

REGIONAL MEDICAL RESEARCH CENTRE, N.E. REGION (ICMR),  
Post Box No 105, DIBRUGARH –786001, ASSAM, INDIA

No. RMRC/DIB/S&P-14(advt.1/(IDBT)/10-2011/

**Notice Inviting Sealed Tender:**

The Director, Regional Medical Research Centre, N.E. Region (ICMR), Dibrugarh, Assam invites **Sealed Tender** in double bid system i.e Technical and Price Bid from the reputed foreign/ Indian manufacturers, authorized dealers/ stockists and in case of imported item from their authorized Indian agent for supply & satisfactory installation of the following Instruments/ equipments for its Research Centre. Interested suppliers are requested to send Rs.200/= by crossed demand draft as tender money for whole tender paper and EMD as mentioned below in favour of the Director, Regional Medical Research Centre, N.E. Region (ICMR), Dibrugarh separately along with the quotation (in technical bid).

Sl. No	Name of the Equipment	Specifications
1	<b>DNA Sequencer: 8 capillaries</b>	Should be a fully automated Multi-capillary, fluorescence-based genetic analysis system and must have <ol style="list-style-type: none"><li>1. Eight Capillaries operating in parallel, upgradable to 24 capillaries to meet future throughput.</li><li>2. The system must be able to detect and analyze 6 fluorescent dyes simultaneously.</li><li>3. The system should have 505nm solid-state long life laser utilizing standard power supply.</li><li>4. Cooled CCD detection technology and a spectrograph for color separation.</li><li>5. Radio-frequency identification technology to track key consumables data.</li><li>6. Simultaneous dual-side illumination technology system to maximize signal uniformity and sensitivity that in turn reduces the requirements placed on the user for sample preparation and cleanup.</li><li>7. Active temperature cooling/heating that can maintain temperatures from 18 C to 70 C.</li><li>8. Employ capillary arrays that use bare silica capillaries with a useful life that exceeds 160 runs.</li><li>9. Should have system software allowing real-time data quality evaluation providing immediate access to base-called or size called data to make decision about the quality of data as it is generated.</li><li>10. The vendor must supply softwares and application-specific kits that are optimized for the instrument in the area of de novo and comparative sequencing, fragment analysis applications like microsatellite, SSCP, HMA, linkage analysis, Loss of heterozygosity, AFLP, SSR, SNP validation and screening.</li></ol>

		<p>11. Purchase of the equipment must include</p> <ol style="list-style-type: none"> <li>a. Online-UPS 5KVA back-up 4 hours</li> <li>b. Set-up of the installation room with twin AC</li> <li>c. Adequate reagents POPs for about 1920 runs.</li> <li>d. System installation and training by service engineer</li> <li>e. Local service engineers</li> <li>f. Application training</li> </ol>
2	<b>Flowcytometer with cell sorter</b>	<ul style="list-style-type: none"> <li>• System should be equipped with following two laser light sources <ul style="list-style-type: none"> <li>488nm Blue Solid State Laser 20mW</li> <li>633-635nm Red diode laser 25mW</li> </ul> </li> <li>• System should atleast have Five colour analysis capability which must be available on a single 488nm air-cooled laser.</li> <li>• The System should have high florescence sensitivity threshold and resolve 0.5µ diameter particles.</li> <li>• System should come with a magnetic cell sorter.</li> <li>• Signal Processing dynamic range should be through 20-bit data acquisition, workstation resolution &gt; 1 million channels</li> <li>• System should have capability to collect light from two angles 1 - 8<sup>0</sup> and 1-19<sup>0</sup></li> <li>• Should have Multiple – carousel loader, at least 32 tubes with provision for individual per-sampling vortexing.</li> <li>• Should have the facility of True Volumetric absolute counting</li> <li>• Should have Provision for both real–time and list mode (off-line) full matrix compensation so as to avoid the need for repeat sample runs.</li> <li>• Should have Provision for bead-based multiplexing.</li> <li>• Should provide Bar code gun, with provision for Bar coding for sample ID should.</li> <li>• Should preferably provide Optic filter kit</li> <li>• System should be based both on tube based and 96 well formats.</li> <li>• Software should be IVD approved, user friendly and 21 CFR Part 11 compliance</li> <li>• System should be digitally configured with latest technology and should collect &gt;4 decades of dynamic range.</li> <li>• Percentage of error should be &lt;1%</li> <li>• Auto calibration for instrument set-up for at least 5 colour application</li> <li>• Should have alignment free or Fixed Laser Alignment <ul style="list-style-type: none"> <li>▪ System should have contamination free computer controlled</li> </ul> </li> </ul>

		<p>syringe pump for sample transport.</p> <ul style="list-style-type: none"> <li>▪ The instrument and reagents should be of IVD status with minimum five colours option</li> <li>▪ Should be supplied with appropriate computer &amp; UPS back-up of the required rating of Minimum for 2 hrs and colour printer. should be supplied.</li> <li>▪ Quality Control program should be available on the same platform free of cost.</li> <li>▪ Microsoft Based PC operating system that utilizes Windows based cytometry user-friendly software allowing for integration of Microsoft Office Applications. Should provide the latest flowcytometry software capable of real time data analysis and gating, Auto-compensation feature etc.</li> <li>▪ System should come with complete Basic reagents and consumables &amp; reagents for atleast 500 tests for absolute CD4 count.</li> <li>- Application training &amp; 5 years warranty should be mentioned.</li> </ul>
	<p><b>Capillary Electrophoresis</b></p>	<p>* System should be fully automated Electrophoresis chip based system to perform Protein, DNA and RNA electrophoresis.</p> <ul style="list-style-type: none"> <li>• Should have fully automated priming station with preset time &amp; pressure to ensure error free priming to reduce chip wastage.</li> <li>• It should have Vortex Station with preset time &amp; speed settings to provide single step &amp; precise mixing of samples.</li> <li>• It should have Quantization Range- <ul style="list-style-type: none"> <li>Protein- 2.5-2000 µg/ml</li> <li>RNA- 100- 5000 pg/µl.</li> <li>DNA- 0.5 – 50 ng/ µl.</li> </ul> </li> <li>• Protein Separation- should have accurate Single step protein sizing from 10-260 kD.</li> <li>• Protein sensitivity should be up to 2.5 ng/ µl CA and Comparable to silver satin &amp; colloidal Coomassie staining.</li> <li>• System should have RQI (RNA Quality indicator) with colour coding to check the RNA quality before gene expression studies</li> <li>• System should be able to run 10-12 samples or less time for fewer samples with in 30 minutes approximately.</li> <li>• Separate and detect total DNA, RNA or m RNA at nanogram and picogram levels</li> </ul>

		<ul style="list-style-type: none"> <li>• 2 nos. of Starter kits should be provided to get quickly about system functioning.</li> <li>• Kits should have long shelf life (More than 6 month) &amp; include all the reagent &amp; buffers, markers etc.</li> </ul> <p>Software-</p> <ul style="list-style-type: none"> <li>• User friendly and displays results in both electrophoresis &amp; gel view form</li> <li>• Able to provide automatic calculation to give information such as size, conc., % of total sample etc</li> <li>• Should be able to analyse the data for single peak as well as all peaks</li> <li>• Multiple chip comparison function to identify the differences &amp; similarities between multiple run</li> <li>• Multiple export capabilities for customized analysis, easy publication &amp; data sharing</li> <li>• Should have the provision to use internal &amp; external standard both</li> </ul> <p>Should be with statistical analysis such as Mean, Standard Deviation &amp; % CV etc. Training &amp; 5 years warranty should be mentioned.</p>
4	<b>Deep freezer -80 C vertical (560-580L</b>	<ul style="list-style-type: none"> <li>• Conventional Polyurethane foam 5.1”, 130 mm insulation.</li> <li>• 1/2”, 1.3 cm high Easy-to-read LED display.</li> <li>• Capacity 560- 570 Litres (20 Cubic Ft.) Upright.</li> <li>• 5 compartments and 4 adjustable-height shelves, with 5 insulated inner doors.</li> <li>• Vent Plunger, heated air vent prevents vacuum formation.</li> <li>• Keyed lock, user-defined password protection, stainless steel interior</li> <li>• Programmable temperature range upto -86<sup>0</sup> C</li> <li>• Power Consumption approx. 13.56 kWh/Day</li> <li>• Automatic Reset, Automatic Restart with Non-Volatile memory, programmed Restart.</li> <li>• Hermetically-sealed two-stage cascade refrigeration system with CFC, HCFC free refrigerants.</li> <li>• Internal Dimensions 49.8”x 30.1”x 22.6” (HxWxD),</li> </ul>
5	<b>Refrigerated Micro centrifuge</b>	<p>Maximum Speed : 14800 RPM</p> <p>Maximum RPM : 21,100 g.</p> <p>Maximum Noise Level : 56dBA(ventilated),50 dBA(refrigerated)</p> <p>Time Set Range : 1min to 99 min; 1 min increments + HOLD mode.</p> <p>Temperature Range : Set from -9°C to 40°C per 1°C increment.</p>

		<p>Dimensions :330x295x445 mm</p> <p>Weight : Not more than 32 kg</p> <p>With Click Seal Bio-containment lid</p>
6	<b>Cryo storage Cans with capacity to store 6000 vials with accessories</b>	<p>System Capacity (Vials): 6000 2ml cryovials in liquid phase.</p> <p>Height with Lid: (mm): 900-960mm</p> <p>Neck Diameter: Inches (mm): 215-220</p> <p>Working Liquid Nitrogen Capacity (Liters): 160</p> <p>Average Static Liquid Nitrogen Consumption Rate (Liters/Day): 0.63</p> <p>Static Holding Time (Days): &gt; 250 days</p> <p>Cryobox format: 6000</p> <p>No. of cryoboxes: 10x10</p> <p>Shipping Weight: (kg): 64.</p> <p>Should provide continuous temperature monitoring with temperature logger, Cryo logger, and should have alarm for Low LN2, High temperature, low battery.</p> <p>Should provide a Roller base.</p> <p>Should provide the Auto-fill accessories to maintain LN2 levels</p>
7	<b>Electroporation system</b>	<ul style="list-style-type: none"> <li>• Should be a multi-well plate based system with an option of cuvette that provides both exponential &amp; square wave forms in one instrument.</li> <li>• Should be able to optimize all parameters including waveform, resistance, voltage, capacitance, duration, number of pulses, and cell concentration etc.</li> <li>• Output voltage 10-500 Volts</li> <li>• Pulse time 0.5<math>\mu</math>s - 9999 <math>\mu</math>s</li> <li>• Should have choice of multiple Electroporation plates (96-, 24-, &amp; 12-well plate) in plate chamber along with a cuvette.</li> <li>• Should have an option to choose different parameters for each well-set allowing up to 24 different protocols on a single plate</li> <li>• Should have a gradient feature (to automatically generate a gradient of settings across all the wells on the plate).</li> <li>• Should be an open system for delivery of plasmid DNA, siRNA &amp; other molecules.</li> <li>• Should have preset optimization protocols for <b>mammalian cells including difficult to transfect &amp; primary cells &amp; user method storage.</b></li> <li>• Should have better reproducibility with pulse track circuitry and arc protection.</li> <li>• Should have the option to store atleast 300 protocols.</li> <li>• Unit should not require any external power source.</li> <li>• Should have 2 pulse types available – exponential decay and square wave Single Pulse, Double Pulse.</li> </ul>

		<ul style="list-style-type: none"> <li>• Should supply 1 KVA online UPS with the equipment.</li> <li>- Application training &amp; 5 years warranty should be mentioned.</li> </ul>
8	<b>PCR workstation</b>	<ul style="list-style-type: none"> <li>▪ Dimensions[w x d xh]mm : 630 X 550X900</li> <li>▪ Work area size [w x h] mm : 610 x 550</li> <li>▪ Laminar flow velocity : &gt; 0.4 m/sec</li> <li>▪ Filters : 1x HEPA filter[99.997 % efficient at 0.3 micron] 1 x pre- filter</li> <li>▪ Negative pressure filter seals : Standard</li> <li>▪ Low airflow alarms : Standard</li> <li>▪ Internal lighting : 1x15 watt[fluorescent]</li> <li>▪ Uv lighting : 254 nm at 15 watt</li> <li>▪ Lightweight interlocked night door : Standard</li> <li>▪ Construction : Zintec Mild Steel with Epoxy Powder Coating ,Removable Stainless Steel Worksurface</li> <li>▪ Fan : Centrifugal sparkless to IP 44</li> <li>▪ Noise level : &lt; 53db(A)</li> <li>▪ Weight : in and around 60 Kg</li> </ul>
9	<b>Micropipette set variable volumes</b>	<p>(A) Adjustable Single Channel Pipette  Size: 0.1µl-2.5µl  Size: 1-10µl  Size: 10-100µl  Size: 20-200µl  Size: 100-1000µl</p> <p><b>Specifications:</b>  Single channeled adjustable volume, dispensing error &lt;±1%)  Spring loaded tip cone, tight to fit universal tips in each category, ergonomic design  Adjustment opening for specific liquids and volume  Secondary adjustment for specific liquid.  Light weight piston made of Forton  Ejector should be smooth with ergonomic design  Volume display: four digits  Fully autoclavable  Minimum 3 years replacement Warranty</p> <p>(B) Adjustable eight channel pipette:  Size: 1-10 µl, Size: 10-100µl, Size 30-300µl</p> <p><b>Specifications:</b>  8-Channel adjustable volume pipette, dispensing error &lt;±1%  Spring loaded tip cone, tight to fit universal tips in each</p>

		<p>category, ergonomic design  Adjustment opening for specific liquids and volume  Secondary adjustment for specific liquid.  Light weight piston made of Forton  Ejector should be smooth with ergonomic design  Volume display: four digits  Fully autoclavable  Minimum 3 years replacement Warranty</p>
10	<p><b>Online UPS 10 KVA back-up 2 hours</b></p>	<ol style="list-style-type: none"> <li>1. <b>General: 10 KVA On-Line UPS System</b> with should have provision for future scalability and upgradation of UPS upto 40 KVA (i.e. 4 x 10 KVA parallel redundant configuration) should provide battery back up of atleast 2 hours at full load</li> <li>2. <b>Topology:</b> True On-Line Double Conversion Architecture with DSP (Digital Signal Processing) Technology using IGBT rectifier and IGBT inverter</li> <li>3. <b>Input voltage and voltage tolerance:</b> 305-480 VAC (<math>\pm 20\%</math>) at 100% load; 200-480 VAC (<math>-50\%</math>, <math>+20\%</math>) at 50% load.</li> <li>4. <b>Input frequency:</b> 45-55 Hz</li> <li>5. <b>Input current distortion:</b> 5% THD max</li> <li>6. <b>Isolation:</b> Input isolation Transformer of suitable Rating for providing galvanic isolation between input &amp; output. The isolation transformer should be at the <u>input of the UPS</u> such that the load is galvanically isolated in Bypass mode also.</li> <li>7. <b>Rectifier Type: IGBT based only.</b> SCR/Thyristor based rectifier shall not be accepted</li> <li>8. <b>Output power: 10 KVA / 9 KW @ 0.9 p.f.</b></li> <li>9. <b>Output power factor:</b> 0.9</li> <li>10. <b>Output voltage:</b> 380 / 400 / 415 VAC, Three Phase</li> <li>11. <b>Output voltage regulation (static):</b> <math>\pm 2\%</math></li> <li>12. <b>Output voltage regulation (dynamic):</b> <math>\pm 5\%</math> with 1 ms recovery</li> <li>13. <b>Total harmonic distortion:</b> <math>&lt; 3\%</math> (linear load); <math>&lt; 5\%</math> (non-linear load)</li> <li>14. <b>Standard communication ports:</b> 1 x RS232 for local support, 2 x X-slot with optional provision for Modbus / Jbus, AS400 Relay module</li> <li>15. <b>Network Connectivity:</b> Should have SNMP hardware and software connectivity facility through web browser for remote monitoring of UPS systems</li> <li>16. <b>External controls:</b> 1 x relay contact, 1 x emergency power off input, 2 x environmental input</li> <li>17. <b>LCD display:</b> Graphical LCD (Alphanumeric) for measurement of various UPS parameters, changing UPS</li> </ol>

		<p>Settings, Event Log etc</p> <p>18. <b>BATTERY:</b> Sealed lead-acid Maintenance Free batteries.</p> <p>19. <b>Rating &amp; Configuration:</b> The system must be capable of providing 2 hours of battery back-up time with each UPS module (Minimum VAH = 16128 VAH )Total qty, Ampere-Hour rating &amp; Volt-Ampere-Hour rating of the Battery Bank Offered should be clearly mentioned.</p> <p>20. <b>Ambient service temperature:</b> +0 to +40°C, max.</p> <p>21. <b>Testing Standards: (Documentary evidence to be furnished)</b></p> <p>22. General &amp; safety requirements for UPS used in operator access areas: Ensure safety for the operator, layman &amp; service persons that may come into contact with the equipment) - <b>IEC 62040-1-1</b></p> <p>23. Safety of UPS electrical equipment: Reduce risks of fire, electric shock or injury for operator, layman &amp; service person that may come into contact with the equipment.) - <b>IEC 60950</b></p> <p>24. UPS EMC requirements: Ensure satisfactory functioning in its environment without introducing intolerable electromagnetic disturbances to other electronic devices in that environment) - <b>EN 50091-2</b></p> <p>25. <b>Quality:</b> should be ISO 9001, ISO 14001, RoHS / WEEE compliant</p>
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**Terms & Conditions:**

1. Tenders are requested to give detailed tender separately for each item in their own forms under two bid systems - Technical and Financial Bid in two separate sealed envelopes super scribing the name of the equipment & Sl. No as mentioned in the tender paper on the envelope such as “Quotation for (Name of the item)”.

**Combined Tenders submitted for more than one item will summarily be rejected.**

2. Non-refundable **Tender Fee** (for whole tender paper) of Rs.200/= (Rupees two hundred only) in the form of demand draft in favour of Director, Regional Medical Research Centre, N.E. Region (ICMR), Dibrugarh must be enclosed with the tender (Technical Bid). Otherwise the tender will not be considered.

3. For item costing more than Rs.3.00 (three) lakhs only, an amount equal to **2% (two percent) of the cost of quoted item will be required for deposit as Earnest money** along with tender “Technical Bid” by demand draft in favour of Director, Regional

Medical Research Centre, N.E. Region (ICMR), Dibrugarh in the form of Bank Guarantee (Format enclosed).

**(i) For item costing more than Rs.3.00 (three) lakhs , an amount of equal to 10% (ten percent) as Security Deposit in case of accepted tender** in form of Bank draft in favour of the Director, Regional Medical Research Centre, N.E. Region (ICMR), Dibrugarh, or bank guarantee for cost of the item failing which the offer is liable to be ignored. Cheque will not be acceptable.

4. The Technical Bid should accompany with complete specifications, Manufacturer's name, address and relevant Literature / Brochures with WARRANTY terms & EMD etc.

5. In case of foreign quote, the address of Principal's / Manufacturer's and their Banker's details should be furnished. The mode of dispatch should be by Air Post Parcel / Ocean Freight / Air freight (on competitive rate). The approximate dimensions of the packages and weight of consignment are to be indicated.

6. The make/ brand and name and address of the manufacturer, country of origin, country of shipment and currency in which rates are quoted are to be mentioned.

7. Details of onsite warranty, agency who shall maintain warranty and undertake Annual Maintenance Contract / Comprehensive service Maintenance contract beyond warranty shall be given in the offer. In case of foreign quote, the Indian agent who shall maintain warranty and AMC beyond warranty shall be given in the Technical Offer, Name, address, contact persons, phone/fax no/e.mail id etc. of such firm may also be indicated clearly. Details of services rendered as well as after-sales services offered are to be made clear in the technical bid.

8. Indicate the names of the reputed Indian Organizations where similar equipment was supplied and may attach the satisfactory performance report of the equipment from user Organization.

9. If similar or identical equipment was supplied to other ICMR Labs/ Institutes, the details of such supplied for the preceding three years may also be given together with the price eventually or finally paid.

10. The Tenderer is required to furnish the Permanent Account Number (PAN) allotted by the Income Tax Department. If registered with the National small Industries Corporation, the registration number, purpose of registration and the validity period of registration etc. should also be provided in Technical Bid.

11. The Tenderer has to state in detail the Electrical Power / UPS requirements, floor Space, head room, foundation needed and also to state whether Air-conditioned environment is needed to house the system etc. and to run the tests, i.e pre-installation facilities required for installation in the technical bid.

12. Cost of the items should be mentioned clearly in the Commercial Offer only. The optional and any other essential items / accessories required for the maintenance of the equipment for the next THREE years should also be specified in the commercial offer separately.

- a) Packing, Forwarding, Freight & Insurance and Commissioning charges, if any extra, may be quoted separately in Commercial Bid.
  - b) In case if the quote is F.O.R / F.O.B basis, estimated insurance coverage charges may please be indicate.
  - c) CIF, Kolkata value both by Airfreight and Ocean freight.
13. RMRC, Dibrugarh will not be responsible for delayed / late quotations submitted / sent by Post / Courier etc.
14. Kindly mention the charges for AMC / Comprehensive Maintenance contract separately in Commercial bid (for post warranty period) upto 10 years after expiry of the warranty.  
Discount on all spares have to be specified during warranty period.
15. Tenders, which are submitted without following the Two-Bid offer system -  
a) Late / Unsigned / incomplete Tenders  
b) Conditional Offers  
c) Tenders submitted by Fax / E.mail / Telegraphic if not accompanied Bid Security/EMD, will summarily be rejected.
16. Descriptive catalogue and technical details, if any for the equipment should be submitted along with the quotations. Please also state the accessories required to be supplied along with the main instruments, if any
17. Manufacturer Certificate, if the firm is a manufacturer or authorized dealership certificate is to be submitted along with the quotation.
18. Quotation in triplicate for each item must be submitted separately under proper sealed cover.
19. The price should be FOR, Dibrugarh. The equipment has to be delivered at RMRC, premises. Unloading the item from the transport under risk of supplier.

**(A) RMRC will not take any responsibility FOR collection of Road Permit or any other documents pertaining to delivery of such articles. The supplier has to arrange of their own.**

**(B) For the imported items, the rate should be quoted upto CIF, Kolkata.**

20. The firm/ supplier should submit guarantee letter of the spares or related chemicals/kit etc. of the respective equipment that the same will be available for next 10 years.
21. **The firm should give a 5 years Warranty of the item (3 years general and 2 years extended warranty).**
22. **The payment will be made to the party/ firm in respect of foreign equipments purchased through letter of Credit only and after proper installation of the equipment.** No part or advance payment is admissible. While submitting the

quotations extra charge prevailing towards custom duty should also be mentioned/quoted in each item.

**23. Please note that all bank charges outside India and amendments charges etc should be borne by the beneficiary.**

24. Equipment purchased or proposed from foreign countries the commission to Indian agent must be quoted separately in Indian Currency.

25. Quotation rate should remain valid at least for 6 (six) months from the date of submission of the tenders/ quotation.

26. Authority reserves the right to accept or reject any tender quotation without assigning any reason.

27. The pre-requisite material, which will be required, should be quoted separately.

**28. Please mention the VAT charges separately in the quotation and TIN No etc for deducting the VAT charges in this Centre.**

29. The equipment should have good performance record/recommendation from at least two government research/academic institutions of repute and should submit reports with regard to the following for a period of 5 yrs.

- Performance of the equipment
- Post-sales service

Dealers should undertake to provide expert qualified engineers for maintenance/support within 24 hours of receiving a complaint.

30. The vendor quoting for the tender should either be the original equipment manufacturer (OEM) or the vendor should be having a joint venture with the OEM for more than Five years .The vendor quoting the tender should produce in original an undertaking from the OEM that the OEM shall have the vendor quoting the tender as his distributor for next 10 years. and in case Distributor defaults in service , OEM shall directly take up On-site support services at the same terms and conditions as agreed with Distributor.

**31. The firm should certify in the quotation that “ the price of the quoted item is genuine and no other authorized dealer OR the principal has sold this item at a lower price in India within last 6 months.”**

**32. The last date of submission of tender/quotation: 23/07/2010**