /or a PC standard configuration Air Supply: Clean, oil and moisture free air, Pressure 2 Bar, consumption 50 LPH</p>	01

7.	FLOW CONTROL TRAINER	<p>Control unit Digital indicating controller with Ethernet communication, Diff. pressure transmitter Type Capacitance, two wire, Range 0–200 mm, Output 4–20 mA sq.root, I/P converter Input 4-20mA, Output 3-15 psig, Control valve Type Pneumatic, Size 1/4", Input 3–15 psig, Air to close, Characteristic Linear, Rotameter 10-100 LPH, Pump Fractional horse power, type submersible Supply tank SS304 Flow measurement Orifice meter Air filter regulator Range 0-2.5 kg/cm2, Make Airmatic Pressure gauge Range 0-2.5 kg/cm2(1No), Range 0-7 kg/cm2(1No), Make Wika (All above parts standard make of reputed companies with performance certificate). Computer: Laptop /or a PC standard configuration Air Supply: Clean, oil and moisture free air,Pressure 2 Bar, consumption 50 LPH</p>	01
8.	LEVEL CONTROL TRAINER	<p>Type of control SCADA Control unit Digital indicating controller with Ethernet communication Level transmitter Type Electronic, two wire, Range 0–250 mm, Output 4–20mA, I/P converter Input 4-20mA, Output 3-15 psig, Control valve Type Pneumatic, Size 1/4", Input 3–15 psig, Air to close, Char. Linear, Rotameter 10-100 LPH, Pump Fractional horse power, type submersible Process tank Transparent, Acrylic, with 0-100% graduated scale Supply tank SS304 Air filter regulator Range 0-2.5 kg/cm2, Pressure gauge Range 0-2.5 kg/cm2(1No), Range 0-7 kg/cm2(1No). Computer: With standard configuration.Air Supply: Clean, oil and moisture free air,Pressure 2 Bar, consumption 50 LPH.</p>	01

9.	PRESSURE CONTROL TRAINER	<p>Type of control SCADA Control unit Digital indicating controller with Ethernet communication Pressure transmitter Type Two wire, Range 0–5 bar, Output 4–20 mA, I/P converter Input 4-20mA, Output 3-15 psig, Make Control air Control valve Type Pneumatic, Size 1/4", Input 3–15 psig, Air to close, Char. Linear, Process tank Pressure vessel, MS Air filter regulator Range 0-2.5 kg/cm², Pressure gauge Range 0-2.5 kg/cm²(1No), Range 0-7 kg/cm²(1No). Computer with standard configuration , Air Supply: Clean, oil and moisture free air</p>	01
10.	MULTIPROCESS TRAINER	<p>Differential pressure transmitter Type Capacitance, two wire, Range 0–200 mm, Output 4– 20 mA sq.root (2 Nos) Level transmitter Type Electronic, two wire, Range 0–250 mm, Output 4–20 mA DAQ device NI USB-6001, 14 bit, 20KS/S Multifunction I/O and NI-DAQMX, Analog input 4, Analog output 2 Communication USB port I/P converter Input 4-20mA, Output 3-15 psig Power supply Model S-15-24, Output 24 VDC, 0.7 A Control valve Type: Pneumatic; Size: 1/4", Input: 3–15 psig, Air to close, Characteristics: linear Rotameter 10-100LPH (3 nos) Pump Fractional horse power, type submersible Process tank Transparent, Acrylic, with 0-100% graduated scale Supply tank SS304 Flow measurement Orifice meter (3 nos) Air filter regulator Range 0-2.5 kg/cm² Pressure gauge Range 0-2.5 kg/cm² (1 no), 0-7 kg/cm²(1 no) Clean, oil and moisture free air, pressure 2 Bar, consumption 50 LPH Computer: Compatible with standard configuration.</p>	01
11	CONTROL VALVE CHARACTERISTICS	<p>Control valve (Linear) Type: Pneumatic; Size: 1/2", Input: 3–15 psig, Air to open, Characteristics: Linear Control valve (equal %) Type: Pneumatic; Size: 1/2", Input: 3–15 psig, Action: Air to close, Characteristics: Equal % Control valve (quick opening) Type: Pneumatic; Size: 1/2", Input: 3–15 psig, Air to open, Characteristics: Quick opening Rotameter Range 40-400 LPH 60-600 LPH Overhead tank SS304, cylindrical</p>	01

12	Temperature controlled Photo reactor	<p>Receiving tank SS304, water reservoir Pressure indication Tube with graduated scale at control valve inlet Pump Fractional horse power, type submersible Pressure gauge Range 0-2.5 kg/cm² Air regulator Range 0-2.5 kg/cm² Valve Positioner fitted on linear valve Mini Compressor Air supply: Clean, oil and moisture free air, pressure 2 Bar. Consumption 50LPH</p> <p>Control temperature range up to 10-50 °C Reactor transparent thick glass or SS 1 litre capacity Quartz tube in reactor with UV tube light(wavelength less than 287 nm) and circuitry Mechanical and magnetic stirring provisions Provisions for removing sample and blowing oxygen MS painted stand Spares 1 each Quartz tube and UV tube light(287 nm)</p>	01
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Annexure-II
BID FORM

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

Ref: Tender No. _____ issued under No.: NITS/CPU/ 2018/.....
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:

Date.....

Telephone No.....Email:

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							