



F.No. RC/TC/(S-31)DBT-Citrus / Pearls/Phage/2017/2836

Dated the 22<sup>nd</sup> December, 2017

**TENDER DOCUMENT**

Sl. No.	Name of the equipments	Quantity	Under which project
1.	Ultra-Pure Water Purification System and accessories	02 nos.	1 no. for DBT- Twinning project ‘ In vitro mass – multiplication and conservation of some endangered <b>Citrus species</b> of NEH Region of India.
			1 no. for DBT- Twinning project ‘Identification of most suitable population of <b>pearl producing</b> freshwater bivalves of North East India through molecular approach.
2.	Deep Freezer (-20°C) (Vertical – General purpose lab freezer).	01 no.	DBT- Twinning project ‘ In vitro mass – multiplication and conservation of some endangered Citrus species of NEH Region of India.
3.	Bead Based Tissue Homogenizer along with accessories	01 no.	DBT- Twinning project ‘Identification of most suitable population of pearl producing freshwater bivalves of North East India through molecular approach.
4.	Refrigerated Centrifuge	01 no.	Development of therapeutic phage consortia to manage <i>Aeromonas hydrophila</i> in aquaculture systems
5.	PAGE apparatus	01 no.	Development of therapeutic phage consortia to manage <i>Aeromonas hydrophila</i> in aquaculture systems

TENDER No.RC/TC/(S-31)DBT-Citrus/Pearls/Phage/2017 : **22/12/2017**

Date & Time for Submission of Tender : **15/01/2018**

Date & Time for opening of Tender : **16/01/2018**

**Total Nos. of pages 09 (Nine)**



**OPEN TENDER**

**INVITATION OF TENDER IS INVITED FOR PROCUREMENT OF EQUIPMENTS  
UNDER DBT – Pearls/Citrus/Phage PROJECT  
FOR ICAR RESEARCH COMPLEX FOR NEH REGION, LEMBUCHERRA, WEST  
TRIPURA**

Sealed bids are invited from the reputed MANUFACTURER/AUTHORIZED DEALER /GOVERNMENT organization for supply of four equipments (i). **Ultra-Pure Water Purification System and accessories (2 nos.)** (ii). **Deep Freezer (-20°C Vertical), (1 no.)** (iii). **Bead Based Tissue Homogenizer along with accessories (1 No.)** (iv). **Refrigerated Centrifuge (1 no.)** (v). **PAGE apparatus (1 no.)** having at least 3(three) years experience in manufacturing/ marketing/ supply of such equipments/Machineries by ICAR Research Complex for N.E.H. Region, Lembucherra, West Tripura. The detailed specification of equipments is as per appendix-1.

**TERMS & CONDITIONS OF THE TENDER**

1. Cost of tender paper of Rs.500/-(Rupees five hundred) only (Non-refundable) to be deposited in favour of the Joint Director, ICAR, Tripura Centre-799210, by means of Demand Draft payable at SBI, College of Agriculture Branch, Lembucherra. Non-submission of the cost of tender paper (consolidated) shall lead to rejection of the Tender Bid.
2. The Bidders should submit the proposals in two parts:
  - 2.1. Technical Bid (Bid-I)
  - 2.2. Financial Bid (Bid-II)
3. Technical part should contain all such details as mentioned in the Bid Document.
4. Financial part (Bid-II) should contain the financial bid including all admissible taxes, duties and levies, installation charges, freight charges, taxes etc., as may be applicable. The rates quoted should be up to ICAR Research Complex for NEH Region, Lembucherra, West Tripura. The Financial Bid should consist of the Rates, their detailed break-up, etc. Non-compliance of this shall lead to rejection of the Bid. The rates must be valid for at least for one year from the date of quotation.
5. These two parts (Bid-I & Bid-II) should be submitted in separate sealed envelopes. Both envelopes should then be sealed in a third envelope super scribed as “TENDER NO. RC/TC/(S-31)DBT-Citrus/Pearls/2017/2836 dated 22/12/2017 due on 15/01/2018 **FOR PROCUREMENT OF EQUIPMENTS UNDER DBT Phage/Citrus/Phage PROJECT FOR ICAR, RESEARCH COMPLEX FOR NEH REGION, LEMBUCHERRA, WEST TRIPURA**” and addressed to “THE JOINT DIRECTOR, ICAR RESEARCH COMPLEX FOR NEH REGION, LEMBUCHERRA WEST TRIPURA-799210.
6. **Both the consolidated Cost of the Tender as well as the Earnest Money in the form of Bank Draft along with all other Technical Details should mandatory be kept in the Technical Bid**

**only. Cheque/ Bank Guarantee/ Fixed Deposit receipt/ Money Orders/ Cash etc. are not acceptable towards deposit of earnest money.**

7. In no case Earnest Money will be accepted after opening of tender.
8. Details of Earnest Money i.e. draft number and date should be indicated on the cover of the big envelope otherwise they may not be received or opened and returned to the party. All Tenders should be sent by Registered Post. Hand delivered tender document should be put in the Tenders box, kept in the office chamber of Assistant Administrative Officer, ICAR Research Complex for NEH Region, Lembucherra, West Tripura-799210 not later than 12.30 P.M. on 15th January, 2018. Tenders received after the due date and time shall not be considered under any circumstances.
9. On the date of opening, only Part-I (Technical Bid) will be opened. Part-II (Financial Bid) shall be opened subsequently only of those tender, whose Technical Bid qualifies as per laid norms of this tender
10. Composition of Technical Bid-
  - 10.1. Profile & Track Record of the company.
  - 10.2. Documents in support for Number of years in Scientific Equipments manufacturing/supply.
  - 10.3. Balance Sheet for last 3 financial years. Annual Turnover, which will be average of last three years on the basis of balance sheet.
  - 10.4. Photocopy of PAN No. issued by Income- Tax Department. Photo copy of Taxes Registration etc.
  - 10.5. Non-Refundable tender Document Fee of Rs. 500/- (Rupees Five Hundred only) in the form of Demand Draft from any Nationalized Bank drawn in favour of the Joint Director, ICAR Research Complex for NEH Region, Lembucherra , West Tripura payable at State Bank of India, College of Agriculture Branch (IF exempted/relaxed submit the relevant document in support of the claim). The Cost of the Tender paper as well as Earnest Money along with all other Technical Details should be mandatory kept in the Technical Bid only. Non-submission of the Bid Security with quotation shall make the quotation/ bid liable to be rejected.
  - 10.6. Furnishing of related documents like detailed specification, technical literature, brand name, model and make, catalogue, authorization letter, dealership certificate, Manufacturing company registration certificate, product certification, price list (if any) etc. is mandatory, Dealership certificate/ Agency Certificate for the manufacturer/ manufacturing firm should be enclosed if any of the rates are quoted by the Dealers/Agents. Failing which the quotation shall not be considered.
  - 10.7. Up-to-date GST/SGST tax certificate, tax clearance, valid registration certificate are mandatory.
  - 10.8. Other relevant technical documents/ specifications in favour/ claim/ support of equipments/ machines if any may be submitted as additional with the technical bid.
11. The supply is effected at DGS&D rate contract, wherever is applicable. The rate should be quoted for list of items as per the tender document.
12. The Buyer shall not be responsible for payment of transit insurance charges.
13. Payment shall be made on actual delivery in good condition and successful installation and demonstration (Which should be free of cost and must be completed before payment).
14. In case of Imported goods:

- 14.1. The price may be quoted in foreign currency and import will be on FOB basis. However, custom clearance, Inland freight etc. will be the responsibility of the supplier and no separate charges will be paid for that, however, custom duty exemption certificate shall be provided. The supplier should inform well in advance for sending these papers. No demurrage charges will be paid. If the supplier desires, rate in corresponding Indian currency may be quoted. It will be at the discretion of the authority of ICAR Research Complex for NEH Region to accept Indian or Foreign currency prices.
- 14.2. In case of any custom duty charge, applicable as per the Govt. of India's Notification, the same may be paid by the firm which will be reimbursed to the Indian Agent (who should be registered firm and with DGS&D immediately, subject to the condition that the bill of entry in original along with all relevant papers are submitted immediately, after custom clearance and installation and demonstration of the items. Installation and demonstration should be free of cost.
- 14.3. The import & payment will be made by means of Foreign Bank Draft/ Site Draft in case of foreign imported goods. Performance Bank guarantee of 10% FOB value valid till the end of warranty period should be submitted before the release of the security deposit. All bank charges outside and inside India shall go to the beneficiary's account. Performance bank guarantee of 10% FOB value, valid till the end of warranty period, should be submitted before the release of the security deposit. All bank charges outside and inside shall go to the beneficiary's account. Draft making charges would go to the beneficiary's account and a scanned copy of the draft, if required, can be sent to the Indian agent by post. Draft would be handed over after successful installation and demonstration which should be completed within 45 days from the date of draft and submission of all documents like bill of entry etc.
- 14.4. All imported items should be delivered up to destination i.e. all the import should be free of inland freight charges, insurance etc.
- 14.5. Indian Agency Commission rate and amount should be clearly specified as per rules. IAC, wherever applicable, will be paid in Indian Currency only.
- 14.6. In case of delay in supply, penalty will be imposed @ 2% per week, subject to a maximum of 10% of the FOB value.
- 14.7. Indian Agents quoting on behalf of their principal must be registered firms with DGS&D. They are also requested to provide necessary authorization letter from their principal along with the quotation.
- 14.8. ICAR Research Complex for NEH Region, Lembucherra, West Tripura, being a Scientific and Research Organization, is exempted from payment of Excise Duty (certificate to this will be provided)
15. Performance Bank Guarantee is required for all indigenous items also. For items less than Rs.50,000/-, the amount should be 5% of the actual cost of the equipment and for items more than 50,000/-, the amount should be 10% of the actual cost of the equipment. The bank guarantee should cover the entire guarantee/ warranty period which should be of at least one year duration.
16. The selected tenders must complete the supply/ installation/ demonstration within 45 (forty five) days from the date of the supply order.
17. The guarantee/ warranty should be from the date of installation. All guarantee/ warranty services should be attended within a maximum limit of 15 days, failing which, proportionate deductions from the security deposit may be made at the discretion of the Institute.

18. The complete details regarding the Institution/ Corporation/ Bodies, etc. where the Firm/ Dealer has made the supplies during the last 2/3 years should be furnished, along with the supply orders.
19. The bidders should mandatory provide their full Bank details, PAN Card No., IFS code No., and TDS so as to ensure e-payment to them directly on satisfactory completion of the Supply.
20. The Joint Director, ICAR Research Complex reserves the right to reject any tender in part or full, without assigning any reason thereof.
21. Legal Jurisdiction for all disputes shall be within the purview of the Agartala High Court.
22. The bidders should mandatory sign on every page of the Tender Document, which would show their unconditional acceptance of all the terms and conditions of the Tender Document.
23. Tenders shall be opened on 16th January, 2018 at 11.30 am, ICAR Research Complex for NEH Region, Lembucherra, West Tripura-799210. Interested bidders may attend the opening.
24. If the above mentioned closing/ opening day of the tender happen to be non-working date due to Bandh/ Strike or any other reasons, the tender will be received & opened on the following working day at the same time except on the 2nd (second) Saturday.
25. Other terms & conditions, as may be decided by the competent Authority from time to time, depending upon the condition & requirement of the supply. The intimation in this regard, shall be provided well in advance & the bidders/ suppliers shall be bound by the said terms & conditions.
26. For any query/ clarification, the undersigned may be approached at:  
Contact address: **E mail: aao.neh\_trp@icar.gov.in**

**SD/-**  
**(B.K.Kandpal)**  
**Joint Director**

*Before quoting for the Tender, it is requested to kindly go through the the Tender Document thoroughly and abide by all the Terms and conditions given. Non-Compliance of any of the T & C mentioned above, shall lead to non-consideration of the Bid and no request what so ever shall be considered under any circumstances.*

## APPENDIX-I

### 1. Specification of Water Purification System. (2 Nos.)

Sl.No.	Feature	Requirement
1.	Output water quality	ASTM Type II and ASTM Type I quality water for molecular biology applications and HPLC , ICPMS, TOC, etc. free of impurities and nucleases
2.	Characteristics of purified water	Conductivity 0.055 $\mu$ S/cm, TOC value 1-5 ppb, Endotoxins<0.01 EU/ml.
3.	PreTreatment facility	Activated Carbon Filter, Hardness Stabilizer, Filter Insert, 5 $\mu$ m, 1 $\mu$ m, 0.5 $\mu$ m of 10" cartridge and a unit for removal of iron from water.
4.	Purification mechanisms	Reverse Osmosis and Ultra-pure Ion exchange System with UV Photo-Oxidation (185 and 254nm) for producing nuclease- free and endotoxin-free water. The ultra-filtration of bacteria and suspended particles.
5.	Water output capacity	Grade 1 ultrapure water free of impurities and nucleases at the rate of at least 1.0 litre per hour.
6.	Mode of operation	The system must be an automated micro- processor based table top model with digital microprocessor control.
7.	Other features	<ul style="list-style-type: none"><li>• Equipped with a recirculation pump to prevent bacterial growth in stagnant water.</li><li>• Integrated tank with capacity of at least 6L with vent filter, conical bottom and food grade polyethylene.</li><li>• RS232 interface for external data print</li><li>• Limiting switch to ensure quality of water</li><li>• Minimal noise in operation, easy to view display system</li></ul>
8.	Minimum warranty	1 year

**2. Specification for Deep freeze (-20°C) (Vertical – General purpose lab freezer). (1 No.)**

-20°C freezer (Vertical)	<p>Gross capacity : 250-350 litres or more storage capacity solid door static freezer. Energy consumption in units KWH/24H (R134a/R600a):1.90/1,45                  Rated load Wattage (180/140)                  Power supply (230 volts 50 Hz single phage) Internal light                  Analog thermometer                  Quick freezing function                  Mains warning lamp.                  CFC/HCFC free.                  Pull out drawers and open compartments, Adjustable baskets/ shelves                  No. of basket/ shelves:8-12                  No.of lids/doors: 1                  Temperature Range: -16°C to -24°C,                  White finishes, Interior- White food safe plastic fitted with digital external                  Temperature display.                  Automatic defrost.                  Sealed drawers- prevent frost loss from open door                  Fully automatic operation with voltage stabilizer, temperature dips alarm  <b>Dimension:</b>                  Width : 23-25 inch                  Depth : 23-25 inch                  Height : 72-80 inch                  Wheel : Yes                  Lock : Yes                  Digital Controller :Yes                  Low energy consumption and noise levels                  External digital temperature display, fully electronic temperature control                  High Temperature alarm  <b>Accessories:</b>                  External Stabilizer (145 -280 AC input, 195-245 AC output) from reputed brand with ISI approved : 1 (One)                  Base trolley with wheels : 1 (One)                  Minimum warranty : 2 years comprehensive warranty including spare parts and labour.</p>
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**3. Specification for Bead based Tissue Homogenizer along with accessories. (1 No.)**

Sl.No.	Features	Requirements
1.	Throughput	Rapid, fast, uniform and efficient disruption simultaneously of at least 12 biological samples
2.	Tissue compatibility	Suitable for soft and hard animal tissues, plant tissues, bacteria and yeast.

3.	Adapter capacity	Adapter to hold at least twelve 2 ml sample tubes for fast and uniform disruption of various samples. The adaptor must be provided as accessory with the equipment.
4.	Mechanism of tissue disruption	<ul style="list-style-type: none"> <li>• Beating and grinding effect of beads on the sample material taken together in 2 ml sample tubes.</li> <li>• Effective disruption and homogenization using liquid nitrogen or in frozen condition.</li> </ul>
5.	Programming conditions	Easily programmed to provide variable speeds from 15 to 50 Hz (900-3000 oscillations/minute) and run times from 1 second to 1 hour 59 minutes.
6.	Size	Compact (10-15cm x 27-30cm) and have a small footprint.

#### 4. Specification for PAGE apparatus (1 no.)

Technical Specification	
Sl No	Technical Specifications
1	Gel Capacity : Number of gels 1-2
2	Suitable for ready made precast gels and hand made gels
3	Gel casting: Hand cast gels cast using the spacer plates
4	Comb: At least 5 nos of ridge comb 10& 15 well and more
5	At least 2 Stand gel casting stand, no tapes or grease
6	Should include at least 5 sets of compatible glass plates (spacer plate and shorter plates) and 2 or more casting frames and stands
7	Should include all the accessories of SDS-PAGE gel including sample loading guide, electrode assembly tank with power cables
8	Should be a modular system to support blotting and electro-elutions also in the same time
9	Should be supplied with power pack (basic, high current, high voltage options)
10	Auto power up feature in the event of power failure
11	Must accommodate minimum 2 electrophoresis units simultaneously
12	Full bright LED display indicating voltage and time clearly
13	Should have at least 2 pairs of output jacks
14	Should have power of approx. 75 watts and time control of 001-999 minutes, fully adjustable.

#### 5. Specification for Refrigerated Centrifuge. (1 No.)

Sl.No.	Technical Specifications
1.	Microprocessor based programmable speed control with brushless motor.
2.	Speed range upto 30,000 rpm with 1 rpm increment and $\pm 50$ rpm accuracy. Selection of speeds in both rpm and ref modes.



3.	Temperature range should be from -11°C to 40°C, should be able to maintain 4°C at maximum speed.
4.	CFC/HCFC free and non-ozone depleting ecofriendly refrigeration system with 3-5 years non-prorated warranty.
5.	Rotors: fixed angle rotor and swing bucket type to accommodate 0.25ml, 1.5ml, 2.0 ml, microtubes and spin column, 15ml, 50 ml, 100ml and 200ml tubes.
6.	All rotors must be coated in main offer along with centrifuge.
7.	Fast, simple and secure mechanism to mount/dismount rotor and the drive adapter eliminating the need for a tool or to hand tighten. Automatic instant rotor identification and lock/self locking systems.
8.	Uniform rotor lid must be provided to prevent spillage of contents during operation.
9.	Active imbalance identification and cut-off.
10.	Alarm signals indicating completion of runs, errors during run, lid open, imbalance and other functions of the centrifuge.
11.	Digital display of time, temperature and speed on bright LED backlit display.
12.	Centrifuge must come with inbuilt or suitable servo voltage stabilizer.
13.	Ecoshut off function (sleep mode to save energy when continuously not in use for a period of time)
14.	Must comply ISO, CE and IEC 1010 certification
15.	At least 2 year complete warranty on both machine and rotor from the date of installation directly certified by the manufacturers. 2 maintenance visit by engineers is a must.
16.	Quick key for short run and spin, fast temperature for achieving required temperature in shortest possible time, analysis of time remaining and elapsed time.
17.	Instrument should be supplied with aerosol tight high speed Rotor should be made of aluminum, rotor and rotor lid should be should be autoclavable at 121°C for 20 mins.
18.	Aerosol tightness of rotor should be certified by a third party agency.
19.	Instruments should have an in-built condensate drain to prevent water accumulation.
20.	It should be possible to perform a fast pre-cooling of the instrument using a dedicated Fast Temp function
21.	It should be possible to program fast cooling with preset date and time.
22.	50 programs storage memory with 5 quick access program keys should be available.
23.	It should be possible to perform gentle acceleration and deceleration using dedicated key.
24.	Noise levels should be <54 db(A).
25.	<b>Essential accessories:</b> Rotors: fixed angle rotor and swing bucket type to accommodate 0.25ml, 1.5ml, 2.0ml, microtubes and spin column, 15ml, 50ml, 100ml and 200ml tubes, Centrifuge must come with inbuilt or suitable servo voltage stabilizer. Should be supplied with 1.5 ton inverter AC.