National Institute of Technology, Nagaland, Chumukedima, Dimapur, Nagaland-797103

INVITATION LETTER

Package Code: TEQIP-III/nitn/35
Package Name: THERMO GRAVIMETRIC ANALYSER

Current Date: 17-July-2019
Method: Shopping Goods

Sub: INVITATION LETTER FOR THERMO GRAVIMETRIC ANALYSER

Sir/Madam,

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

Sr. No	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1.	Thermo Gravimetric Analyser (Detailed specifications given at Annexure I)	1	NIT Nagaland	Yes

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, initialling, 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.

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3.6 The Prices should be quoted in Indian Rupees only. Goods/Equipments should be brand new.

4. Each bidder shall submit only one quotation.

5. Quotation shall remain valid for a period not less than **60** days after the last date of quotation submission.

6. Evaluation of Quotations: The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which
   6.1 are properly signed; and
   6.2 Confirm to the terms and conditions, and specifications.

7. The Quotations would be evaluated for all items together

8. 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.

   8.1 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.

   8.2 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.

9. Payment shall be made in Indian Rupees as follows:

   Delivery and Installation - 90% of total cost
   Satisfactory Acceptance - 10% of total cost

10. Liquidated Damages will be applied:
    - Liquidated Damages Per Day Min % : 0
    - Liquidated Damages Max % : 0

11. All supplied items are under warranty of **Twelve** (**12)** months from the date of successful acceptance of items.

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12. You are requested to provide your offer latest by 1**2:00** hours on **31-July-2019.**

13. Detailed specifications of the items are at Annexure I.

14. Training Clause (if any) **Yes**

15. Testing/Installation Clause (if any) **Yes**

16. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly Indicating the model quoted for

17. The tender document shall be submitted/delivered in a sealed envelope bearing the following reference on the top left corner: **Package Code: TEQIP-III/nitn/29 Dated: 17-07-2019** latest by 1**2:00** hours on **31-July-2019** and addressed to: **The Registrar, National Institute of Technology, Nagaland, Chumukedima, Dimapur, Nagaland-797103.**

18. The bidder should furnish the certificate of GST registration, PAN, and IT Returns of last three years.

19. The Bidder should have experience of executing at least 1 (One) Purchase Order of Equipment/Machines from any IITs /NITs/ Central Govt. Institutions or Educational & Research Institutions of National Repute.

20. Vendors should clearly state the available nearest after sales service facilities in the region, without which their offers will be rejected.

21. The bidder should be the manufacturer or authorised dealer and, in such case, the certificate of dealership from the manufacturer should be produced.

22. **Performance Bank Guarantee (PBG):** The supplier shall furnish an unconditional PBG for 5% of the Purchase Order value for a period of one year from a scheduled Bank of India, within 21 days from the date of delivery and installation of the work. Where the PBG is obtained by a foreign bank, it shall be got confirmed by a Schedule Indian bank and shall be governed by Indian Laws and be subject to the jurisdiction of courts at Dimapur. The PBG shall guarantee that,
    a) The Vendor guarantees satisfactory operation of the Equipment & components against poor workmanship, bad quality of materials used, faulty designs and poor performance.
    b) The Vendor shall, at his own cost, rectify the defects/replace the items supplied, for defects identified during the period of guarantee.

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23. The bidder should produce Audited statement of accounts for the last 3 years.

24. **Disputes and Jurisdiction**: Any legal dispute arising out of any breach of contract pertaining to this order shall be settled in the court of competent jurisdiction located within Dimapur in Nagaland.

25. **All the supporting documents should be attached with the quotation, without which the tender will be completed rejected.**

26. The Institute reserves the right to accept in part or in full any quotation(s) or reject any or more quotation(s) without assigning any reason or to cancel the tendering process and reject all quotation(s) at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).

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

TEQIP-III COORDINATOR
17-07-2019

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Annexure I

Sr. No	Item Name	Qty	Specifications
1.	Thermo Gravimetric Analyser	1	**Simultaneous High Resolution Thermo Gravimetric Analyzer/Differential Thermal Analyser (TGADTA)** TGA/DTA should have Controlled Rate Thermal Analysis Mode that consists of operations such as Constant heating rate, Dynamic heating rate, Constant reaction rate and step wise isothermal. The system should be able to operate under dynamic heating rates during isothermal decomposition studies to extrapolate kinetic parameters. The TGA/DTA should be equipped with the following : **Balance design**: Ultra Micro Balance. Weight change measurements should not be dependent on sample positioning. Thermally sealed balance with Calibration facility. The calibration for zero setting should be done through TGA Optimization for Balance Mechanism. **Furnace design**: should be Horizontal. Both furnace and balance should be in horizontal Position. The balance should be with motorized opening and closing for easy handling. Any form of vertical design should be completely avoided. The system should have low thermal mass furnace with built-in platinum resistance heating elements. **Balance beam**: Dual, differential and horizontal. Should be made up of ceramic material with user friendly plug-in/plug-out connection. Balance assembly should have thermostatting capability to minimize isothermal drift **Temperature range**: Room Temperature to 1500°C **Weighing range**: Upto 200 - 400 mg without range switching **Maximum sample weight upto** : upto 400 mg **Resolution**: 0.2µg above the noise level for the entire range from RT to 1500°C **DTA measurement range**: + 1000 µV **DTA RMS Noise**: 0.03 µV **DTA RMS Sensitivity**: 0.06 µV **Temp accuracy**: +/-0.1°C **Temp reproducibility**: +/-0.15°C **Scan rate**: 0.01ºC to 100 ºC/min with secure and controlled purge arrangement **Cooling unit**: Forced Air. Cooling from 1000ºC to 50ºC within 10 - 12 minutes **Purge gas facility**: All inert gases with automatic gas purging and sweeping System through Software . Should have built-in safety interlocks for gases/switching of gases should be possible with necessary flow rate of 0 -1000 ml/min. Minimum two kinds of the purge gases should be switched from the measurement software, **The TGA/DTA system should have capability of purging under reduced and corrosive gas atmosphere like hydrogen with separate port that doesn't affect balance mechanism**

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			TG RMS Noise: 0.1µg. RMS noise should be related to both signal and noise power (or amplitude) which is measured at the same or equivalent points in a system, and within the same system bandwidth. **Local module**: Control unit should have LCD display of weight, temperature and experiment status. **Software**: Windows-based Thermal Analysis software for data collection and treatments. Multitasking and multimodules software exploitation license under Windows for data acquisition and storage, Drawing and printing of the TG -DTG and DTA curves according to time or temperature, calculation and printing of derivatives curves, mass variation calculation, regression calculation, data storage, baseline correction, DTA peak integration, multi task software under Windows. Should have capability of converting collected data into ASCII after finishing the test for exportation. Should include special Softwares like curve treatment (smoothing, deconvolution, erasing, slope adjustment...), Kinetics for TG, DTA, or Purity, heat capacity software. **The system should have Controlled Rate Thermal Analysis Mode that consists of operations such as constant heating** **rate, dynamic heating rate, constant reaction rate and step wise isothermal.** **The system should be able to operate under dynamic heating rates during isothermal decomposition studies to extrapolate kinetic parameters** **Crucibles**: Alumina (5 Nos.) and Platinum (5 Nos.) **EGA Upgrade**: System should be easily upgradeable to MS (any make) and FTIR (any make) coupling for evolved gas analysis. Corresponding interface should be quoted along with system as an optional. **Spares and consumables**: List of Spares/Consumables should be provided for 2-3 years trouble free operation. **Calibration Standards**: TGA system should have facility for flexible calibration that is saving calibration with multiple combination of gas type, flow rate, crucible type etc. Also, calibration of temperature should be possible with NIST, certified metal standards. Also, NIST Certified standards for curie point temperature studies and weight loss measurement should be quoted along with system. ➢ Service should be directly from the manufacturer's engineer should be based at Guwahati, provide contact details. ➢ Call should be attended within 24 hours. ➢ Onsite Warranty – One Year

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FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To: _____

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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 %	In figures (B)
Total Cost							

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

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. ———————— (Amount in figures) (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: _____

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