

# INVITATION TO TENDER AND INSTRUCTIONS TO TENDERERS

**Tender for  
Procurement of Equipments for  
“Modernization of Animal Cell Line Engineering and Metabolomic Facility”  
For CBT-IST under AICTE-MODROBS.**

**Tender**

**Schedule for sale of document: 30.06.2018 to 13.07.2018**

**Tender opening Date: 14.07.2018**



**CENTRE FOR BIOTECHNOLOGY  
INSTITUTE OF SCIENCE & TECHNOLOGY  
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY  
KUKATPALLY, HYDERABAD.**

**TENDERER**

*[Signature]*  
**Dr. A. UMA**  
Assistant Professor  
Centre for Biotechnology,  
Institute of Science and Technology,  
JNTU, Hyderabad-85, Telangana State.  
**Chief Coordinator**  
MODROBS, AICTE, Project  
CBT, IST, JNTUH - 85.

**DIRECTOR**

*[Signature]*  
**DIRECTOR**  
JNTU Institute of Science & Technology  
Kukatpally, Hyderabad-85.



**INVITATION TO TENDER AND  
INSTRUCTIONS TO TENDERERS FOR THE SUPPLY OF EQUIPMENTS FOR  
MODERNIZATION of ANIMAL CELL LINE ENGINEERING AND METABOLOMIC  
FACILITY FOR  
CBT, Institute of Science & Technology, JNTUH**

Institute of Science & Technology, Jawaharlal Nehru Technological University, Hyderabad invites tenders for the supply of equipments for “**Modernization of Animal Cell Line Engineering and Metabolomic Facility**” for CBT-IST under AICTE-MODROBS as per specifications given in the Schedule attached to the Tender form annexed here to. All offers should be made in English and should be written in both figures and words. The list of equipments include

S.No	Name of equipment	Quantity
1	Phase Contrast Inverted fluorescent microscope	1
2	Rotavapor	1
3	High speed cooling centrifuge	1
4	CO <sub>2</sub> incubator	1

The tender schedules can be obtained from CBT, IST, JNT University, Kukatpally, Hyderabad on payment of Rs.2000/- (Rupees Two Thousand only) in the form of crossed Demand Draft on any Nationalized Bank drawn in favor of “The Director, IST,JNTUH, Hyderabad.” payable at Hyderabad. Alternatives offer / option, if any, must be quoted in separate tender schedule.

Tender fee once paid is neither refundable, transferable nor adjustable for other tenders. The tender form is non-transferable and should be purchased in the exclusive name of the party who has to actually submit the offer.

The Director, IST, JNT University, Hyderabad reserves the right to select certain items (in single or multiple units) and reject the others or all mentioned in the schedule. The Director, IST, also reserves the right to revise or alter the specifications of the above mentioned equipment before acceptance of any tender.

Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored, and rejected.

**Delivery:**

The tenderer shall be responsible for delivery of the given equipments including installation (including civil works if any) as per the specifications at destination site. No additional charges would be paid in separate.

**EMD:**

A Demand Draft for Rs. 20,000/- (Rupees Twenty Thousand only) drawn in favor of “The Director, IST, JNT University, Hyderabad” towards EMD must accompany the tender. Those tenders without EMD will be rejected summarily. The EMD will be refunded to all the unsuccessful tenderers only after the purchase orders are placed on the successful tenderer.

**TENDERER**

*[Signature]*  
Chief Coordinator  
MODROBS, AICTE, Project  
CBT, IST, JNTUH - 85.

*[Signature]*  
**DIRECTOR**  
**DIRECTOR**  
JNTU Institute of Science & Technology  
Kukatpally, Hyderabad-85.



The final acceptance of the above mentioned equipments will be made only after delivering goods in good condition and to the satisfaction of the specifications given, by the Institute and satisfactory functioning of the same.

**Prices:**

The Prices must be quoted must be in Indian rupee currency with detailed description and should be inclusive of packing, forwarding, freight, insurance, delivery and installation (including civil works if any) at destination site (CBT, Institute of Science & Technology, JNTUH, Kukatpally, Hyderabad) and all taxes.

**Validity:**

The tenders should be valid for acceptance up to a period of 30 days. The tenderers should be ready to extend the validity, if required,

**Demonstration and feedback:**

The tenders must accompany the list of reputed organizations, and educational institutions where the similar orders have been executed with track record along with proof of work order. They should provide the demonstration, if required.

A list of organizations and institutions where in the given equipments have been purchased and are being in use should be provided.

**Delivery:**

All the items ordered shall be delivered with proper packing within the maximum delivery period of 60 days from the date of issue of order at the above destination.

**Terms of Payment:**

Payment shall be made by Dr.A.Uma, Chief Coordinator, AICTE-MODROBS, CBT-IST, JNTU, Hyderabad only after receipt of the equipments (including accessories) in good condition with all specifications, standards, demo and training to the entire satisfaction of the Institute/University. If the institute is unsatisfactory with any of the specified/unspecified but essential features of the equipment the instrument will be summarily rejected even after delivery and demo.

**Terms and Conditions of the Tendering Firms:**

Printed terms and conditions of the Tenderers will not be considered as forming part of their tenders. Tenderer should supply the above mentioned equipments as per the specifications. If it is not done as per the same, the purchase committee (including technical and financial) decision is final.

**Delivery of Tender:**

The sealed tender should be addressed to:

**The Director,  
Institute of Science & Technology,  
JNT University Hyderabad,  
Kukatpally, Hyderabad – 500 085**

Superscripted on the right hand side “TENDER FOR “PROCUREMENT OF EQUIPMENTS FOR MODERNIZATION OF ANIMAL CELL LINE ENGINEERING AND METABOLOMIC FACILITY” FOR CBT, IST” and should indicate clearly the name and address of the tenderer. In addition, left hand corner of the envelope / container should indicate the Tender No., date and time of opening of tender. The Institute reserves the Right to reject any tender which fails to comply with the above instructions. All tenders should be sent by Registered post or through messenger- to drop the tender in the sealed tender box provided in the office; it is the responsibility of the tenderer to see that

**TENDERER**

*[Signature]*  
Chief Coordinator  
MODROBS, AICTE, Project  
CBT, IST, JNTUH - 85.

*[Signature]*  
**DIRECTOR**  
INTU Institute of Science & Technology  
Kukatpally, Hyderabad-85.



his tender offer is delivered by the specified time at the above address. All further communication should be addressed to the Officer named above and by title only.

**Time for Receipt of Tenders:**

The tender must reach the Director, Institute of Science & Technology, JNT University, Kukatpally, Hyderabad – 500085 not later than 13<sup>th</sup> July 2018, by 3.00 pm. Tenders submitted after the specified time shall not be considered and no intimation will be sent in this regard. The Tenders will be opened on 14<sup>th</sup> July 2018 from 3.00 pm to 4.00 pm.

**Tenderer should make their representative available at the time of opening tenders in the meeting hall of the institute located on 2<sup>nd</sup> floor, IST Building or any other designated place within the University Campus.**

**Right to Acceptance:**

The Director, Institute of Science & Technology, JNT University, Hyderabad and Dr.A.Uma, Coordinator, DST-FIST, CBT-IST do not bind themselves to accept the lowest on any tender and reserves to the right of accepting the whole or any part of the tender or portion of the quantity offered and the tenderer shall supply the same at the rate quoted. Further the Director, IST and Dr.A.Uma, Coordinator, DST-FIST, CBT-IST reserves the right to reject any or all offers received in response to tender or cancel or withdraw the tender notice without assigning any reason, whatsoever.

**Results of Tender:**

Acceptance of Tender shall be communicated by letter of acceptance or formal acceptance of the tender to the successful tenderer.

**Other Terms:**

The Tenderer should produce Value Added Tax (VAT) – Registration Certificate. Only 5% GST is allowed any instrument without any other extra taxes.

Tenderer should be responsible and bear any price escalation within the validity period and also after the indent has been placed till the supply.

**Warranty Declaration: All tenderers should give a warranty declaration on nonjudicial stamp paper of Rs.100/- as detailed below:**

We have thoroughly gone through the tender terms and conditions of the tender.

We warrant that everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship and shall be of the highest quality and material of the type ordered, shall be in full conformity with the specifications.

Any deviation in the material, and the specifications from the accepted terms may liable to be rejected and the tenderer need to supply all the goods in the specified form to the satisfaction / specifications specified in the order / contract and demonstrate at the their own cost.

The payments shall be made only after receiving the material in the required format and quality to the satisfaction of the University authorities and after satisfactory installation and training.

During warranty period, repair service will be provided within 15-20 days of notice from the university.

For any further information in this regard, please contact The Director, IST during 10.00 am to 04.00 pm, on all working days.

**TENDERER**

*[Signature]*  
Chief Coordinator  
MODROBS, AICTE, Project  
CBT, IST, JNTUH - 85.

*[Signature]*  
**DIRECTOR**  
DIRECTOR  
JNTU Institute of Science & Technology  
Kukatpally, Hyderabad-85.



## **SPECIFICATIONS**


List of equipment to be quoted under “**Modernization of Animal Cell Line Engineering and Metabolomic Facility**” includes:

<b>S.No</b>	<b>Name of equipment</b>	<b>Quantity</b>
<b>1</b>	<b>Phase Contrast Inverted fluorescent microscope</b>	<b>1</b>
<b>2</b>	<b>Rotavapor</b>	<b>1</b>
<b>3</b>	<b>High speed cooling centrifuge</b>	<b>1</b>
<b>4</b>	<b>CO<sub>2</sub> incubator</b>	<b>1</b>

### **SPECIFICATIONS FOR PHASE CONTRAST INVERTED FLUORESCENT MICROSCOPE**

- 1) **OPTICAL SYSTEM**- Infinity corrected optical system with 100x-1000x magnification.
- 2) **Frame**: Rigid and vibrations free frame.
- 3) **EYE PIECE TUBE**: Trinocular tube (inclination: 30°).
- 4) **NOSE PIECE**- Reversed type quadruple nosepiece for 4 objectives at a time, with a slot for analyzer or DIC slider.
- 5) **STAGE**- Rectangular refocusing type stage with ceramic coating and double slide holding capacity.
- 6) **COARSE/ FINE FOCUSING**-Fine: 0.2mm per rotation, coarse: 37mm per rotation (approx).
- 7) **OBJECTIVES**: 10X, 20X, 40X, 100X.
- 8) **CONDENSER**- Six position universal condenser for bright field, phase contrast, dark field and fluorescence microscopy application.
- 9) **ILLUMINATION SYSTEM**-6v30 watt halogen or 3 watt LED uniform illumination or better X 2pcs.
- 10) **FLUORESCENCE UNIT**: Fluorescence with alignment free 130W mercury illumination having bulb life of minimum 2000 hours. Fluorescence axis should have at least eight cube filter turret with Zero Pixel Shift technology.
- 11) **FLUORESCENCE FILTERS**-With three position fluorescence filter turret
  - Filter block blue for FITC/ Acridine Orange/ Auramine (EX465-495, DM505 and EM 515-555nm);
  - Filter block green for TRITC/ Rhodamine/ Proium iodide (EX540-565, DM555 and EM 605-655nm);
  - Filter block UV for DAPI/Hoechst (EX5330-380, DM400 and EM 435-485nm);
- 12) **CAMERA**: Digital color cooled CCD camera with 2/3” CCD chip, with approx. 10.00 million pixel resolutions with minimum 8 bit output or higher. Speed of minimum 25 frames per second, live display mode; with peltier cooling 20℃ below ambient, digital zoom option; interval shooting.
- 13) **IMAGE ANALYSIS SOFTWARE**: Features for image acquisition and device control up to three dimensional, live image capture, time lapse imaging, manual measurement & object counting, large image report generator facility, vector layer & multi dimensional file format etc.

**TENDERER**



Chief Coordinator  
MODROBS, AICTE, Project  
CBT, IST, JNTUH - 85.

**DIRECTOR**

INTU Institute of Science & Technology  
Kukatpally, Hyderabad-85.



- 14) DATA PROCESSING UNIT: Branded PC with Intel Core i7 processor, CPU 3.40 GHz, 4GB RAM, 500 GB HDD, optical mouse, DVD writer, 18.5" TFT color monitor, multimedia kit, 1394B fire wire port & cable along with ups & color inkjet printer.
- 15) Suitable UPS with at least 30 mins power back-up and compatible stabilizer.
- 16) Warranty: At least three years warranty on all parts including lamp. Two 130 mercury bulb for illuminator should be provided.
- 17) Sole/exclusive distributor certificate of microscope & camera should be provided.
- 18) User list of at least 5 similar installations in reputed institutes should be provided.
- 19) The microscope should be CE certified and CE certificate should be submitted along with the bid.
- 20) All the accessories required for installation and demo should be provided.
- 21) Warranty for a minimum of 5 yrs should be provided for all the parts and also for the entire instrument.
- 22) Warranty starts from the date of installation and on demand repair services as and when required should be provided.
- 23) Warranty should be given on manufacturer letter head.

### SPECIFICATIONS FOR ROTAVAPOR

1. Flask Volume (both evaporatory and receiving) range should be 500ml to 1000 ml.
2. Lift should be manual.
3. It should have coated glassware for safety.
4. Bath fill volume should be atleast 3 litres.
5. Operating voltage should conform to Indian standards (220-240 V).
6. Condensation glassware assembly should be vertical with atleast 1500 cm<sup>2</sup> cooling surface.
7. The rotation speed range should be 20 - 280 rpm.
8. Timer function should be available.
9. Safety features should include individually settable temperature circuits, dry-run protection and adjustable lower end stop and lock function of bath setting.
10. Additional set of glassware should be provided along with the instrument.
11. Temperature range should be 20°C to 100°C or more.
12. Option for manual height adjustment should be present.
13. Heating bath material should be of stainless steel.
14. Instrument should be provided with suitable vacuum pump and chiller.
15. DC motor drive with electronic speed control.
16. Alarm and time function should be present.
17. Shall include the recovery flask, evaporation flask and any other required accessories for safe and efficient operation.
18. The vacuum pump should be Two-stage oil free diaphragm pump made from chemically resistant materials (such as PTFE or equivalent) and pump all type of vapours.
19. The vacuum pump should have a suction capacity of 2 m<sup>3</sup>/hr and ultimate vacuum of 7mbar.
20. User list of at least 5 similar installations in reputed institutes should be provided.
21. All the accessories required for installation and demo should be provided.
22. Warranty for a minimum of 5 yrs should be provided for all the parts and also for the entire instrument.
23. Warranty starts from the date of installation and on demand repair services as and when required should be provided.
24. Warranty should be given on manufacturer letter head.

**TENDERER**

*[Signature]*  
 Chief Coordinator  
 MODROBS, AICTE, Project  
 CBT, IST, JNTUH - 85.

*[Signature]*  
**DIRECTOR**

**DIRECTOR**

JNTU Institute of Science & Technology  
 Kukatpally, Hyderabad-85.



## SPECIFICATIONS FOR HIGH SPEED COOLING CENTRIFUGE

1. Temperature range -  $+4^{\circ}\text{C}$  to  $37^{\circ}\text{C}$ .
2. Speed range – 17000 to 20000 rpm with unit increment.
3. Max RCF – 25000-35000 g.
4. Motor type – direct brushless induction motor with CFC free refrigeration system.
5. Auto rotor identification.
6. Instrument should support different rotors.
7. Rotors should support 50ml, 15ml, 1.5-2ml tubes and appendorfs.
8. Quotation should include rotors for 24x2 ml, 6x50 ml, 4x500 ml volumes. Suitable adaptors for 15 ml, 2ml should be provided.
9. Alarms for lid closure, imbalance etc should be present.
10. Programmable acceleration and deceleration should be present.
11. Programmable Microprocessor control.
12. Digital speed indicator for rpm and rcf should be present.
13. Display should be of LCD with indicators for rpm, rcf, time, temperature.
14. Precooling option should be present.
15. The instrument should have an option of manual lid opening in case of power failure for sample retrieval.
16. It should have built-in condensation drain to eliminate excess water to prevent corrosion.
17. The equipment should be made of non corrosion material both internally and externally.
18. All rotors, buckets should be metallic. Rotors, caps, buckets and adaptors must be autoclavable.
19. Suitable stabilizer must be provided along with the instrument.
20. User list of at least 5 similar installations in reputed institutes should be provided.
21. All the accessories required for installation and demo should be provided.
22. Warranty for a minimum of 5 yrs should be provided for all the parts and also for the entire instrument.
23. Warranty starts from the date of installation and on demand repair services as and when required should be provided.
24. Warranty should be given on manufacturer letter head.

## SPECIFICATIONS FOR CO<sub>2</sub> INCUBATOR

1. One CO<sub>2</sub> incubator shaker for suspension cultures with 150-210 litres capacity.
2. Should have a direct heating profile with fan assisted design.
3. Equipped with built-in-two detachable mini shakers on 2 shelves. Shakers should be removable.
4. Inner chamber should be seamless and made up of stainless steel or copper. Copper is preferable.
5. Microprocessor PID controlled and LED display should show levels of temperature, CO<sub>2</sub>, humidity rpm and other parameters.
6. Dual Beam Infra-Red Sensor to maintain control of CO<sub>2</sub> density.
7. Simultaneous conduction of adherent and suspension cell culture.
8. Built-in-shaker run by low noise, low heat occurrence, vibration-free plate BLDC Magnetic Induction Drive.
9. Humidity of more than 70% using water tray and maintenance-free insulated dry wall.
10. High temperature disinfection with temperature Range of ambient  $+5^{\circ}\text{C}$  to  $60^{\circ}\text{C}$  with  $\pm 0.25^{\circ}\text{C}$  accuracy.
11. Time Range – continuous.
12. CO<sub>2</sub> Range - 0% to 20% with  $\pm 0.1\%$  accuracy.
13. Shaker Speed should be 30 to 300 rpm with  $\pm 0.1$  rpm accuracy and 1 rpm increment with orbital motion.

**TENDERER**

Chief Coordinator  
MODROBS, AICTE, Project  
CBT, IST, JNTUH - 85.

**DIRECTOR**  
**DIRECTOR**  
JNTU Institute of Science & Technology  
Kukatpally, Hyderabad-85.



14. Outer Door should be silicon packing magnet door and Tempered safety inner glass door.
15. Shaker should be able to hold atleast 6X250ml conical flask
16. Audio visual alarms.
17. Should have ISO9001 and CE certification.
18. Validation certificate of the decontamination routine from any accredited by 3<sup>rd</sup> party should be provided.
19. User list of at least 5 similar installations in reputed institutes should be provided.
20. All the accessories required for installation and demo should be provided.
21. Warranty for a minimum of 5 yrs should be provided for all the parts and also for the entire instrument.
22. Warranty starts from the date of installation and on demand repair services as and when required should be provided.
23. Warranty should be given on manufacturer letter head.

NOTE: Basic essential specifications not mentioned should be present in the instruments.

**TENDERER**

  
Chief Coordinator  
MODROBS, AICTE, Project  
CBT, IST, JNTUH - 85.

  
**DIRECTOR**  
**DIRECTOR**

Institute of Science & Technology  
Kukatpally, Hyderabad-85.



## BID PARTICULARS

1. Name of the Supplier :
2. Address of the Supplier :
3. Address of the Company :
4. Availability of demonstration of equipments : Yes / No
5. EMD enclosed : Yes / No if Yes  
D.D. No. \_\_\_\_\_ Bank \_\_\_\_\_  
Amount \_\_\_\_\_
6. Name and address of the Officer to whom all references shall be made regarding this tender enquiry.  
  
Name :  
  
Address :  
  
  
Telephone No.:  
  
Fax No. :  
  
Mobile No :  
  
e-Mail :  
  
Web :

**TENDERER**

*[Signature]*  
Chief Coordinator  
MODROBS, AICTE, Project  
CBT, IST, JNTUH - 85.  
  
Dr. A. Usha  
Assistant Professor  
Institute of Science and Technology  
JNTU Hyderabad  
Kukatpally, Hyderabad-85, Telangana State.

*[Signature]*  
**DIRECTOR**

**DIRECTOR**

Institute of Science & Technology  
Kukatpally, Hyderabad-85.