

F. No. RC(S)152/2015

Dated: 30th July, 2016

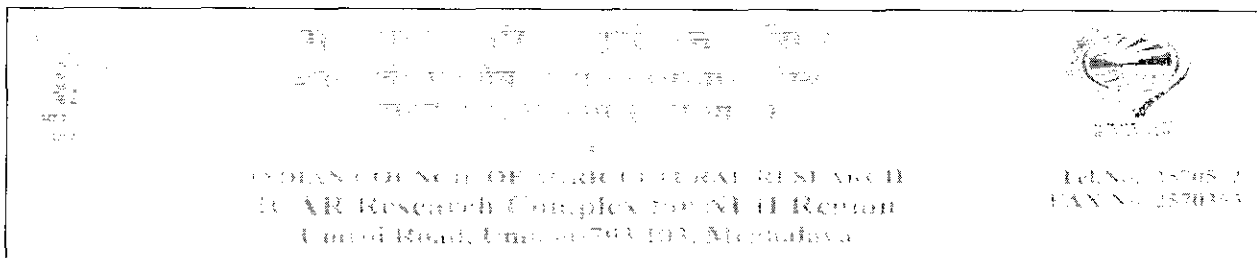
TENDER DOCUMENT

FOR

**PROCUREMENT OF SCIENTIFIC EQUIPMENTS/MACHINERIES UNDER NICRA
PROJECT FOR ICAR, RESEARCH COMPLEX FOR NEH REGION, UMIAM,
MEGHALAYA.**

TENDER No: RC(S)152/2015 : Date: 30th July, 2016.
Date & Time for Submission of Tender : 16th August, 2016 upto 12.30 p.m
Date & time for opening of Tender : 16th August, 2016, 2016 at 2.30 pm.

Total No. of pages 10 (ten)



Tender No. RC(S)152/2015

Dated: 30th July, 2016

SHORT TERM INVITING TENDER

**PROCUREMENT OF SCIENTIFIC EQUIPMENTS/MACHINERIES UNDER NICRA
PROJECT FOR ICAR, RESEARCH COMPLEX FOR NEH REGION, UMIAM,
MEGHALAYA**

Sealed bids are invited from the reputed from reputed **Manufacturer/ Authorized Dealer/ Government organizations** for supply of Scientific Equipments, having at least 5 (Five) years experience in manufacturing/ marketing/ supply of such Equipments/Machineries by ICAR Research Complex for N.E.H. Region, Umiam, Umroi Road, 793103, Meghalaya. The details specification of equipments/machineries is as per Appendix -1.

TERMS & CONDITIONS OF THE TENDER

1. **Cost of Tender paper of Rs. 1000/- (Rupees one thousand) only** (Non – refundable) to be deposited in the favour of the Director, ICAR Research Complex for NEH Region, Umiam – 793103 by means of Demand Draft payable at SBI, ICAR Complex Branch, Umiam. Non – submission of the cost of Tender paper (consolidated) shall lead to non – consideration of the Tender.
2. The Bidders should submit the proposals in two parts:
 - a. Technical Bid (Bid -I)
 - b. 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 inclusive of all admissible taxes, duties and levies, installation charges, freight charges, Taxes, VAT etc., as may be applicable etc. The rates quoted should be up to ICAR Research Complex for NEH Region, Umiam for the mentioned items. The Financial Bid should consist of the Rates, their detailed break –ups, etc. Non-compliance of this shall lead to non-consideration of the Bid. The rates must be valid for at least for 1(one) year from the date of quotation.
5. These two parts (BID-I & BID II) should be submitted in separate sealed envelopes. Both envelop should then be sealed in a third envelop **super scribed as “TENDER NO. RC(S)152/2015 dated 30th July, 2016 due on 16th August, 2016 FOR PROCUREMENT OF SCIENTIFIC EQUIPMENTS/MACHINERIES UNDER NICRA PROJECT FOR ICAR, RESEARCH COMPLEX FOR NEH REGION, UMIAM, MEGHALAYA** and addressed to “THE DIRECTOR, ICAR RESEARCH COMPLEX FOR NEH REGION UMIAM, MEGHALAYA-793103”. The firm should also super scribe on the top of the envelope the Sl. No. & name of the equipments to be supplied, date of opening and details of earnest money deposited otherwise their tender may not be considered.
6. **The Cost of the Tender (consolidated) as well as the Earnest Money (consolidated) in the form of Bank Draft along with all other Technical Details should be**

mandatory 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 the tender may not be received or opened and returned to the party. All Tenders should be sent by Registered Post. Tenders to be handed delivered should be put in the Tender box, kept in the office chamber of Chief Administrative Officer, ICAR Research Complex for NEH Region, Umiam, Meghalaya-793103 not later than **12:30 P.M. on 16th August, 2016.** 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 the laid norms of this tender.
10. **Composition of Technical Bid –**
 - a. Profile & Track Record of the company
 - b. Document in support for Number of years in Scientific Equipments manufacturing/supply.
 - c. Document in support of last supply orders.
 - d. Balance Sheet for last 3 financial years. Annual Turnover, which will be average of last three years on the basis of balance sheet.
 - e. Photo copy of PAN No. issued by Income – Tax Department. Photo copy of Service Tax/sale tax/VAT Registration etc. (If not applicable submit the relevant document).
 - f. **Non refundable tender Document Fee of Rs. 1000/- in the form of Demand Draft** from any Nationalized Bank drawn in favour of the Director, ICAR, Research Complex for NEH Region, Umiam, Meghalaya payable at Sate Bank of India, ICAR complex branch (If exempted/relaxed submit the relevant document in support of claim). **Refundable Earnest Money Deposit (EMD) of Rs. 30,000 (Rupees thirty thousand only) in the Form of Demand Draft from any Nationalized Bank, drawn in favour of the Director, ICAR, Research Complex for NEH /region, Umiam, Meghalaya.** (If exempted/relaxed submit the relevant document in support of claim) **The Cost of the Tender paper as well as the 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.**
 - g. **Furnishing of related documents like detailed specifications, 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 the rates are quoted by the Dealers/Agents. Failing which the quotation shall not be considered.**
 - h. **Up-to-date sale tax certificate, tax clearance, valid registration certificate are mandatory.**
 - i. **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 for Imported goods:
 - i. **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.
 - ii. In case of any custom duty charge, applicable as per Govt. of India's Notification, the same may be paid by the firm which will be reimbursed to the Indian Agent (who should be a 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.
 - iii. **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 India 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.
 - iv. All imported items should be delivered up to destination i.e. all the import should be free of inland freight charges, insurance etc.
 - v. **Indian Agency Commission rate and amount should be clearly specified as per rules. IAC, wherever applicable, will be paid in Indian Currency only.**
 - vi. In case of delay in supply, penalty will be imposed @2% per week, subject to a maximum of 10% of the FOB value
 - vii. 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.
 - viii. **ICAR Research Complex for NEH Region, Umiam, Meghalaya, being a Scientific and Research Organization, is exempted from payment of Excise Duty (Certificate to this effect will be provided).**
15. **All Bidders should mandatory give their current, PAN Card No., TDS& other Bank A/C details to enable the office for releasing the dues via e- payment basis.**
16. 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 50,000.00 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.

17. **The selected tenderers must complete the supply/ installation/ demonstration within 30 (thirty) days from the date of the supply order due to time factor or the said orders shall be treated as cancelled and no further correspondence will be entertained.**
18. The guarantee/ warrantee 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.
19. The complete details regarding the Institutions/ Corporations/ Bodies, etc. where the Firm/ Dealer has made the supplies during the last 2/3 years should also be furnished, along with the supply orders.
20. 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.
21. The Director, ICAR Research Complex reserves the right to reject any tender in part or full, without assigning any reason thereof.
22. Legal jurisdiction for all disputes shall be within the purview of the Shillong Court.
23. **The Firm/ Agency run by the Non-Tribal should produce Trading License issued by the KHADC & also produce Municipal Trade License as applicable state to state & Tribals should provide Schedule Tribe Certificate.**
24. **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.**
25. Tenders shall be opened on 16th August, 2016 at 2:30 pm, ICAR Research Complex for NEH Region, Umiam, Meghalaya – 793103. Interested bidders may attend the opening.
26. If the above mentioned closing /opening day of the tender happened to be non – working date due to Bandh/Strike as any other reasons, the tender will be received & opened on the following working day at the same time except on the 2nd (second) Saturday.
27. 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 bidder/ supplier shall be bound by the said terms & conditions.
28. For any query/ clarification, the undersigned may be approached at:
Contact address:

E-mail : kejoshiicar@yahoo.in/storesection@yahoo.in

Sd/- S. V. Ngachan
DIRECTOR



Before quoting for the Tender, it is requested to kindly go through 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

Sl. No	Items	No. of units	Specification
1	Protein separation system and characterization facility including 2D electrophoresis, gel imaging and documentation with necessary software and all accessories	1	<p>Fraction Collector & Accessories</p> <p>Fraction collector: The collector should be able to hold 80 to 120 tubes of 10-15 ml capacity along with provision for holding the micro centrifuge tubes (0.5- 1.5ml). With time or drop mode, (to collect 1 drop to 9 ml or more). Provision for manual as well as automated advance of tubes.</p> <p>Pump: Bi-directional, peristaltic variable speedpump. Digital flow rate display in ml/min and time or volume progression. Fully compatible with software/ chart plotter.</p> <p>UV Monitor: Dual wave length (250/290nm) monitor for flow through monitoring with 2 or less mm path length flow cell compatible with above system.</p> <p>Gradient Monitor: External flow cell for placement flexibility, realtime monitoring of conductivity, with compatible connections.</p> <p>Suitable software to run the above system for online monitoring and data recording with desktop and printer.</p> <p>Western Blot Apparatus (Semi dry blot system)</p> <p>Should be suitable for gel size of 10 x 10 cm and 24 x 16 cm</p> <p>Capacity to accommodate for mini and midi PAGE gel.</p> <p>Should be able to transfer in 15-60 min</p> <p>Single-step locking/ screw lock system.</p> <p>Platinum coated titanium anode and stainless steel cathode plate electrodes.</p> <p>Should accommodate various gel stack thickness (0.25 mm- 10 mm) and produce</p> <p>Uniform pressure on the blotting sandwich during transfer.</p> <p>Should come with agarose gel support frame to do transfers for DNA and RNA also in addition to Protein transfer. Pre-installation requirement should be mentioned in the bids.</p> <p>Power pack for semidry blot system</p> <p>Output maximum (range should be programmable) of 250 V, 700-1000 mA, and 150-300W.</p> <p>Microprocessor controlled constant voltage, constant current with automatic crossover.</p> <p>Four output terminals pairs to run four systems at a time.</p> <p>Timer fully adjustable.</p> <p>Real time editing function.</p> <p>LED display</p> <p>Safety features: No-load detection, sudden load change detection, overload/short circuit protection, input line protection, auto power backup. Input protection of fuse on both hot and neutral.</p> <p>Auto recovery after power failure.</p> <p>Pause/ resume function. Pre-installation requirement should be mentioned in the bids.</p> <p><u>Instrument Warranty</u>: 3 years comprehensive warranty and 2 years non-</p>



			comprehensive warranty should provide at free of cost. Any items required to complete the system may be quoted.
2	Multi parameter monitoring system	1	<p>Equipments should have the following features:</p> <ul style="list-style-type: none"> ➤ High resolution 12-15" touch screen colour TFT LCD display ➤ Upto 7 lead ECG display (12 lead ECG display optional) ➤ Standard configuration of ECG, Respiration rate, Temperature, NIBP ➤ Nellcor or Masimo SpO2 ➤ Drug dose, Hemodynamic, Renal profile (nephridium), Ventilation, Oxygenation calculations and OXY CRG software ➤ HL7 connectivity ➤ Alarm event review-Crisis and warning ➤ Thermal recorder (optional) ➤ Full parameter storage function while power off with rechargeable battery ➤ CNS: Wired/wireless ➤ CNS: Wi-fi (optional) ➤ Pacemaker detection function ➤ ETCO2 (Mainstream / Sidestream / Microstream) ➤ Multigas monitoring ➤ Cardiac output (ICG) ➤ Dual IBP ➤ BIS ➤ EEG ➤ Upgradable to ETCO2 (mainstream / sidestream / microstream), dual IBP cardiac output, thermal recorder, multigas monitoring and second temperature (Rectal) <p>Instrument Warranty: 3 years comprehensive warranty and 2 years non-comprehensive warranty should provide at free of cost.</p>
3	Wood chipper & biomass shredder	1	Shredder cum chipper powered by 20HP III phase electric motor chip and shreds upto 100mm diameter, working capacity of 1000- 2000 kg/hr with interchangeable sieve for desired output size from feeding materials dimension upto 350 mm having ability to shreds leaves and scrub also.
4	Spectro Radiometer with all accessories	1	<p><u>Spectro-radiometer</u></p> <p>Specifications:</p> <p>Wavelength Sensitivity: 220 to 1100 nm</p> <p>Irradiance Calibration Range: 300 to 1000 nm</p> <p>Wavelength Resolution: minimum 1.5 nm</p> <p>Detector Type: CCD, 2048 pixel</p> <p>Grating Type:Holographic & aberration-corrected, 590 g / mm</p> <p>Digitizer:16-bit</p> <p>Signal to Noise Ratio:1000 : 1</p> <p>Stray Light:0.02 % at 435 nm; 0.2 % at 220 nm</p> <p>Software: Windows compatible (should be included)</p> <p>Computer Interface:USB2</p>

			<p>Power Requirement:100 mA at +5 VDC, supplied via USB cable</p> <p>Operating Temperature:0 to +60 °C or more on both sides</p> <p>Optical Cable:2 m armored fiber-optic</p> <p>Base Unit Size:69 x 100 x 150 mm</p> <p>Mass:900-1000 g</p> <p>Measurement Repeatability:< 1 %</p> <p>Calibration Uncertainty:± 10 %</p> <p>Detector Integration (Exposure) Range:1 ms to 65 s</p> <p>Directional (Cosine) Response: 80° zenith angle: ± 5 %</p> <p>The unit should include:</p> <ol style="list-style-type: none"> 1. Spectroradiometer unit (including field carrying case) with data retrieval software & calibration files 2. Fiber Optic cable (minimum 2 meters) 3. Cosine corrected radiometric head with black cap 4. Bubble leveling plate 5. 16 GB USB drive with Black USB cable 6. Reflectance wand 7. Compatible data retrieval system
5	Growth chamber with CO ₂ , light and temperature controls along with UPS and stabilizers	1	<ol style="list-style-type: none"> 1. CO₂ Growth Chamber with minimum capacity of 1300 Litrs with complete Stainless Steel structure inside and Steel plate with powder Coating outside. Double front door for space saving, Should Have Double glass door that can reduce Temperature and CO₂ Gas error. 2. With HEPA Filter attached inside chamber. It can be made clear CO₂ environment. 3. Should have Display panel that can use to check, Setting value and Present value of test on touch screen. All data can be checked by Character and Graph on the screen. 4. Should have built in Cortex A8 CPU 7 System with facility to save the data, make data backup, transfer and print out on this unit. Data file can be converted with Excel file. So, you can check it on computer well. 5. Should have Temperature control with digital PID Controller. 6. Programmable: 10 step and one manual Program. 7. Temperature Range : 0°C to 60°C (Light on: 10°C to 60°C) 8. Temperature Accuracy: ±0.5°C at 37°C 9. Humidity Range: 35 to 98% RH. 10. Humidity Accuracy: ±1% at 70% 11. CO₂ Range: 0 ~ 12000ppm. 12. CO₂ Sensor Specification: Dual-Beam NDIR, with precision of ± 0.1 13. Should control Temperature, Lux by Day and Night mode. As time goes by Lux and Temperature should be controlled according to change in Day and Night mode. 14. USB Port must available so that after testing, user can make a data file for their test. Should have provision for data transfer by USB Port. 15. User File name for all data files. 16. Should have facility to checking for Humidity with Humidity sensor. 17. Self diagnostic, Error Message facility. If there are some error

			<p>message, they are shown on display with Alarm .</p> <p>18. Safety device. User can set Limit for Over and Less Temperature and CO₂ on the screen. Also, there are safety device in front of control. Door open alarm etc.</p> <p>19. With optional features like Sterilization for the contamination removal by use of Hydrogen peroxide vapors and UV treatment system. Following a hydrogen peroxide vaporization, circulation and dwell cycle, vaporization stopped and UV lamp turned on for treatment.</p> <p>20. Upgradable features with Security Black box. And Thermal Recorder (Printer) for all data and graph can be printed out by it.</p> <p>21. Upgradable features with Remote monitoring by storing the data by data-logging and remote transmission of data at the server through telemetry and also attach observe camera.</p> <p>22. It should record Trend and History about test results.</p>
6	Plant canopy analyzer	1	<p>Specifications:</p> <p>Lens: Equidistant wide-angle fish eye lens</p> <p>Image resolution: 768 x 494 pixels</p> <p>Interface: USB</p> <p>Measuring time: 0.5 second</p> <p>Fish-eye lens angle: 150°</p> <p>Operating temperature: 5 to 50 °C</p> <p>Probe size: 20 x 20 mm</p> <p>Arm length: 400 mm</p> <p>Probe and arm weight: 0.5 kg</p> <p>Data logger with USB cables</p> <p>Battery capacity minimum: 6 hours</p> <p>GPS enabled</p> <p>Able to measure LAI, PAR, extinction coefficient & sunflakes</p> <p>Carrying case, data retrieval system & software with all standard accessories</p>
7	SPAD meter	1	<p>The SPAD Chlorophyll Meter instantly measures chlorophyll content or “greenness” of plants to reduce the risk of yield-limiting deficiencies or costly over fertilizing. It should quantifies subtle changes or trends in plant health long before they’re visible to the human eye. It should be non-invasive measurement; simply clamp the meter over leafy tissue, and receive an indexed chlorophyll content reading (-9.9 to 199.9) in less than 2 seconds. It should assist in assessment of nitrogen needs by comparing in-field SPAD readings to university guidelines or to adequately fertilized reference strips. Research shows a strong correlation between SPAD measurements and leaf N content.</p> <p>Trend graph stores and displays up to 30 measurements</p> <p>Waterproof design</p> <p>Compare in-field SPAD readings to university guidelines</p> <p>Should include hard carrying case and batteries</p> <p>Data-logging model (2900PDL)</p> <p>Should Connect to any GPS receiver that has a serial output option equipped with internal data logger and RS-232 port</p> <p>Should record 5000 measurements (1,488 with added GPS/DGPS option)</p> <p>Technical specifications</p>

			<p>Optical Density Difference at two wavelengths: 650 nm and 940 nm Measurement Area: 2 mm x 3 mm (Approximately 3/32 in x 1/8 in) Light Source: 2 LEDs Receptor: Silicon Photodiode Power Source: 2 AA alkaline batteries (1.5V) Repeatability: Within ± 0.3 SPAD unit SPAD Value: Index of relative chlorophyll content; -9.9 to 199.9</p>
8	IR thermometer	1	<p>Infrared thermometer with 2 point laser sighting, adjustable limit values, alarm function and connection of external probes. Measuring Range : -30 to +400°C Accuracy : ± 1.5 °C or $\pm 1.5\%$ of mv ± 1 digit (+0.1 to +400 °C) ± 2 °C or $\pm 2\%$ of mv (-30 to 0 °C) The larger value applies Resolution : 0.5 °C</p>
9	Vapour Pressure Osmometer	1	<p>The osmometer should be</p> <ul style="list-style-type: none"> • Should operate on vapour pressure depression principle. • capable of routine osmolality determination on sample volume of 5-10 microliters and should perform the measurement automatically once the sample has been loaded. • Capable of routine osmolality determinations on plant organic sample. • should consume not more than 5 watts of electrical power and should weigh less than 4kg. • should not require any routine maintenance other than periodic cleaning of the thermocouple sensor assembly <p>Measurement range: 0 to 3000 mmol/kg @ kg 25⁰ C ambient Resolution: 1mmol/kg Repeatability: Standard deviation ± 2 mmol/kg Linearity: 2% of reading from 100 to 2000 mmol/kg Readout: 10 X 6.8 cm LCD Operating Temperature: 15 to 40°C ambient The required osmolality standards need to be provided for calibration Serial output: RS-232 (ASCII format)</p>

Sd/- S. V. Ngachan
DIRECTOR

