



राष्ट्रीय मिथुन अनुसंधान केंद्र
भारतीय कृषि अनुसंधान परिषद
National Research Centre on Mithun (NRC-M)
Indian Council of Agricultural Research (ICAR)
Jharnapani, Medziphema, Nagaland-797106 INDIA



F.No.NRCM(S)204/2014

Date: 20.08.2014

RE-TENDER NOTICE

Sealed tenders (*in two bids system*) from the interested manufacturers/Dealers/Suppliers are invited for the supply of the item(s) required for external funded DST & DBT project, as per the details given below :

Sl No.	Brief description of goods	Quantity	Earnest Money (Rs.)
(i)	Upright compound microscope (DST)	01	7,000/-
(ii)	Digital Water bath (DST)	01	5,000/-
(iii)	Incubator Shaker(Orbital) (DST)	01	6,000/-
(iv)	Refrigerated centrifuge (DST)	01	6,000/-
(v)	Deepfreeze -20°C (DST)	01	8,000/-
(vi)	Deepfreeze -80°C (DBT)	01	6,000/-
(vii)	Microscope with digital imaging and fluorescence(DBT)	01	24,000/-

1. Cost of tender is Rs. 1000/- payable through bank draft.

2. The last date for the sale of tender form is **11.09.2014 up to 3.00 PM**

3. The last date of receipt of complete sealed tenders is **12.09.2014 up to 1.00 PM**

4. The process of opening of the tender(s) (*the technical bid*) will start **12.09.2014 at 2.00 PM**

Complete details ie Terms & Conditions, Technical Specifications etc can be obtained alongwith the tender form or can be download from the institute website www.nrcmithun.res.in for submission alongwith the required tender fees etc.

ASSTT. ADMN. OFFICER(S)
FOR AND ON BEHALF OF DIRECTOR

TERMS & CONDITIONS

1. The tender documents along with the terms & conditions and the technical specifications can be had, on any working day, from this Institute at a cost of **Rs.1000/-(One thousand)** (Non-refundable) in the shape of cash or Demand Draft(DD) to be drawn in favour of **DIRECTOR, NRCM, payable at SBI Medziphema,(code 06759)** or can be requested through post by sending a written request along with the cost of tender or can be downloaded from the Institute website. Tender documents downloaded from the website www.nrcmithun.res.in must be accompanied with the cost of tender, failing which the tender shall be summarily rejected.
2. Since the insertion is in accordance with the provisions of “two bid system” the technical bid and financial bid should be sealed by the bidder in **separate covers duly superscribed and both these sealed covers are to be put in a bigger cover which should also be sealed properly and duly superscribed.**
3. Item number, name, date of opening of the tender should be clearly superscribed on the top of the envelope containing the tender (technical and financial bid).
4. The proposed earnest money (**EMD**) may be deposited in the shape of Demand Draft drawn in favour of **“Director, NRCM, Jharnapani” payable at State Bank of India, Medziphema (code 06759).**
5. The last date for the sale of tender form is **11.09.2014 up to 3.00 PM.**
6. The last date of receipt of complete sealed tenders is **12.09.2014 up to 1.00 PM**
7. The process of opening of the tender(s) (the technical bid) will start on **12.09.2014 at 2.00 PM.** The tenders will be opened by a committee nominated by the Director of the Institute in the presence of the tenderers or their authorized representatives, if they wish to be present at the time of opening of the tenders. The Financial Bid(s) as per rules, in respect of each item will be opened after the process of evaluation of the technical bid(s) are over.
8. The required **earnest money must be attached with the technical bid.** The Technical Bid must contain all the technical details along with commercial terms and conditions. Whereas, the Financial Bid must indicate item-wise price for the items/details mentioned in the technical bid.
9. Separate tender form available in the institute website www.nrcmithun.res.in & fees will be required for each item(s). Separate tender (sealed envelope) must be furnished for each item. Envelopes containing documents of more than one tender will be summarily rejected.
10. Prices quoted shall be on FOR, Jharnapani, Nagaland and kept open for at least 90 days from the date of opening of tenders.
11. The successful tenderer will have to **deposit 5% (five percent)** of the total cost of the item as security money (SMD) which will include the already deposited earnest money (EMD) with the tender submitted.
12. All Tender must be sent to DIRECTOR, NRCM, ICAR, JHARNAPANI, MEDZIPHEMA, DIMAPUR, NAGALAND – 797 106 through Registered Post / Speed post only. Tenders submitting **“BY HAND”** will not be accepted.
13. The submission must be supported with the documents related with the clearance of taxes, registrations, annual turnover, authorization certificates, users list with complete addresses etc.
14. Late, delayed, unsealed, unsigned, figures overwritten, in complete tenders, envelope containing more than one submission, without EMD, will not be considered and summarily rejected.

15. The Selected firms/agencies will have to provide installation, demonstration, training free of cost at the purchaser site.
16. Charges for onsite Annual Maintenance Contract after the expiry of the warranty period may be given for our convenient.
17. For items of "imported nature", the selected Indian agent will on behalf of their principals responsible for providing the information/related documents for timely clearance of the consignment without any demurrage charges etc. Information required for the establishment of "Irrevocable Letter of Credit" must be furnished as and when required. Each quote should clearly specify the "agency commission", if any, payable to the Indian agent after the satisfactory installation of the equipment. Rates on FOB and CIF must be shown separately.
18. Director, NRCM, Jharnapani, Nagaland reserves the right to enhance/reduce the quantity of the demanded items and accept/reject entire or a part of the tender(s) submitted, without assigning any reasons, thereof.
19. In case of any dispute, the decision of the Director, NRCM, Jharnapani, Nagaland shall be final and binding on either side.

ASSTT. ADMN. OFFICER(S)
FOR AND ON BEHALF OF DIRECTOR

Copy to :
(i) ARIS I/c for uploading in institute website.

DST

Item Sl.No-(I) Upright compound microscope

Specifications:

- **Type of microscope:** Upright/Inverted, trinocular microscope
- **Eye piece:** Binocular /sliding with graduated and adjustable diopter, Wide field, high eye point with 10x/16x lenses coated with antifungal
- **Nose piece:** Provision for attaching 4-6 objective lenses
- **Objective :** Preferably plan apochromatic or Semi apochromatic infinity Corrected, coated with antifungal
- **Details of objectives for bright field:** 10X, 20X, 40X, 65X and 100X Oil immersion
- **Stage:** Ceramic Coated Low Profile double Stages with scale marking and slide holder with low positioned X-Y coaxial control knobs.
Size of stage 15-20 cm x 10-14 cm,
- **Condenser:** Adjustable condenser centre with Abbe 1.25 NA with scale marking corresponding to the objective lenses
- **Filters:** Filter for bright light
- **Focusing :** Coarse and fine adjustable focusing with low position controlled knobs
- **Illumination :** 30 Watts Halogen Illumination with Automatic Voltage sensing power supply for Transmitted Light Use.
- **Image capture module and image analyzer software:**
- **CCD Sensor:** 2- 3 megapixel, CMOS,
- **Pixel Size:** 2 μm x 3 μm
- **Image Resolution:** 2x, 3x
- **Frame Rate:** 30-40 frames per second
- **Capture:** Still images (.jpg, .tiff, .bmp, .psd) and video (.avi)
- **Microscope Connection:** C-Mount thread for connecting to your microscope-specific c-mount adapter. Should have USB and firewire ports
- **A/D Conversion:** 3 x 10 Bit RGB
- Should be supplied with the software of the camera compatible with windows (XP/7/8, 32 & 64 bit) software for camera operation
- Should be supplied with required attachments and accessories such as compatible computer having 1 GB HD, i3 processor, 2 GB Ram
- **Warranty** – at least 5 years for instrument post installation against any manufacturing defects and 3 years for camera and software
- The supplier should have their Service Centre in India preferably in North Eastern Region
- The supplier should have experience of installing the system in North East India and should provide the list of the laboratories/institutes where it has been installed
- **Compliance report against each specification in tabular format in hard copy** as well as soft copy in CD and original copy of the catalogue of the entire system should be provided.
- Original information broucher of the Instrument should be provided
- Price should quoted F.O.R. destination

Item Sl.No-(II) Specifications for Digital Water Bath

- Temperature range should be from ambient to 100°C
- Capacity should be 20-30 Liters
- System should be made of stainless steel
- Stainless-steel covers should be provided with the system
- Should have PID control providing approx $\pm 0.25^{\circ}\text{C}$ uniformity, $\pm 0.5^{\circ}\text{C}$ stability and $\pm 0.1^{\circ}\text{C}$ control resolution at 37°C
- Digital temperature set and readout selectable display should have at least 0.1° resolution
- Shaking speed upto 200 strokes per minute with stroke length of 20-30 mm
- Movable temperature controllers should be available in the system
- Heating elements should be stable even if the bath, by chance, runs dry
- Drain pump should be included with the system
- The system should work on 220-240 Volts 50 Hz Single Phase.
- The system should be supplied with 3 KV stabilizer with high ampere and timer control system.
- Warranty – at least three years post installation
- The supplier should have their Service Centre in India preferably in North Eastern Region
- The supplier should have experience of installing the system in India and should provide the list of the laboratories/institutes where it has been installed
- **Compliance report against each specification in tabular format in hard copy** as well as soft copy in CD and original copy of the catalogue of the entire system should be provided.
- Original information broucher of the Instrument should be provided
- Price should quoted F.O.R. destination

Item Sl.No-(III) Specifications for Incubator Shaker (Orbital)

- LCD display with microprocessor controlled temperature control device with variation within $\pm 0.5^{\circ}\text{C}$
- Unique air flow system for even temperature distribution
- Temperature stability and reduced energy consumption through foamed - in place CFC free PUF insulation
- Triple eccentric drive to ensure long life and smooth operation
- Stainless steel inner chamber
- Audio visual alarm for controlling temperature and RPM deviation from the set value
- Cabinet insulated with high density CFC free poly urethane foam
- Interior of chambers should be fabricated using mirror finish stainless steel (304 SS, 0.8 mm thick)
- Chambers made of powder coated steel (1.0 mm thick)
- Door should be provided with magnetic gasket and a keyed door lock
- Inside storage should be facilitated through stainless steel trays
- Hermitically sealed compressor for superior cooling
- Universal platform and holders for flasks/bottle, (500 ml, 1000 ml), test tube (15 ml) and ELISA plates should be quoted
- The Instrument should be supplied with one 4 KV Stabilizer

Technical specifications

Temperature Range	Amb+5°C to 60°C
Temp Accuracy	$\pm 0.5^{\circ}\text{C}$
Temp Control	Micro controller/ PLC controller
Standard platform Size	420x420 mm
Max. Capacity	1000 ml
Shaking Speed	20-300 RPM
Shaking Motion	Orbital
Shaking Amplitude	25 mm

- The system should work on 220-240 Volts 50 Hz Single Phase.
- Warranty – at least three years post installation
- The supplier should have their Service Centre in India preferably in North Eastern Region
- The supplier should have experience of installing the system in India and should provide the list of the laboratories/institutes where it has been installed
- **Compliance report against each specification in tabular format in hard copy** as well as soft copy in CD and original copy of the catalogue of the entire system should be provided.
- Original information broucher of the Instrument should be provided
- Price should quoted F.O.R. destination

Item Sl.No-(IV) Specifications for High Speed Refrigerated Centrifuge

Specifications

- 1) Automatic rotor identification system.
- 2) LCD display with microprocessor control.
- 3) Inbuilt programme storage memory
- 4) The operation data of main engine and rotor should get stored automatically.
- 5) Automatic calculation of the service life of the rotor.
- 6) The brushless direct drive electromotor with frequency conversion, which should have high torque and short acceleration time.
- 7) Imbalance, automatic door interlock, over temperature and over speed protective function for the safety of people and instrument.
- 8) RCF value should be set directly for centrifuging operation without speed setting.
- 9) The refrigeration system should be free from CFC and other environmental hazards

10) TECHNICAL PARAMETER:

Max Speed: 16-30000r/min

Max RCF: 60000xg

Max Capacity: 4x100ml

Speed Accuracy: ± 30 r/min

The Dimension of Temperature Setting: -20°C - $+40^{\circ}\text{C}$

Temperature Accuracy: $\pm 10^{\circ}\text{C}$

Refrigeration system: Non-Freon Refrigeration System

Time Range: 0-23h 59min

Power Supply: AC220v 50Hz

11) ANGLE ROTOR:

- Capacity: 24x1.5/2ml; speed: upto 20000r/min; Max RCF: 25000xg
- Capacity: 12x15ml; speed: 20000r/min; Max RCF: 25000xg.
- Capacity: 0.2 PCR tubes, speed: 20000r/min; Max RCF: 25000xg.
- Rotors should be of aluminum alloy/ titanium alloy/carbon fiber.

12. The system should work on 220-240 Volts 50 Hz Single Phase

13. The Instrument should be supplied with one 4 KV Stabilizer

14. Warranty – at least three years post installation

15. The supplier should have their Service Centre in India preferably in North Eastern Region

16. The supplier should have experience of installing the system in India and should provide the list of the laboratories/institutes where it has been installed

17. **Compliance report against each specification in tabular format in hard copy as well as soft copy in CD and original copy of the catalogue of the entire system should be provided.**

18. Original information broucher of the Instrument should be provided

19. Price should quoted F.O.R. destination

Item Sl.No-(V) Specification of Deepfreeze (-20°C)

- Temperature Range: -20°C preferably upto -40°C
- Capacity: should be about 250-500 liters
- Freezer should be vertical
- Exterior Dimensions: should not be more than 35"W x 80"H x 40"
- Interior Dimensions: should not be less than 20.0"W x 50"H x 25"
- Body material (Interior as well as exterior) should be preferable of stainless steel
- Refrigeration: One 1 HP
- Instrument should have preferably double compressor with minimum of three years warranty
- Insulation: Non-CFC, foamed-in-place urethane: 5.0" cabinet; at least 4.5" door with triple-point door gasket
- Electrical -nominal voltage $\pm 10\%$: 230V, 50 Hz, 6.5 FLA Operating Range: 208-230VAC
- It will be preferred to have microprocessor control, centralized control and monitoring system
- Freezer should have multiples inner doors to reduce cold air loss and improve temperature recovery after door closings
- Freezer should have power management system with low voltage surge protection and buck/boost
- Freezer should have easy-to-remove, washable filter to provides protection from dust on the condenser
- Freezer should have easy-roll at least 2 inch locking casters
- Freezer should allow single-hand operation, easy-to-use, padlock-compatible, ergonomic door handle with integrated key lock
- The instrument should be quoted with removal trays and racks for keeping cryo boxes
- The Instrument should be quoted with one no of 2 tonn cooling device as preinstallation requirement for the instrument.
- The system should be supplied with 5 KV stabilizer with high ampere and timer control system.
- Warranty – at least three years post installation
- The supplier should have their Service Centre in India preferably in North Eastern Region
- The supplier should have experience of installing the system in North East India and should provide the list of the laboratories/institutes where it has been installed
- **Compliance report against each specification in tabular format in hard copy** as well as soft copy in CD and original copy of the catalogue of the entire system should be provided.
- Original information broucher of the Instrument should be provided
- Price should quoted F.O.R. destination

Item Sl.No-(VI) Specification of Deepfreeze (-80°C)

- Temperature Range: -80°C
- Capacity: should be about 250-500 liters
- Freezer should be vertical
- Exterior Dimensions: should not be more than 35"W x 80"H x 40"
- Interior Dimensions: should not be less than 20.0"W x 50"H x 25"
- Body material (Interior as well as exterior) should be preferable of stainless steel
- Refrigeration: One 1 HP
- Instrument should have preferably double compressor with minimum of three years warranty
- Insulation: Non-CFC, foamed-in-place urethane: 5.0" cabinet; at least 4.5" door with triple-point door gasket
- Electrical -nominal voltage $\pm 10\%$: 230V, 50 Hz, 6.5 FLA Operating Range: 208-230VAC
- It will be preferred to have microprocessor control, centralized control and monitoring system
- Freezer should have multiples inner doors to reduce cold air loss and improve temperature recovery after door closings
- Freezer should have power management system with low voltage surge protection and buck/boost
- Freezer should have easy-to-remove, washable filter to provides protection from dust on the condenser
- Freezer should have easy-roll at least 2 inch locking casters
- Freezer should allow single-hand operation, easy-to-use, padlock-compatible, ergonomic door handle with integrated key lock
- The instrument should be quoted with removal trays and racks for keeping cryo boxes
- The Instrument should be quoted with one no of 2 tonn cooling device as preinstallation requirement for the instrument.
- The system should be supplied with 5 KV stabilizer with high ampere and timer control system.
- Warranty – at least three years post installation
- The supplier should have their Service Centre in India preferably in North Eastern Region
- The supplier should have experience of installing the system in North East India and should provide the list of the laboratories/institutes where it has been installed
- **Compliance report against each specification in tabular format in hard copy** as well as soft copy in CD and original copy of the catalogue of the entire system should be provided.
- Original information broucher of the Instrument should be provided
- Price should quoted F.O.R. destination

Item Sl.No-(VII) Specification for Microscope with digital imaging and fluorescence

Type of microscope: Upright/Inverted, trinocular microscope

Eye piece: Binocular /sliding with graduated and adjustable diopter, Wide field, high eye point with 10x/16x lenses coated with antifungal

Nose piece: Provision for attaching 4-6 objective lenses

Objective : Preferably plan apochromatic or Semi apochromatic infinity Corrected, coated with antifungal

Two set of objectives of bright field and fluorescent observations

Details of objectives for bright field: 5X, 10X, 20X, 40X, 65X & 100X

Details of objectives for fluorescent observation

F10X, N.A 0.40-0.50 W.D 1.0mm , F N 24

F20X, N.A 0.50-0.70. W.D 0.7mm , F N 24

F40X, N.A 0.82, W.D 0.15mm , F N 24

F100X Oil, N.A 1.25, W.D 0.2mm FN.24

Stage: Ceramic Coated Low Profile double Stages with scale marking and slide holder with low positioned X-Y coaxial control knobs, Size of stage 15-20 cm x 10-14 cm,

Condenser: Adjustable condenser centre with Abbe 1.25 NA with scale marking corresponding to the objective lenses

Filters: Filters for bright light as well as fluorescent light

Chroma filters (Dichronic mirror and emilter filter with 25 mm diameter) for UV, Blue, Green and Red fluorescence

Focusing: Coarse and fine adjustable focusing with low position controlled knobs

Illumination: 30 Watts Halogen Illumination with Automatic Voltage sensing power supply for Transmitted Light Use.

EPI-Fluorescence Attachment: Modular six positions EPI- Fluoresce illuminator attachment with blue, green and UV filters, 100 watt mercury lamp with minimum life of 200-250 hours, An additional one 100 watt mercury lamp should be provided

Dark field & Phase contrast attachment: Zernike phase condenser for Uplan Phase objective with centerable Phase annuli for 10x , 20x, 40x, 400x with bright field Position with Iris diaphragm in dove tail mount.

Centering Telescope 30.0mm OD.

Semi Appo objective, 100X oil immersion dark field objective with stroke condensive system,

Dark field condenser with Dove tail Mount.

Image capture module and image analyzer software:

- Image capture module with colorfast cool technology (Still images in .jpg, .tiff, .bmp, .psd and video .avi format).
- CCD type with C mount with provision of image capturing and live recording with precise measurement tools, 5-7 mega pixel, maximum frame rate 20 -30 frames per second fps and resolution of upto 10X, USB and fire wire provisions, image analyser software should be compatible with Windows XP/Vista/ Windows 7/8 (32 & 64 bit).
- **A/D Conversion:** 3 x 12 Bit RGB
- Warranty – at least FIVE YEARS from the date of supply against any manufacturing defects post installation
- The supplier should have their Service Centre in India preferably in North Eastern Region
- The supplier should have experience of installing the system in North East India and should provide the list of the laboratories/institutes where it has been installed

- The supplier should provide servicing of the Instrument at least 2 times in a year including cleaning, and antifungal treatment of the lenses and the duct system till the period of warranty.
- **Compliance report against each specification in tabular format in hard copy** as well as soft copy in CD and original copy of the catalogue of the entire system should be provided.
- Original information broucher of the Instrument should be provided
- Price should quoted F.O.R. destination