



भारतीय कृषि अनुसंधान परिषद,
उत्तरपूर्वी पर्वतीय क्षेत्र अनुसंधान परिसर
उमियम, मेघालय - 793 103
INDIAN COUNCIL OF AGRICULTURAL RESEARCH
ICAR Research Complex for NEH Region
Umiam, Meghalaya - 793 103



Tender No.RC(S)136/2015

Dated Umiam, the 8th November'2016

OPEN TENDER

INVITATION OF TENDER IS INVITED FOR PROCUREMENT OF EQUIPMENTS *UNDER LOW LIGHT PROJECT*,
CENTRE FOR BIOTECHNOLOGY, ICAR RESEARCH COMPLEX FOR NEH REGION, UMIAM, MEGHALAYA

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

TERMS & CONDITIONS OF THE TENDER

- The consolidate cost of Tender paper Rs.1,000/- (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 shall lead to non - consideration of the Tender.
- The Bidders should submit the proposals in two parts: -
 - Technical Bid (Bid -I)
 - Financial Bid (Bid-II)
- Technical part should contain all such details as mentioned in the Bid Document.
- 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 each particular item. 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.
- These two parts (BID-I & BID II) should be submitted in separate sealed envelopes. Both envelop should then be sealed in a third envelop **superscribed as "TENDER NO.RC(S)136/2015 dtd.08.11.2016 for procurement of Equipments under Low Light Project" Centre for Biotechnology, 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 superscribe on the top of the envelope the details of earnest money deposited otherwise their tender may not be considered.
- 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.**
- In no case Earnest Money will be accepted after opening of tender.
- 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 8th December, 2016**. Tenders received after the due date and time shall not be considered under any circumstances.
- 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.
- Composition of **Technical Bid** -
 - Profile & Track Record of the company
 - Document in support for Number of years in Instruments/equipments manufacturing/supply.

- III. Document in support of last supply orders.
- IV. Balance Sheet for last 3 financial years. Annual Turnover, which will be average of last three years on the basis of balance sheet.
- V. 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).
- VI. **Non refundable tender Document Fee of Rs.1,000/- 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.5,000/-** (Rupees five 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.
- VII. **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, pricelist (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.**
- VIII. **Up-to-date sale tax certificate, tax clearance, valid registration certificate are mandatory.**
- IX. 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. **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 45 (forty five) 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 selected tenderers must complete the supply/installation/demonstration within 45 (forty five) days from the date of supply order due to time factor or the said orders shall be treated as cancelled and no further correspondence will be entertained.
19. In case of delay in supply penalty will be imposed @ 2% per week subject to maximum of 10% of the FOB value, if agreed by Competent Authority on written request for extension of time limit.
20. 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.
21. 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.
22. 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.
23. **The Director, ICAR Research Complex reserves the right to reject any tender in part or full, without assigning any reason thereof.**
24. Legal jurisdiction for all disputes shall be within the purview of the Shillong Court.

25. KHADC license.

- I. The Firm/Agency run by the Non-tribal contractor's /firms/ companies/suppliers/stockiest/banded ware house/Private carriage contractors/Co-operative Societies etc. should produce Trading License issued by the KHADC (Govt. of Meghalaya).
 - II. Submission of tender paper does not fall under trade as per the above said act. However, if a Non-tribal becomes a successful bidder he has to furnish License issued by the KHADC (Govt. of Meghalaya) before any work involving trade is issued to him. Further those firm/agency opting for clause II above are requested to submit *an undertaking mandatorily* to this effect along with the technical bids as a certification about their capability of submission of the trade license when ask for, failing which the tender are liable to be rejected/not to be considered at any circumstances. (If not applicable submit the relevant document).
26. 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.
27. Tenders shall be opened on **8th December, 2016 at 2:30 pm**, ICAR Research Complex for NEH Region, Umiam, Meghalaya – 793103. Interested bidders may attend the opening.
28. 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.
29. 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.
30. For any query/ clarification, the undersigned may be approached at:

Contact address:

E-mail: kcjoshiicar@yahoo.in/ aogaicarneh@gmail.com /storesection@yahoo.in

**Sd/-
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

Details specifications for procurement of Equipments/Instruments under Low Light Project, Centre for Biotechnology at ICAR (RC) for NEH Region, Umiam

Sl. No.	Name of the equipment	Qty./No.
1.	<p>AUTOMATIC SENSORS/ANALYZERS</p> <p>i) Quantum Radiometer with Data logger with Multiple sensors</p> <p>Quantum sensor (PAR) Range: 400 – 700 nm Sensitivity: Typical 5µA per 1000 µmol s⁻¹ m⁻² Response time: 10 µS Detector: High Stability Silicon photovoltaic detector (Blue enhanced) Cosine Corrected, Cable Length: 5m Cable Mounting & levelling fixture</p> <p>Pyranometer sensor Sensitivity: Typically 7SUA per 1000 w^m⁻² Response time: Less than 1µs Operating temp: upto 60°c Detector: High stability silicon photovoltaic detector Cable length: 5m Mounting and levelling fixture</p> <p>Line quantum sensor 1 meter long line quantum sensor — Cosine Corrected — for measuring PAR within a plant canopy.</p> <p>Sensing Area :1 Meter L X 12.7mm W Detector :High Stability silicon photovoltaic detector(blue enhanced)- 1 Meter long Single Quartz Rod.</p> <p>Sensor Housing :Weatherproof anodized aluminium case with acrylic diffuser and Stainless steel hardware</p> <p>Sensitivity :Typically 7µA per 1000 µmol s⁻¹ m⁻² Linearity :Maximum deviation of 1% up to 10,000 µmol s⁻¹ m⁻² Response Time 10 µS</p> <p>Cable Length : 5m</p> <p>Datalogger with GPS DATALOGGER for connecting to Line Quantum Sensors — Current operated Data Logger for connecting direct to PAR Sensors. DataLogger comes with Large Memory capacity of 1GB and Menu driven Interface. DataLogger comes optionally with or without GPS capability and Working on Four Alkaline AA batteries with GPS capabilities.</p> <p>DISPLAY : 128 x 64 graphic display Current inputs : Five Channels with addition, subtraction, multiplication, division, natural logarithm, integration , daily integration and attenuation etc. Resolution : 16BIT Sampling Rate : 0.01 Hz, 0.1Hz, 1Hz, 2Hz, 5Hz, 10Hz, and 20Hz Fast Scanning : up to 500 Hz Temperature Coefficient: ± 0.01% of reading</p> <ol style="list-style-type: none"> Warranty: > 24 months Should provide all accessories necessary for its efficient and smooth functioning Provide warranty certification, authorization certification, instrument installation, demonstration and time to time service when necessary. 	01
	<p>ii). Leaf Area Meter</p> <p>Features:</p> <ul style="list-style-type: none"> • Instruments should be used for Non-destructive leaf area measurement in the field • 1 mm² resolution • Should be able to Display and store individual leaf area, accumulated area, leaf length, average width, maximum width • Data storage for up to 125,000 individual leaf measurements • RS-232 and USB ports • Lightweight for portability • Precise measurement of perforated and irregular margin leaves • Easily combined with a belt conveyer system for lab use • Simple Windows® Software for file transfer and real-time data collection 	01



	<p>Resolution : 1 mm² (1mm x1 mm scanning area) Accuracy : within +/- 2% for samples upto >50cm² Display Capacity : Area 9,999,999.99 cm² Length : 99,999,999.9 cm Width : 12.8 cm</p> <p>Display : Up to 16 character LCD Keyboard : 24 key tactile response Memory Capacity : More than 1,25,000 Data sets Internal Memory : > 2.1MB RAM for up to 125,000 individual leaf measurements Communication : RS-232 and USB Sample Dimension : Width: up to 125 mm, 1 mm min. ,Thickness : 8mm max. Length:1 meter max. Power requirement : Rechargeable battery Battery capacity : 12-15 hours of continuous operation Scanning head : LED Light source Storage Temperature : -20 to 55°C Supplied complete with Carrying Case, Rechargeable Battery, RS-232 Serial & USB Cable Communications Software for Computer and user manual.</p> <p>Conveyer Belt Accessory for measurement of Plucked Leaves in the Laboratory Conveyer Belt Speed : 5.4cm s⁻¹ at 50Hz Transparent Belts : Rugged Clear Vinyl Resolution : 1 mm² (1mm x1 mm scanning area) Accuracy : Within +/- 1% for samples upto >10cm² Sample Capacity : Width :127mm maximum , 1mm minimum Thickness: 7.5mm minimum Length: unlimited. Operating Temp. : 0-55°C, 5 to 95% RH (non-condensing) Power requirement : 230V AC, 50Hz.</p> <p>----- 1. Warranty: ≥ 24 months 2. Should provide all accessories necessary for its efficient and smooth functioning 3. Provide warranty certification, authorization certification, instrument installation, demonstration and time to time service when necessary</p>	
2.	<p>REFRIGERATED WATERBATH Capacity : > 7 litres Temp. Range : <4°C to 100°C Set Accuracy : ±0.05 - 0.1°C Uniformity : +/- 0.05 - 0.7°C Heater : 600W-1100W Cooling : 200W-500W Refrigerant : CFC Free Refrigerant Controller : Digital PID Multi-Function Controller Display : Digit Display Pump : Powerful Circulation Pump, Max. Flow: >7L/min Material : Stainless Steel Adjustable high & low temperature limits Low liquid level alarms Safety : Over Temp. Cut Off, Over Current and Leakage Breaker Electric Supply : 220V-240V Supplied with compatible power Backup ≥ 2KVA 1. <u>Warranty: > 24 months</u> 2. Should provide all accessories necessary for its efficient and smooth functioning 3. Provide warranty certification, authorization certification, instrument installation, demonstration and time to time service when necessary.</p>	01
3.	<p>Portable Weather Station Digital date logger with display and inbuilt memory with data transmission facility using RS232/USB cable with expandable ports for connecting sensors with operating software. Weather sensors Wind direction: 0-360°; accuracy ±3° Wind speed: 0 – 200 mph; accuracy ±2mph Air Temperature: -10°C to 70°C Relative humidity: 0-100%; accuracy ±3%</p>	01



	<p>Dew point: -73° to 60°C; accuracy ±2°C Rainfall: 0 – 200mm/h; intensity resolution 0.1 to 0.2 mm/h</p> <p>Optionals: Compatible solar power system Solar Radiation Sensor Soil Moisture Sensor Soil Temperature Sensor Evaporation Sensor <u>Warranty:> 24 months</u></p> <p>Should provide all accessories necessary for its efficient and smooth functioning Provide warranty certification, authorization certification, instrument installation, demonstration and time to time service when necessary.</p>	
4.	<p>Double Beam Spectrophotometer: Microprocessor controlled Double Beam UV/Vis Spectrophotometer with scanning, kinetic and multiwavelength measurement facility for measuring biological applications such as proteins, nucleic acids, enzyme kinetics & concentration.</p> <p>Photometric System :Double beam optics Photometric Accuracy :+/- 0.004 Abs. or better at 0.5 - 1.0 Abs Wavelength Range :190 to 900 nm or more Wavelength Accuracy :+/- 0.3nm or better Wavelength Repeatability :+/- 0.1nm or better Photometric range :Up to 3 Abs or better Spectral Bandwidth :Selectable from 0.1 nm to 5 nm or better Wavelength Scan Speed :About 3000 nm/min or better Stray light :0.05% or less Detector :Photomultiplier or silicon photodiode Light source :Tungsten and Deuterium lamp, Light source auto position adjustment</p> <p>Quartz Cuvette :3 ml capacity 10 mm path length Available Power supply : 220/230V, 50/60 Hz 5. 1. Supplied with compatible power Backup ≥ 3 KVA PC having latest configuration, necessary software for data processing and other relevant accessories to be quoted as required. <u>Warranty: > 24 months</u> Annual Maintenance Contract may be quoted as optional Provide warranty certification, authorization certification, instrument installation, demonstration and time to time service when necessary</p>	01
5.	<p>Vertical Deep Freezer (-20°C) Digital temperature control and LED Display and systems monitoring and reporting technology. Minimum attainable cabinet temperature:<-20°C with an increment of 1°C. Capacity: Minimum 450 ltrs. Minimum 5 multiple freezer compartments with individual insulated doors. Adjustable shelves Strong, molded, chemically resistant ABS interior. Vacuum Insulation Technology Temperature thermostat regulator. Audible and visual alarms for high/low temperature, power failure, high/low voltage, overheated condenser with push button alarm reset/stop and adjustable alarm set points Push button with quick freeze indicator. Acclimatized hermetically sealed CFC free compressor Cascade refrigerator Technology. Automatic defrost with electrical water evaporation system. Internal Voltage stabilizer. Caster moving wheels with stopper for easy movement 220-230 V/50/60 Hz. Door lock 5 KVA power backup.</p> <p><u>Warranty: > 24 months</u> Annual Maintenance Contract may be quoted as optional Provide warranty certification, authorization certification, instrument installation, demonstration and time to time service when necessary</p>	01



6.	<p>Chlorophyll Concentration Meter Display Output Unit: μmol of chlorophyll per m^2 of leaf surface Measurement Area: 64 mm^2 (9.0 mm standard diameter), 20 mm^2 (5.0 mm diameter with reducer) approx.</p> <p>Resolution: $\pm 10 \mu\text{mol m}^{-2}$ Linearity: $\pm 1 \%$ Repeatability: $\pm 1 \%$ Sample Acquisition Time: < 3 seconds Data display: LCD display Data mode: Single point and averaged Storage Capacity: 8 MB for up to 160,000 data measurements; 94,000 data measurements with GPS data entries User Interface: Graphic display screen, push buttons for control and data manipulation Data Output: USB port for data transfer Operating Environment: 0 to 50°C Power Requirement: Standard 9 V DC alkaline battery Battery Operation time: at least 5-6 hr; Auto off Auto Switched off when not in use for more than 3-4 minutes Weight of instrument: < 200 g Provided with carrying case <u>Warranty > 12 months</u> Should provide all accessories necessary for its efficient and smooth functioning Provide warranty certification, authorization certification, instrument installation, demonstration and time to time service when necessary</p>	01
7.	<p>Autoclave Vertical type Capacity: > 150 L Made of stainless steel Steam pressure between 15-20 psi (adjustable) Fully Automatic Temperature controller by PID Water level indicator, auto cut device when water level is low Handy lid lifting device <u>Warranty: > 12 months</u> Provide warranty certification, authorization certification, instrument installation, demonstration and time to time service when necessary</p>	01

Sd/-
DIRECTOR

