



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI-620 015
INVITATION FOR QUOTATION

TEQIP-III/2018/NITT/Shopping/75

26-September-2018

To,

Address (Firm)

Sub: Invitation for Quotations for supply of Nonlinear Level control.

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sl. No	Brief Description	Quantity	Delivery Period (In days)	Place of Delivery	Installation Requirement (if any)
1	Nonlinear Level control	1	90	Department of Instrumentation and Control Engineering, National Institute of Technology, Tiruchirappalli	Installation to be done in the Department of Instrumentation and Control Engineering, National Institute of Technology, Tiruchirappalli, Tamil Nadu

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.
3. Quotation,
 - 3.1 The contract shall be for the full quantity as described above.
 - 3.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.

- 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.
- 3.4 Applicable taxes shall be quoted separately for all items.
- 3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- 3.6 The Prices should be quoted in **Indian Rupees only**.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **55** days after the last date of quotation submission.
6. **GST 5% - as per Column (4) II under notification no. 45/2017 Central Tax – (Rate), Date. 14-11-2017/ Notification no. 46/2017 Integrated Tax – (Rate), Date. 14-11-2017**
7. Evaluation of Quotations,
The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which
- 7.1 are **properly signed**; and
- 7.2 confirm to the terms and conditions, and specifications.
8. The Quotations would be evaluated for all items together.
9. Award of contract:
The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
- 9.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 9.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
10. Payment shall be made in Indian Rupees as follows:
Delivery, Installation & Satisfactory Acceptance - 100% of total cost
11. All supplied items are under warranty of **24** months from the date of successful acceptance of items.
12. You are requested to provide your offer latest by **15:00** hours on **24-October-2018**.
13. **Opening time : 24-October-2018 16:00 hours at TEQIP Office, Administrative Building, NIT Trichy**
14. Detailed specifications of the items are at Annexure I.
15. Training Clause (if any) **one day training and demo**.

16. Testing/Installation Clause (if any) 100% payment after delivery and successful installation at Department of Instrumentation and Control Engineering, NIT, Tiruchirappalli - 620 015, Tamil Nadu
17. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
18. Sealed Quotations to be submitted at the following address:

The Head of Department
Dept. of Instrumentation and
Control Engineering,
National Institute of Technology,
Tiruchirappalli – 620 015.

19. We look forward to receiving your quotation and thank you for your interest in this project.

Note: The cover should be duly superscribed with the following details.

- (1) Quotation Reference Number (2) Quotation for the supply of
- (3) Date of opening

DL
26/9/18

B. Vasuki
(Dr. B. Vasuki)

HoD /ICE.
Dr. B. VASUKI
HEAD
Instrumentation and Control Engineering
National Institute of Technology
Tiruchirappalli - 620 015.

Annexure I

Sl. No	Item Name	Specifications
1	Nonlinear Level control	<p><u>Computerized Non Linear and Hybrid Control System (Conical and Spherical)</u></p> <ul style="list-style-type: none"> • SS Conical tank as a Non-Linear process <ul style="list-style-type: none"> * Body Material : SS 304 * Top Diameter : 300 mm * Bottom Diameter : 25 mm * Height : 500 mm • SS Spherical tank as a Non-Linear process <ul style="list-style-type: none"> * Body Material : SS 304 * Dia meter : 400 mm * End Connection : 3/4" BSP Thread • Two no's of Industrial type Pneumatic Control Valve to control the line flow rate <ul style="list-style-type: none"> * Make : RK Controls * Type : Normally Closed * Characteristics : Equal % * CV : 2 * End Connection : 1/2" or 3/4" • Two no's of Variable area type Rotameter to visualize the flow rate <ul style="list-style-type: none"> * Type : Variable area * Range : (25-250)LPM * End Connection : ½" Screwed * Float material : SS316 • Two no's of Electro Pneumatic converter to control valve actuator <ul style="list-style-type: none"> * Air Input : 20 Psi * Signal Input : (4-20)mA * Output : (3-15)Psi • Two no's of smart Level Transmitter to sense the tank level <ul style="list-style-type: none"> * Make : Yokogawa * Type : DPT (Two wire system) Hart * Supply : 24V DC * Range : (0-4000) mmwc * Output : (4-20) mA • Air regulator with filter to regulate the air <ul style="list-style-type: none"> * Supply : 100 Psi Maximum * Output : (0-30)Psi • Magnetic float type level sensor for level sensing

- Two no's of pump with electric motor to circulate the water
 - * Type : Centrifugal pump
 - * Supply : 230 V AC / 50 Hz
 - * Power : 5 HP
 - * Mounting : Foot Mounting
- Sump tank to store the water
 - * Capacity : 80 liter
 - * Size : 600 X 400 X 350
 - * Thickness : 5mm
 - * Material : Fiber
- Suitable hand valves (½" & ¾") with indication
- Sight glasses with fittings
- Plumbing lines are SS304 pipes
- Regulated variable voltage power supply
- Control valve position sensor provided
- PID flow controller
- Air lines are rust proof tubes
- SS pressure gauges
- All components are mounted in attractive powder coated movable frame
- Interface with DCS
- **DAQ Specification:**
 - * Model : NI USB-6008
 - * Supply : 5 V
 - * No. of analog inputs : 8
 - * Resoultion : 12-bit, 10 kS/s
 - * No. of Analog outputs : 2
 - * Resoultion : 12-bit, 10kS/s
 - * No. of Digital I/O : 32

FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To: _____

Sl. No.	Description of goods (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In 5 %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____ (Amount in figures)

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of _____ months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier _____
 Name: _____
 Address: _____
 Contact No: _____