



**NATIONAL INSTITUTE OF TECHNOLOGY
RAIPUR – 492 010, CHHATTISGARH**

Advertised (Open) Tender Enquiry for Biotechnology Department

Department: Biotechnology

Enquiry No: NITRR/S&P/BT/OT/2018/590

Date: 05/06/2018

Important Dates

To

Event	Date	Time
Last Date of submission of quotation	27/06/2018	Up to 03:00PM
Technical bid Opening date	27/06/2018	At 03:30PM
Price (financial) bid Opening	To be Informed to technically successful bidder by mail and phone.	

Dear Sir,

We intend to purchase the commodities specified in this document and invite quotations in accordance with the terms and conditions detailed in the bid document. If you are interested, kindly send your offer with prices and complete terms within the time mentioned above.

Please send your quotation to:

REGISTRAR
NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR
G. E. ROAD, RAIPUR – 492 010, CHHATTISGARH

Yours sincerely,

Registrar

National Institute of Technology,
Raipur

Enclosed:

- (1) Bid Document – Instruction to bidder – containing detail terms and conditions.
- (2) List of Equipment's/machines/commodity etc.- Annexure 1
- (3) Technical Specification – Annexure 2
- (4) Technical Compliance Format- Annexure 3
- (5) Price Bid Format in INR – Annexure 4
- (6) Price Bid Format in of imported items in currency other than INR -Annexure 5
- (7) Deviation statement form – Annexure 6
- (8) Bidder information & check list- Annexure 7

BID DOCUMENT**INSTRUCTION TO BIDDER**

1. Please go through the enclosed “bid document” carefully for other bidding instructions.
2. **IMPORTANT NOTE:** Being a Two-Part Tender (techno-commercial and price bid), fax quotations will not be accepted. Please ensure your offers are received on or before tender due date and time. Bidder / Tenderer are requested to download the tender documents from our website (www.nitr.ac.in) and please submit the Demand Draft of Rs. 1180/-(Inclusive of 18% GST) towards Tender fee not refundable (in favor of Director NIT Raipur, Demand Draft should not be dated prior to the date of advertisement. Separate request letter and separate Demand Draft shall be sent for each tender document.) in a separate cover along with a covering letter duly marked on the cover “Tender fee in respect of Tender No”. please note carefully that;
 - **Quotations received without tender fee will not be considered.**
 - No request for extension of the due tender date will be considered.
 - In the event any date indicated above is declared as holiday, the next working day at Institute shall be considered as the due date for receiving & opening of tenders.
 - The bids shall be opened on date and time as mentioned above. The bidders may send their authorized representatives to attend the bid opening, if they so desire.
 - Bids received after the deadline of receipt indicated above, shall not be taken in to consideration.
3. The bid should remain valid for a period of **180 days** from the date of opening. In case your offer has a different validity period that should be clearly mentioned in the quotation. Validity period may also be extended without change in bid prices ,if required on mutually agreed basis only.
4. The bids may be drop in the Tender Box kept in the office of Registrar, NIT Raipur in normal working day that is Monday to Friday except holidays (from 11 AM to 5 PM) of the Institute. Please do not hand over the quotation to any person by hand.
Speed post/Registered Post and Other Courier Services is not acceptable.
5. **Clarification of bidding documents:** If a prospective bidder requires any clarification in regard to the bidding documents, they may mail to asstreg.str@nitr.ac.in at least 15 days before the deadline for receipt of bids.
6. **Amendment of Bidding Documents**
 - o Corrigendum, if issued any for the tender, shall form part of the Tender Document. Corrigendum will be posted on NIT RAIPUR website (www.nitr.ac.in). Bidders/Tenderers are requested to visit NIT RAIPUR website regularly and note the corrigendum / amendments to the tender without fail and submit the offer accordingly. NIT RAIPUR will not be responsible for ignorance of corrigendum.

- o At any time prior to the deadline for submission of bids, the Institute may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder/Tenderer, modify the bidding documents by amendment. The same would also be hosted on the website of the Institute and all prospective bidders/tenderer are expected to surf the website before submitting their bids to take cognizance of the amendments. Bidder/Tenderer who has submitted bids before publishing the amendment may revise their bid incorporating the amendments before the last date of tender.
- o In order to allow prospective Bidder/Tenderer's reasonable time in which to take the amendment into account in preparing their bids, the Institute, at its discretion, may extend the deadline for the submission of bids and host the changes on the website of the Institute.

7. **Custom duty:** The NIT Raipur have registration in Department of Scientific & Industrial Research(DSIR).

8. Bid Security (BS)/(Earnest Money/ EMD)

- I. The Bidder/Tenderer shall furnish, as part of its bid, a bid security (BS) of **3 % of gross bid value** has to be submitted as Bid Security (Earnest money Deposit/ EMD). **Gross bid value means F.O.R. NIT Raipur final price**
- II. In the case of foreign bidders/tenderers, the BS shall be submitted either by the principal or by the Indian agent and in the case of indigenous bidders/tenderers; the BS shall be submitted by the manufacturer or their specifically authorized dealer/Bidder/Tenderer.
- III. The bid security shall be in Indian Rupees. The bid security shall be in one of the following forms at the Bidder/Tenderers' option:
 - (a) A Banker's cheque or demand draft in favour of the Director, NIT Raipur.
 - (b) FDR in favour of the Director, NIT Raipur
- IV. The bid security should be submitted in its original form. Copies shall not be accepted.
- V. *Any bid without EMD or bid not secured in accordance with above will be rejected by the Institute as non- responsive.*
- VI. The bid security of unsuccessful Bidder/Tenderer will be discharged / returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity or placement of order whichever is later.
- VII. The successful Bidder/Tenderer's bid security will be discharged upon the Bidder/Tenderer furnishing the performance security.
- VIII. **The firms registered with DGS&D & NSIC, if any, are exempted from payment of BS provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies.**
- IX. **The bid security may be forfeited:**
 - (a) If a Bidder/Tenderer withdraws or amends or impairs or derogates its bid during the period of bid validity specified by the Bidder/Tenderer on the Bid Form; or

9. Sealing and Marking of Bids:

In a two bid system All Bidders/Tenderers are requested to follow carefully the following instructions before preparing their offer.

Part I: Technical & Commercial Bid

Part – (a) Technical

- (i) This part should contain detailed specifications of the items quoted by you along with technical literature and leaflets.
- ii. A compliance statement showing the compliance of the item quoted by you with that of item tendered by us should be prepared and enclosed to this.
- iii. Any other information called for in the tender related technical and commercial specifications can also come in this part.
- iv. Prices should NOT be indicated in this cover.

Part – (b) Commercial terms: (WITHOUT PRICE)

- i. The commercial terms applicable for the items quoted by you should be indicated in this part.
- (ii) If any compliance statement is called for the commercial terms/contractual terms and conditions, the same is to be attached in this part.
- (iii) ***Prices should NOT be indicated in this part. However a copy of the price bid (without prices) must be enclosed in this part to enable to understand whether all the items required to be quoted by you have been quoted in the price bid.***
- iv. The Commercial terms such as delivery terms, delivery period, payment terms, Warranty, validity of the offer, installation & commissioning, duties and taxes etc., shall come into this.
- v. The required EMD should be enclosed.
- vi. The Tenderer / bidder need to submit the following certificates along with the Tender Documents to confirm their eligibility in this part :
 - Proof of establishment of Firms/shop/business/ manufacturing unit etc. and Dealership certificate from the principals etc.
 - Proof of registration with any other central government organization (if any)
 - Photocopies of purchase orders received from any central govt. organization to the firm (if any).
 - Goods & Service Tax registration certificate should be enclosed
 - The bidder should enclosed proof of turnover by way of Audited Balance Sheet/Auditor's certificate, if required.
 - The bidder should Photocopy of PAN card issued un the name of the bidder's firm.

Note:

- Technical Specifications and terms & conditions as above should be very clearly reflected item-wise with reference to the items called for in the tender.
- Please note that the PRICE SHOULD NOT BE indicated in this part.
- Technical and Commercial part as described above shall be prepared and put it in a sealed cover.

Part II: Price Bid

The prices applicable for the items, item-wise in response to the tender shall come into this part in the prescribed format only. ***Bid will be rejected if rates are not quoted in the prescribed format.***

- i. Tenderer shall indicate very clearly item-wise prices with reference to their technical offer.
- ii. Price Bid prepared as above shall be enveloped and marked as follows:

The Technical & Commercial envelope (Part I) and Price cover (Part II) prepared as above along with 'Tender fee' which should be inserted in another envelope and marked as tender fee:

All envelop should be addressed to Registrar NIT RAIPUR and top of all envelop should be super scribed with (Tender No/ Department and due date of opening.). Part I: TECHNICAL BID with EMD & COMMERCIAL BID, Part II: PRICE BID should also be mentioned on respective envelop.

10. The bidders should quote their offer / rates in clear terms without ambiguity.
11. The rates should be quoted both in figures and words and legibly written without any over-writings. In case of any correction, the same must be attested by the bidder with full signature. However, no over-writing is permissible. Manufacturer's price-list, where applicable, should be submitted along with the bid.
12. In case of any discrepancy between the rates in figures and that in words, the rate in words will be accepted as correct.
13. Each bidder shall submit only one bid. A bidder, who submits more than one bid, shall be disqualified and considered non-responsive.
14. The bidder has to sign in full at all pages of the bidding document.

15. Bid Prices

- (i) The Bidder /Tenderer shall indicate **unit prices in the prescribed format only**,
- (ii) Prices indicated on the price-schedule form shall be entered separately in the following manner:
 - (a) **For Goods being offered from India/ abroad in INR**
 - (b) The price of the goods quoted should be FOR NIT RAIPUR inclusive of all taxes(GST, Custom etc), charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination as specified in the price schedule form, installation, commissioning, training charges etc , if any. **(Annexure V)**
 - (b) **For Goods being offered from abroad in currency other than INR**
 - i. The price of the goods, quoted on FCA (named place delivery abroad) or FOB (named port of shipment), as specified in the price schedule form. The price should be FOR NIT RAIPUR inclusive of all taxes, charges for insurance and

transportation of the goods, agency commission, installation, commissioning, training charges etc if any. **(Annexure VI]**

- ii. The terms FOB, FCA, CIF, CIP etc. shall be governed by the rules prescribed in the current edition of the Incoterms published by the International Chambers of Commerce, Paris.
- iii. Prices quoted by the Bidder/Tenderer shall be fixed during the Bidder/Tenderer's performance of the Contract and not subject to variation on any account.
- iv. If at any stage of the price quoted GST applicable, it should be clearly mentioned.

16. Conditional discount, if any, offered by the bidder shall not be considered at the time of evaluation.

17. Responsiveness of Bids

- (iv) Prior to the detailed evaluation, the Institute will determine the substantial responsiveness of each bid to the bidding documents. For purposes of this clause, a substantive responsive bid is one, which conforms to all terms and condition of the bidding documents without material deviations, reservations or omissions. A material deviation, reservation or omission is one that:
 - (a) affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
 - (b) limits in any substantial way, inconsistent with the Bidding Documents, the Institute's rights or the Bidder/Tenderer's obligations under the Contract; or
 - I if rectified, would unfairly affect the competitive position of other bidders/tenderers presenting substantially responsive bids.
- (ii) The Institutes' determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- (v) If a bid is not substantially responsive, it will be rejected by the Institute and will not subsequently be made responsive by the Bidder/Tenderer by correction of the material deviation, reservation or omission.

18. Evaluation and comparison of bids

- (i) The Purchaser shall evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially responsive.
- (ii) To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria defined below. No other criteria or methodology shall be permitted.
- (iii) The bids shall be evaluated on the following basis which shall be arrived as under:

For goods being offered from India.

Goods price will be calculated FOR NIT Raipur. Lowest bid (L1) will be deciding by the price of the goods quoted should be FOR NIT RAIPUR inclusive of all taxes(GST & Custom Duty, etc), charges for inland transportation, installation, commissioning, training charges, insurance and other local services required if any for delivering the goods at the desired destination as specified in the price schedule Price Bid format

For goods being offered from Abroad

- (i) In case of goods being offered from abroad, Lowest bid (L1) will be decided based on total cost at NIT Raipur, that include basic price of goods, freight and Insurance up to Indian Airport/port (CIF/CIP value up to Indian airport/port), custom duty and other taxes as applicable etc., Inland transportation and insurance up to NIT Raipur, packaging, forwarding, agent commission for custom clearance and installation, commissioning and training charges if any.
- (ii) Conversion to Single Currency:** To facilitate evaluation and comparison, Bids quoted in foreign currency will be converted into Indian Rupees at the selling exchange rate established by Reserve Bank of India on its website, on the date of price bid opening.
- (iii)** In case charges for packing, forwarding, transportation inside India, custom clearance charges or other incidental charges are quoted extra in addition to the quoted rates, the amount thereof must be specified. Packing, forwarding, freight, entry tax etc., when quotes separately are reimbursable at actuals after production of original receipts/invoices. If external agencies are employed, their receipts must be enclosed with the invoice.
- (iv) *If vender wishes, he/they may alternatively, quote price of imported items in Indian rupees. In this case item may be treated as offered from India. Payment will be released accordingly.*

Note: *Where there is no mention of packing, forwarding, freight, transportation, insurance charges, taxes etc. such offers shall be REJECTED as incomplete.*

19. Clearance and delivery

On arrival of shipment/consignment, the supplier is required to arrange custom clearance and transportation of the consignment up to NIT RAIPUR premises. The Tenderer/ bidder will do all types of clearance work and **formalities to deliver/provide the equipment at the site of installation. The expenses incurred will be reimbursed on actual basis not exceeding the quoted amount.** Institute will provide all types of documentary support including Customs Duty exemption certificate. The custom duty, demurrage (in case of delay in release of custom duty to the custom department by NIT Raipur) and government taxes/levies (if any) will be paid extra by the buyer after as per term of payment. Please note that the State of Chhattisgarh may charge entry tax on all goods entering the State. This may be included in your quotation as a separate item. Entry Tax will be reimbursed on production of proof of payment. **Principals**

will themselves have to procure any requisite permission from the Govt. of country of origin of equipment.

20. Agency Commission/other charges

Agency commission, if any, should be clearly mentioned by the Bidder/tenderer and will be paid in Indian Currency. Please note that actual reimbursement will not exceed the quoted amount in any circumstances.

21. The Institute reserves right to conduct pre-dispatch inspection of goods and the vender must facilitate it at NIT Raipur's cost for pre-dispatch inspection.

22. **Warranty Period:** The warranty period should be minimum **1 year** with spares or as mentioned in technical specifications (whichever is higher) from the date of installation with satisfactory performance as per specifications. For standard items which carry warranty of more than one year, standard warranty shall be applicable.

23. **Terms of Payment:** The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:

(i) **Payment for Goods and Services offered from India:**

Payment for Goods and Services supplied from within India shall normally be made in Indian Rupees, as follows: 100% payment will be made in account payee cheque or Draft/ online Transfer using RTGS to the Supplier normally within thirty (30) days after the successful installation and commissioning of equipment's subject to submission of performance security, if any.

(ii) **Payment for Goods and services offered from abroad:**

Payment of foreign currency portion shall normally be made in the currency of contract in the following manner:

a) **On Shipment:** Ninety (90) percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit (L/C) opened in favor of the Supplier in a bank in its country, upon submission of following documents specified as below:

Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/ courier and copies thereof by FAX.

- i. Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.;
- ii. Packing list;
- iii. Certificate of country of origin;
- iv. Manufacturer's guarantee and Inspection certificate/test report;
- v. Inspection certificate issued by the Purchaser's Inspector, if any.
- vi. Insurance Certificate, if required under the contract;
- vii. Name of the Vessel/Carrier;
- viii. Bill of Lading/Airway Bill;
- ix. Port of Loading;
Date of Shipment;
- x. Port of Discharge & expected date of arrival of goods and
- xi. H S code of classification of goods.

- xii. Any other document(s) as and when required in terms of the contract.

Note:

1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)
 2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.
- b) **On Acceptance:** Ten (10) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods and successful installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security, if any.
- The L/C will be confirmed at the suppliers cost, if requested specifically by the supplier. If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. All bank charges in India to the account of the opener and all bank charges outside India to the account of the beneficiary. Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The L/C for 100% value of the contract shall be established after deducting the agency commission payable, if any to the Indian agent from the CIF/CIP value.
24. **Performance Security (PS):** The successful bidder has to furnish "**Performance Security of 10% of the ordered value in Indian Rupee**", in the form of Account Payee Demand Draft, / Fixes deposit and/or unconditional Bank guarantee encashable on demand from the Director, NIT, Raipur, from a nationalized Bank with validity period of sixty (60) days beyond the date of completion of all contractual obligations of supplier including guarantee/ warranty obligations. The Performance Security is to be furnished in favor of the Director, National Institute of Technology, Raipur, within ten days of intimation, failing which his bid security will be forfeited.
- The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations.
25. **Delivery period:** Delivery should be made within **150 days** from the date of order of placement of goods offered from India or opening of the LC in case of goods offered from abroad.
26. **The Insurance** shall be for an amount equal to 110% of the CIF or CIP value of the contract from within "warehouse to warehouse/installation site (NIT Raipur)" on "all risk basis" including strikes, riots and Chemistry commotion.

27. Delayed delivery: Maximum one month extension in delivery period may be given on the receipt of written request of the successful vendor; however liquidated damage at the rate of 5% per month or part thereof will be recovered from the firm of the value of undelivered goods. Request for extension in delivery period should be made before the last date of supply as mentioned in Purchase Order.

Non delivery beyond extended period: If the Tenderer fails to execute the order within the delivery period as mentioned above the order will be cancelled and EMD will be forfeited by the institute.

28. Installation time: The Company must install the equipment within a period of two months from the date of delivery of the equipment at NIT Raipur failing which order will be cancelled and EMD will be forfeited. However, necessary requirement for installation of goods/equipment will be provided by institute.

29. Copy Right: The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

30. Insurance:

- a. Should the purchaser elect to buy on CIF/CIP basis, the Goods supplied under the Contract shall be fully insured in Indian Rupees against any loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.
- b. Where delivery of the goods is required by the purchaser on CIF or CIP basis the supplier shall arrange and pay for Cargo Insurance, naming the purchaser as beneficiary, initiate & pursue claims till settlement, on the event of any loss or damage.
- c. With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent, if any, shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after customs clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.

31. Right to use Defective Goods: If after delivery, acceptance, installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

32. Site preparation and installation: The Purchaser is solely responsible for the construction of the equipment sites in compliance with the technical and environmental specifications defined by the Supplier. The Purchase will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after notification of Award / Purchase Order / Agreement.

37. Force Majeure:

- (i) Notwithstanding the Clauses relating to extension of time, penalty and Termination for Default the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- (ii) For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- (iii) If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- (vi) If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of force majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.

38. Defective Equipment:

- (vii) If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, unmerchantable or not in accordance with the description /specification or otherwise faulty, the institute will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment have already been made to him.
- (viii) All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found

before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges.

39. Any disputes arising out of this enquiry shall be dealt in the Raipur jurisdiction.
40. Bidder has to sign all the pages of this tender and enclose it with the bid.

Registrar
NIT-Raipur

List of Annexure

1. List of Equipments – Annexure 1
2. Technical Specification of equipments/goods – Annexure 2
3. Technical Compliance of the bidder with reference to the 'Specification of Equipments :Annexure 3
4. Price Schedule for goods being offered from India – Annexure 4
5. Price Schedule for goods being offered from Abroad. – Annexure 5
6. Deviation statement form - Annexure 6
7. Bidder information & check list – Annexure 7

Annexure 1**List Of Equipments To Be Procured Under Tender**

Sr. No.	Name of Equipments	Quantity
1.	Deep Freezer	01
2.	Particle Size Analyzer	01
3.	Column for HPLC	02
4.	Lyophilizer	01

Annexure 2

Technical Specification

1. Deep Freezer:

- ❖ Upright ultra low temperature freezer upto -85 ° C or better.
- ❖ **Capacity:** Should be between 550-650 liters capacity.
- ❖ **Compartments:** Freezer should have 4- 5 compartments with 4-5 inner doors with stainless steel interior to prevent scratches, rust and oxidation and with antimicrobial coating.
- ❖ **Insulation:** Construction should be able to resist the fall of temperature quickly.
- ❖ **Control range:** Freezer should have programmable operating temperature from - 50 ° C to -85 ° C.
- ❖ **Control:** Microprocessor based.
- ❖ **Temperature Accuracy:** +/- 1 °C of set temperature.
- ❖ **Pull down period:** System should have pulled down timing of below 6 hours from ambient temperature to -85 ° C.
- ❖ **Vent:** It should have vacuum release port.
- ❖ **Display** Microprocessor controlled digital and easy to read display with one-degree increment.
- ❖ **Alarm:** System should have adjustable audible and visible alarms for temperature, power failure, system failure, battery low etc.
- ❖ It also should have an option for remote alarm port.
- ❖ Front to back airflow with Removable, cleanable air filter.
- ❖ **Security key locks:** Freezer should have security key locks on the outer doors.
- ❖ **Refrigerant:** System must use CFC-FREE, HCFC- FREE non-flammable refrigerants and refrigeration.
- ❖ **Voltage:** Compressor should be capable to run any voltage between 210-250V/ 50 to 60 Hz.
- ❖ System should be ISO 9001 standard quality test certified.
- ❖ **Power consumption:** Freezer should have efficient power consumption, preferably in the range of 10 to 13 kWh/day.
- ❖ **Racks and boxes:** Freezer should be able to hold at least 15 racks and 240-boxes of 2" height vials. System should have the sample (2" vials) capacity of 24000 or more. System should be supplied with sufficient racks and cryo boxes.
- ❖ **Condenser fan:** System should have condenser fan, reducing energy consumption.
- ❖ **Wheel:** Heavy-duty adjustable wheel at the bottom.
- ❖ **Warranty:** Minimum 2-year unconditional, comprehensive warranty required.
- ❖ **Voltage stabilizer:** System should be supplied with suitable good quality voltage stabilizer.
- ❖ **Service:** Company R&D labs in India with strong and quick service (within 48 hours) support team for further smoother functioning and proper service of the instrument.
- ❖ System quoted must be supplied in IIT/NIT and other Central government institutions and minimum 5 performance statements of the same must be provided and this will be taken very seriously while making the decision.
- ❖ At the time of the installation, a detailed operation and maintenance training must be carried out to our users in our lab, free of cost by the supplier.

2. Particle Size Analyzer:

1. Particle size measurement range: 0.15 nm – 5 microns or better. Measurement principle: Dynamic light scattering.
2. Colloidal system, such as: nanoparticles, polymers, proteins and emulsions.
3. Measurement of polydispersity.
4. Process monitoring (e.g. gelation, aggregation, ageing etc).
5. Compatible software (with windows OS) suitable for running the equipment, data acquisition, data analysis, data transfer, graphical presentation etc. Software should provide result such as particle size, zeta potential measurement and molecular weight determination. The software for later normalization, which can record laser intensity.
6. Zeta potential size range: 5nm to 50 microns or better and – -500 mV to +500 mV. Zeta potential measurement principle: Electrophoretic light scattering. Should be capable of measuring Aqueous/ polar solvent and oils, High salts/ Non-polar solvent –based system.
7. With essential no. of cuvette for low to high volume, Samples for the smooth operation of the system as well as for handling the organic and water sample.
8. Temperature controlled sample chamber operating at +4⁰ to + 85⁰ C with +/- 0.02 ⁰C stability. Operating environment temperature should be 20-30 degree C.
9. Laser fiber coupled diode laser.
10. Detector should be Avalanche Photo Diode Detector and facility to display measurements Intensity wise / Volume wise / Number wise Particle Size Distribution and Statistics.
11. Laser attenuation system combined with on-line incident laser intensity measurement.
12. System should be ISO/CE certified.
13. PC with Intel core i5 processor, 4 GB RAM, 500GB hard disc, CD RO or DVD + RW drive, USB port, laser printer, (window 10) with flat screen (22’’) and preinstalled software with 5 KVA UPS. Computer system should be provided compatible with the particle size analyzer.
14. System should be provided with Standard Operating Procedure (SOPs) for better result quality & easy handling.
15. Updates of the standard software will be provided free of charge during the first year after the purchase of the instrument.
16. Verification of the system performance with the result using NIST certified nanoparticles must be provided to validate claims for size and zeta measurement.

Other terms and conditions:

- A minimum of one year warranty should be provided. Any additional years of warranty will be proffered.
- System quoted must be supplied in IIT/NIT and other Central Government Institutions and minimum 5 performance statements of the same must be provided and this will be taken very seriously while making the decision.

- Company R&D labs in India with strong and quick service (within 48 hours) support team for smoother functioning and proper service of the instrument.
- At the time of installation, a detailed operation and maintenance training must be carried out to our users in our lab free of cost by the supplier.
- List of all consumable items with present cost required for routine sample analysis must be provided. The necessary list of standards required for calibrating the instrument and verifying reproducibility in all Particle Size/ Zeta Potential range must be provided.

3. Column for HPLC:-

HPLC Column 1

- 1) Application: **Aqueous Oligomer separation**
- 2) **Mode of separation: Size exclusion chromatography (SEC)**
- 3) Dimension: Maximum 30 cm × 7.8 mm or any suitable
- 4) maximum Flow Rate: 1 mL/min
- 5) pH Range: 2 - 12
- 6) Particle size: 7 µm
- 7) Max. Operating temp: 80°C
- 8) Mobile phase: preferable water and solvent compatibility: 20% polar solvent

Accessories

Standards: PEGs-200,300,400,600,1500,2000,4000,6000,8000,10000,20000,35000

HPLC Column 2

- 1) Application: **Separation of aqueous polymers or polysaccharide**
- 2) **Mode of separation: Size exclusion chromatography (SEC)**
- 3) Dimension: Maximum 30 cm × 7.8 mm or any suitable
- 4) Maximum Flow Rate: 1 mL/min
- 5) pH Stability 2-12
- 6) Particle size: 13 µm
- 7) Maximum temperature : 80°C
- 8) Mobile phase: Preferable water and solvent compatibility: 50% polar solvent

Accessories

Guard column: Dimension: Maximum of 6.0 mm ID x 4.0 cm L, compatible to SEC

4. Lyophilizer:

We require a compact, bench top, laboratory freeze dryer capable of removing water as well as organic solvents such as acetone, acetonitrile, methanol, ethanol etc.

- Upright stainless steel collector coil capable of removing 2.5 liters or more of water in 24 hours and holding 4 liters or more of ice before defrosting.
- Collection chamber and condenser made of High-grade Stainless steel (Suitable for handling aqueous, organic, and inorganic solvent-based samples)
- Condenser chamber capacity: ~4 to 6 kg.
- Condenser temperature: approximately -85°C (for processing aqueous as well as organic solvents)
- Performance: Ice removal capacity of ~4 kg in 24 hours or better.
- Vacuum Pump: A suitable low-decibel direct driven oil sealed chemical hybrid vacuum pump with a suction capacity of ~90-100 liters/min or more; power-230 V, 50/60 Hz along with Vacuum Sensor control
- Vacuum control for optimization/reduction of process times through electromagnetic pressure control valve to reduce drying process time.
- The vacuum pump should be resistant and able to handle drying of aqueous as well as organic solvent based samples (for example organic solvents like acetonitrile and others)
- The vacuum pump should have replaceable emission traps/exhaust filter that can trap oil mist and odors.
- The vacuum pump should be supplied with all necessary vacuum hoses and connectors. Also, extra vacuum oil, enough for two oil replacements, should be included.
- 12 or more ports. Drying Chamber with individually controlled rubber valve & 20 port manifold suitable for drying in flasks (50 ml to 1000 ml), tube, vials, and ampoules.
- Dual 1/3 hp HCFC/CFC-free refrigeration systems to cool, collector to -85°C or below with drain valve for disposal of defrosts material. .
- The body should be made of corrosion resistant materials.
- Should have LED based wave display to indicate the temperature and vacuum conditions accurately for the add samples.
- Should have a Moisture sensor to prevent vacuum pump start up when moisture is detected in the collector chamber.
- System should have adequate safety features such as:
 - a. Alarm for abnormal system events Such as power failure, improper line voltage supply, collector temperature rise above thresholds, service vacuum pump (after 1000 hours of vacuum use), and moisture in collector.
 - b. Moisture sensor that prevents refrigeration or vacuum start-up when moisture is detected in the collector chamber area.
 - c. Vacuum control valve that maintains set point vacuum level.
 - d. Vacuum break valve that bleeds air into the system when power to the freeze dryer or vacuum pump is shut off.

Essential accessories:

- Tube holder and centrifuge vial holders to accommodate up to 30 no. of 2 ml tubes.

- 5 no each flask from 50 ml, 100ml, 150ml, 250ml, 500ml, & 1000 ml capacity along with adapter to connect the flask with drying drum and vials and 20 no of ampoules.
- 5 KVA UPS.

Other terms and conditions:

1. It is clearly stated that all the components should be sourced from the principals.
2. System quoted must be supplied in IIT/NIT and other Central government institutions and minimum 5 performance statements of the same must be provided and this will be taken very seriously while making the decision.
3. Company R&D labs in India with strong and quick service (within 48 hours) support team for further smoother functioning and proper service of the instrument.
4. At the time of the installation, a detailed operation and maintenance training must be carried out to our users in our lab, free of cost by the supplier.
5. Certificate stating that the quoted system is complete by all means to perform the following type of experiments:
 - (a) Completely drying powder samples containing water.
 - (b) Completely drying powder samples dissolved in organic solvents such as acetone, acetonitrile, methanol, ethanol etc.
 - (c) Completely drying powder samples containing a mixture of water and organic solvents.
 - (d) Completely drying samples containing corrosive chemicals such as strong mineral acids.

Annexure 3**Technical Compliance of the bidder with reference to the
'Specification of Equipments'****Name and model no of offered goods/equipment:**

Item	Technical specification from NIT Raipur	Features available in equipments Yes or No	Any deviation from Specification, if any	Corresponding part number /datasheet/page no in broacher in support of specification	Comment of Technical Committee , NIT Raipur

Signature of Bidder

Annexure-4

Price Schedule form: Price Schedule for Goods Being Offered from India/Abroad in INR
(Separate form to be used for each item offered)

Name of the Bidder/Tenderer:

Name & Model No of offered good:

Tender No.:

S. No.	Details	Price per Unit in INR
1	Ex-works, Ex-warehouse, Ex-show room off the shelf price	
2	GST payable, if contract is awarded(.....%)	C.G.S.T.(2.5 %)
		S.G.S.T. (2.5%)
		I.G.S.T. (5%)
3	Packing & forwarding up to station of dispatch, if any	
4	Charges for inland transportation, insurance to ultimate destination i.e. NIT, Raipur, if any	
5	Installation, Commissioning and training Charges, If any	
6.	Any other charges (Please specify)	
Total Price (Sum of S. No 1 to 6) FOR NIT RAIPUR		

** The equipment will be used for research purpose & GST applicable for the item will be 5% as per the notification issued by Ministry of Finance vide Notification No. 45/2017-Central Tax(Rate) & 47/2017-Integrated Tax(Rate). Necessary GST exemption certificate will be provided by the institute.*

***NIT Raipur have DSIR registration certificate.*

Total Bid price in Indian currency_____

In words: _____

Name_____

Business Address

Note:

- (a) The cost of optional items shall be indicated separately.
- (b) Price should be quoted in prescribed format only as per above.

Seal & Signature of Bidder

Annexure-5

Price Schedule Form: Price schedule for goods being offered from abroad in currency other than INR

(Separate form to be used for each item offered)

Name of the Bidder/Tenderer:

Name & Model No of offered good:

Tender No.:

S. No.		Price per unit in ()
1	Country of origin	
2	FOB (named port of shipment) Or FCA (named place of delivery)	
3	Freight and Insurance up to Indian Airport/port	
4	Total Price at Indian Airport /port (2+3)	
5	**Custom charges (please mentioned %)	
6	Custom clearance and other charges if any (with breakup)	
7	Inland Charges for Insurance & transportation to NIT Raipur	
8	Installation, commissioning and training Charges, if any	
9	If any other charges (Please Specify)	
	Total Price (FOR NIT Raipur) (Sum of S. No 1 to 9)	

**** NIT Raipur have DSIR Registration Certificate.**

Note: Kindly mention GST if applicable at any stage under S.No. 9 of the above table.

Total Bid price in foreign currency: -----words: _____

(a) Indian agents name & address _____

(b) The cost of optional items shall be indicated separately-----

Annexure-6**DEVIATION STATEMENT FORM**

The following are the particulars of deviations from the requirements of the tender specifications:

CLAUSE	DEVIATION	REMARKS (INCLUDING JUSTIFICATION)

Signature of Bidder

Annexure-7(Please put this annexure at the top of the tender document)

Bidder's information & Check list

- 1. Name of the Firm:**
- 2. Type of the firm:** (*Proprietorship, Pvt Ltd, Public Ltd, Partnership etc.*)
- 3. Address of the firm:**

- 4. Contact detail:**
- | | |
|-------------------|------------------|
| Phone No.: | Mob No. : |
| Fax No. | E mail: |

- 5. Name of the authorised signatory:**

- 6. EMD detail : Instrument No.** **Date :** **Amount:**
Issuing Bank name & branch detail:

- 7. Bank details of the firm:**

- | | |
|--------------------------|-------------------|
| Account No.: | IFSC Code: |
| Name of the Bank: | Branch: |

Check List(Please enclose the copy of the following & tick as per applicability)

- 1. Proof of registration of the firm:**
- 2. Authorisation certificate of delership:**
- 3. PAN card in Firm's name:**
- 4. GST Registration Certificate:**
- 5. Proof of registration with any central govt . organisation :**
- 6. Purchase orders issued by any central govt organisation.**

Signature of Bidder