



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



F. No. RC(S)52/2017/EFC/Pt.A

Dated Umiam, the 2nd May, 2018

TENDER DOCUMENT

FOR

**PROCUREMENT OF SCIENTIFIC EQUIPMENTS/MACHINERIES UNDER EFC 2017-18 FOR ICAR,
RESEARCH COMPLEX FOR NEH REGION, UMIAM, MEGHALAYA AND ON BEHALF OF ICAR,
REGIONAL CENTRES**

TENDER No: RC(S)52/2017/EFC/Pt.A

: 02/05/18

Date & Time for Submission of Tender

: 22/05/18 upto 12.30 pm

Date & time for opening of Tender

: 22/05/18 at 2.30 p.m



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



F. No. RC(S)52/2017/EFC/Pt.A

Dated 2nd May 2018

OPEN TENDER

INVITATION OF TENDER(Open) IS INVITED FOR PROCUREMENT OF SCIENTIFIC EQUIPMENTS/MACHINERIES UNDER EFC 2017-18 FOR ICAR, RESEARCH COMPLEX FOR NEH REGION, UMIAM, MEGHALAYA AND ON BEHALF OF ICAR, REGIONAL CENTRES

Sealed bids are invited from the reputed **Manufacturer/ Authorized Dealer/ Government organizations** for supply of Scientific Equipments, having at least 3 (three) years experience in manufacturing/ marketing/ supply of such Equipments/Machineries by ICAR Research Complex for N.E.H. Region, Umiam, Umroi Road, 793103, Meghalaya and on behalf of ICAR, Regional Centres. The details specification of equipments/machineries 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 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:
 - I. Technical Bid (Bid -I)
 - II. 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, GST as may be applicable etc. The rates quoted should be up to ICAR Research Complex for NEH Region, Umiam and Regional Centers i.e FOR Destination for each particular item. The Financial Bid should consist of the Rates, their detailed break –up, 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)52/2017/EFC/Pt. A dated 02.05.18 FOR PROCUREMENT OF SCIENTIFIC EQUIPMENTS/MACHINERIES UNDER EFC 2017-18 FOR ICAR, RESEARCH COMPLEX FOR NEH REGION, UMIAM, MEGHALAYA and On Behalf of ICAR, Regional Centres** and addressed to “THE DIRECTOR, ICAR RESEARCH COMPLEX FOR NEH REGION UMIAM, MEGHALAYA-793103”.
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. 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**

22/05/18. 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 –

- I. Profile & Track Record of the company. (Company Registration, Certificate of incorporation etc.)
 - II. Document in support for Number of years in Scientific 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 GST Registration etc. (If not applicable submit the relevant document).
 - VI. **Non refundable tender Document Fee of Rs. 500/- 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 State Bank of India, ICAR complex branch (If exempted/relaxed submit the relevant document in support of claim). **Consolidated refundable Earnest Money Deposit (EMD) of Rs. 3,000 (Rupees three 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, 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.**
 - VIII. **Up-to-date 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. 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 stipulated time 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 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.**
 24. Tenders shall be opened on 22/03/18 at 2.30pm, ICAR Research Complex for NEH Region, Umiam, Meghalaya – 793103. Interested bidders may attend the opening.

25. 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.
26. 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.
27. For any query/ clarification, the undersigned may be approached at:
Contact address:
E-mail: p.ghoshicar@gmail.com/storesection@yahoo.in

**Sd/- Narendra Prakash
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

A. For ICAR, Regional Centres

Sl. No.	Name of the Centre	Description of the item	Specifications	Quantity
A.1	Arunachal Pradesh Centre	Autoclave	Autoclave should have 80Ltr or more capacity reaching 120°C at 15-20 PSI with precise De-greased rust free stainless steel outer sheet chamber with mineral / glass- 3 Nos. wool insulation to keep the surface Temperature normal & avoid heat / steam loss. 2. Radial locking for minimum steam loss, assure accurate steam generation / sterilization 3. S. Steel 304 grade argon welded cylindrical inner Tank having Stainless steel tubular immersion heater for steam generation. 4. Lid, ring and all steel should be of 304 grade thick S.S. 5. Should have SS cylindrical basket with paddle lifting device. 6. Lid should be double safety lock and built in safety valve, Release Valve, Pressure gauge, water level / Indicator. 7. Pressure range should be adjustable from 5PSI -20PSI "or better with pressure indicator and control switch. 8. Automatic low water cut-off Device with Alarm and timer from 0-60 minute. 9. Digital Indicator/ Digital Timer 0-999 Min/Hrs.	01 No.
A.2	Arunachal Pradesh Centre	BOD Incubator 3 step voltage stabilizer	Fully Automatic Control System Stainless Steel Inner chamber Full view Inner Glass Door Force Air Circulation for uniform temperature Slow Temperature Rise Heaters for long life Voltage: 220 V/110 V Rated Power: 0.9-1 kW Frequency: 50 Hz/60 Hz Temp. Fluctuation: Less Than $\pm 1^{\circ}\text{C}$ Size: 4 to 6 Cu ft	01 No.
A.3	Arunachal Pradesh Centre	Digital balance	Digital Display Range: 200 gm to minimum 1 kg Accuracy: 0.001mg Div./Readability (Gm): 0.0001 g/0.1 mg Minimum Pan Size(mm) Circle: 160 mm Pan Size(mm) Circle: 160 mm	01 No.
A.4	Nagaland Centre	Autoclave	Tank Capacity: 100 Litre Type: vertical Preferably Digital or PID temperature and pressure control with LCD/LED display Outer chamber : 304 or 316 grade SS Inner Chamber : 304 or 316 grade SS Working	01 No.

			<p>Pressure : 15 psi – 20 psi Sterilizing Temperature : 120-130° C Sterilization Time: the instrument should automatically switched off after desired period of times (121°C for 21 to 30 Min) Digital Timer; glass wool insulation Door opening/closing: Foot lifted Water Filling & Removal: Manually NABL Certification Instrument should be supplied with Dressing drum and Sterilization indicator tape Power supply: 220-240V The Instrument must be of International standard and must be certified by International certifying agency such as CE and ISO Warranty: Standard warranty of 1 year should be quoted. The AMC for next 4 years must be provided in financial bid with maximum variation of 10% in Price for successive years</p>	
A.5	Nagaland Centre	Cryocan	<p>Portable type Capacity: 1.5 to 2 and 20-25 liters Static evaporation loss rate: 0.1 to 0.4 liters per day Static holding time: 15-20 days and 60-70 days Accessories: Cryogloves: protection against -100°C to 196°C, water resistant and comfortable, leight weight, excellent dexterity Tilting trolley: roller base to move the can SS Funnel: Suitable for transfer of liquid nitrogen Stainless steel canister with goblets: Suitable for can</p>	
A.6	Manipur Centre	Constant voltage transformer (20 KVA)	<ul style="list-style-type: none"> • Floor model, preferably with wheels at the base for easy shifting. • Servo control. • Capacity : Minimum 50 KVA. • Phase : Three, each phase should incorporated with auto/manual operation. • Air cooled. • Input range : 300-400 V. • Output range : 400 V ± 1-1.5%. • Input and output should be connected with four wire system. • The output voltage regulation should be digitally adjusted to keep within 1-20V phase to neutral. • Display : LCD or LED, should show both input and output voltage (phase to neutral and phase to phase) and load status for all three phases at a time. • Correction rate : Minimum 35V/sec for each phase. 	01 No.

			<ul style="list-style-type: none"> • Motor type : AC synchronous. • Should conform the national or international standards. • Minimum one year onsite warranty. 	
A.7	Mizoram Centre	Electronic Balance	<p>Electronic Balance (0.001 MG) & (0.1 MG) Electronic balance (0.1 mg)</p> <ul style="list-style-type: none"> • Readability: 0.1 mg • Capacity: 400 mg • Repeatability : ± 0.1mg • Response time: 2 sec • Calibration: Built in calibration • Display: LCD display • Weighing unit: mg <p>Electronic Balance (0.001m)</p> <ul style="list-style-type: none"> • Readability: 0.001 mg • Capacity: 300 mg • Repeatability : ± 0.001mg • Response time: 2 sec • Calibration: Built in calibration • Display: LCD display • Weighing unit: mg 	01 no.
A.8	Mizoram centre	Dancing shaker	<p>Digital dancing shaker Shaker with flat mat Speed range: 10-70 rpm CVoltage:220-240V AC Power: 50W Motor type: DC motor Display: LCD</p>	01 No.
A.9	Mizoram centre	Mechanical Shaker	<p>LBD 1 three dimensional shaker (belly dancer) Speed: 0 to 60 rpm Platform size: 30 x 30 cms DCmotor driven Tilt 10 degree on all sides Cabinet: MS powder coted Features, Excellent for laboratory uses, cost effective,durable, reliable, high performance</p>	
A.10	Mizoram Centre	Hot Air Oven	<p>Temp. range: 5C above ambient to 250°C Temp. accuracy: $\pm 2^\circ\text{C}$ Temp. display: LED Sensor: PT-100 Insulation: Mineral wool Doors: Solid with silicone rubber gasket and lock Shelves: 2-3 stainless steel (removable) Voltage: 220V Control type: PID digital</p>	
A.11	Sikkim Centre	Yodder's apparatus	<ul style="list-style-type: none"> • Yoder type motor driven sieve shaker is 	01 No.

			<p>for carrying our wet sieve analysis of material. (It comprise of sets of nested sieves suspended from a bar which is oscillated by shaft crank driven by an electric motor moving at approximately 11oscillation per 2 sec or 30 oscillation per min.</p> <ul style="list-style-type: none"> • The nested sets of sieves move up and down through a vertical distance of about 3 cm submerged in drum)Consists of a water reservoir and a holder for sieve which can take up to 7 sieves of 6 or 8" dia (sets of sieve each having 20 cm diameter and 5 cm height with sieve opening of 5.0, 2.0, 1.0, 0.5, 0.25 and 0.001 diameter stacked in descending order) • The shaker is driven by1/4 HP motor through a belt drive (fitted with heavy duty motor) • Suitable to operate on 230- volts, 30-50 cycles per min, single phase A.C. • Automatic digital ON/OFF timer • With G.I. tank 	
A.12	Sikkim Centre	Full auto veterinary hematology analyzer	<ul style="list-style-type: none"> • 5-part for VET • Application: Veterinary • Complete Blood Count (CBC) and 5-part white cell differential results • Fully automated 22-50 parameter hematology analyzer +3 histograms • Throughout: 40-60 samples per hour • Automatically cleaning sampling probe • LCD/ TFT with high resolution/ • 5-10 years of warranty • Whole blood mode, Capillary whole blood mode and Prediluted mode. • Tri-angle Laser scatter + Chemical dye + Flow cytometry technology • Storage capacity: 10,000 to 20,000 samples. • Sample volume: 15-50 µL 	01 No.
A.13	Sikkim Centre	Automatic analyzer for fruits and vegetables with software	<ul style="list-style-type: none"> • Should be handheld and fully integrated system allowing users to operate it out in the orchard or inside the lab. • Should measure following produce quality parameters non-destructively by using near-infrared (NIR) spectroscopy. <ul style="list-style-type: none"> ○ Total Soluble Solids (TSS or brix) ○ Dry Matter ○ Titrable Acidity 	01 no.

			<ul style="list-style-type: none"> ○ Internal Color ○ External Color ● Should have built-in GPS for easy crop mapping. ● Should have Transflective display for outdoor viewing ● Rechargeable/replaceable batteries that last all day ● Ability to create customizable models for specific crops or locations <p>Specifications</p> <table border="1"> <tr> <td>Spectrometer</td> <td>Carl Zeiss Spectrometer</td> </tr> <tr> <td>Range</td> <td>310-1100 nm</td> </tr> <tr> <td>Spectral Sample Size</td> <td>3 nm</td> </tr> <tr> <td>Spectral Resolution</td> <td>8-13 nm</td> </tr> <tr> <td>Light Source</td> <td>Xenon Tungsten Lamp</td> </tr> <tr> <td>Lens</td> <td>Glass, coated to enhance NIR</td> </tr> <tr> <td>Shutter</td> <td>Gold-plated reference standard</td> </tr> <tr> <td>Display</td> <td>Sunlight visible transflective LCD screen</td> </tr> <tr> <td>PC Interface</td> <td>USB and SD card</td> </tr> <tr> <td>Data Recorded</td> <td>Raw data, reflectance, absorbance, first derivative,</td> </tr> <tr> <td>Measurement</td> <td>Absorbance, second derivative absorbance</td> </tr> <tr> <td>Power Source</td> <td>Removable 3100 milliamp hour lithium-ion battery</td> </tr> <tr> <td>Battery Life</td> <td>1600+ measurements</td> </tr> <tr> <td>Data Storage</td> <td>Removable 32 GB SD card</td> </tr> <tr> <td>Body</td> <td>Heavy-duty anodized aluminum body</td> </tr> <tr> <td>Dimensions</td> <td>7.1" x 4.75"W, 1.75" thick</td> </tr> <tr> <td>Weight</td> <td>1.05 kg</td> </tr> </table>	Spectrometer	Carl Zeiss Spectrometer	Range	310-1100 nm	Spectral Sample Size	3 nm	Spectral Resolution	8-13 nm	Light Source	Xenon Tungsten Lamp	Lens	Glass, coated to enhance NIR	Shutter	Gold-plated reference standard	Display	Sunlight visible transflective LCD screen	PC Interface	USB and SD card	Data Recorded	Raw data, reflectance, absorbance, first derivative,	Measurement	Absorbance, second derivative absorbance	Power Source	Removable 3100 milliamp hour lithium-ion battery	Battery Life	1600+ measurements	Data Storage	Removable 32 GB SD card	Body	Heavy-duty anodized aluminum body	Dimensions	7.1" x 4.75"W, 1.75" thick	Weight	1.05 kg	
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A.14	Sikkim Centre	Digital soil moisture meter	<ul style="list-style-type: none"> ● Data logging type, stand alone Probe body: waterproof sealed PVC (IP68) Size: 155 x Ø63mm ● Rod length: standard: 160mm ● Rod diameter: 6mm interfaces: IMP-BUS RS485 ● Analogue output: 2x 0.1V, 0(4)..20mA1 0..100% vol. water content -40..+70°C soil temperature ● Power supply: 7V..24V-DC ● Power consumption: 100mA @ 12V/DC during 2.3sec. of measuring 	01 No.																																		

			<ul style="list-style-type: none"> • Moisture measuring range: 0-100% volumetric water content • Temperature caused drift of electronics (full range): $\pm 0.3\%$ Soil temperature measuring range: $-15^{\circ}\text{C} \dots 50^{\circ}\text{C}$ • Soil temperature measuring accuracy: $\pm 0,2^{\circ}\text{C}$ Measurement volume: 1,25L \cong 160x100mm diameter • Operating Temperature: $-15^{\circ}\text{C} \dots 50^{\circ}\text{C}$ (extended temperature range on request) • Calibration: Calibration for a wide range of standard soil types (in accordance with Topp (equation)) standard calibration for most soils, customizable material specific calibration, storage of up to 15 user defined calibration curves, calibration of dielectric permittivity is possible. 	
A.15	Sikkim Centre	Air Conditioner	<ul style="list-style-type: none"> • Split AC; 1.5 ton capacity • Energy rating: 5 star • 1 year warranty on product • 5year warranty on compressor 	5 Nos.

