

**DEPARTMENT OF ZOOLOGY  
UNIVERSITY OF LUCKNOW  
LUCKNOW-226007**

**TENDER NO. LU-Zoolog/DST-FIST/2018**

**Dated: March 26, 2018**

**Short term Tender/Bid invited for scientific equipments  
required for 'Central Laboratory Equipment Facility' under DST-FIST  
programme 2017-18 in the  
Department of Zoology, University of Lucknow,  
Lucknow-226007**



**Non transferable**

**DEPARTMENT OF ZOOLOGY  
UNIVERSITY OF LUCKNOW  
LUCKNOW -226007**

**TENDER NO. LU-Zoology/DST-FIST/2018**

**Dated: March 26, 2018**

**Notice inviting short term tenders for scientific equipments required for 'Central Laboratory Equipment Facility' under DST-FIST programme 2018 in Department of Zoology, University of Lucknow, Lucknow.**

Sealed tenders are invited from registered, experienced & reputed firms under **Two Bid System, i.e. Technical Bid & Financial Bid** for the scientific equipments required under DST-FIST programme 2017-18 in the Department of Zoology, University of Lucknow, Lucknow.

**1. Detailed description of the items required along with specifications  
(Please see Annexure I)**

**2. Time Schedule:**

Date of downloading of Bid document: **26.03.2018 onwards till last day**

Last Date & Time for receipt of tenders: **16.04.2018 at 4.00 P.M.**

Date & Time for opening of Bid: **17.04.2018 at 3:00 P.M.**

Place of deposit of tender: Head of Department  
Department of Zoology  
University of Lucknow  
Lucknow-226007

**3. Cost of Tender Form: Rs. 1180/- (including GST)** in form of bank draft from any National bank in favour of **Finance Officer, University of Lucknow** payable at Lucknow must be enclosed with tender form. Cost of tender form is Non-refundable.

**4. Validity of Tender:** 90 days from the date of opening of tender.

**5. The interested firms may put the document completed in all respects along with Earnest Money Deposit (EMD) in the name of Finance Officer, University of Lucknow, Lucknow-226007 in form of bank draft only from any Nationalized bank. The EMD rates are as follows:**

<b>1. FLOW CYTOMETER</b>	<b>: Rs. 70,000.00</b>
<b>2. GC-MS</b>	<b>: Rs. 80,000.00</b>

**6.** The University of Lucknow, reserves all right to amend or withdraw any of the terms and conditions contained in tender document or to reject any or all tenders without giving any notice or assigning any reason. The decision of University of Lucknow in this regard shall be final and binding on all.

**Head of Department  
Department of Zoology  
University of Lucknow  
Lucknow-226007.**

**For Registrar, University of Lucknow, Lucknow-226007.**

## **Tender Form**

The bidders should furnish the under mentioned information and also enclose the copy of the respective document as mentioned below failing which their bids will not be considered.

1. Name of the Firm along with Full Address:
2. Name of the Proprietor:
3. Telephone / Mobile Number:
4. Bank Account Number:
5. Income Tax Permanent Account Number:  
(Please enclose photocopy)
6. Registration with GST No:
7. Income Tax Return for the past years (Please enclose photocopy):
8. Firm deed & Registration of the firm: (Please enclose photocopy):
9. (a) Demand Draft towards the cost of the Tender Form:

Draft No.

Name of the issuing Bank:

Date:

Amount: Rs. 1180/- (including GST)

- (b) Demand Draft for the Earnest Money Deposit:

Draft No.

Name of the issuing Bank:

Date:

Amount: Rs.

**Demand Draft should be drawn in favour of Finance Officer, University of Lucknow, Lucknow, payable at any National bank at Lucknow. Tenders/Bids not accompanied by the requisite Demand Drafts shall not be considered and shall be rejected.**

**Instructions to Bidders  
&  
Pre Qualification Requirement of Bidders**

**1.** Tenders are invited from registered and reputed firms having experience in the field.

**2. Capacity**

The firm should be capable of mobilizing adequate arrangement for the supply of the scientific equipment/item required in the Department of Zoology, University of Lucknow, Lucknow-226007.

**3. Penalty**

Penalty @ 10% of the value of the order shall be imposed for every day of delay in the supply of the full order.

**4. Arbitration**

In case of any dispute, the decision of University of Lucknow shall be binding. University of Lucknow has the right to cancel all or any of the tenders without assigning any reason.

**5. Legal Jurisdiction**

For legal dispute, if any, the jurisdiction will be limited to the District of Lucknow.

**6.** Rates quoted by the firms (L 1) are negotiable.

**7. Technical and financial bids**, duly signed and stamped, to **be kept separately** in sealed envelopes. The envelope containing bids should be marked on top as "**Technical/Financial bids for (Name of the scientific equipment)**"

**8.** Tender should be addressed in the name of **Head of Department, Department of Zoology, University of Lucknow, Lucknow-226007.**

**9.** With tender form specification of equipment or item supplied must be written, sealed and signed by the authorized signatory.

**10.** Non compliance of order, in time, will be treated as non compliance of the terms and conditions.

**11.** No advance amount will be given.

**12.** Quantity to be supplied and work to be completed may change at the time of order.

**13.** Without assigning any reason any tender or all tenders can be cancelled by the University authorities at any stage.

**14** Affidavit will be given by the tendered that they will follow the all the mentioned terms and conditions.

**15.** Payment will be made to the firms after deducting the Sales tax, Stamp Duty and Income Tax, if applicable through the Finance & Accounts Office of the University of Lucknow.

**Head of Department, Department of Zoology, University of Lucknow, Lucknow-  
226007**

**For Registrar, University of Lucknow, Lucknow-226007**

**DETAILED SPECIFICATIONS**

**1. Name of Equipment: FLOW CYTOMETER**

**Quantity: 01**

- Easy to use **Flow cell based (Hydrodynamic based technology)** Flow Cytometer with two lasers: blue laser (488 nm) and red laser (640 nm).
  - System should have minimum four fluorescence detectors or more and two light scatter detectors (forward & side scatter) with capabilities of total six parameters measurement.
  - All Lasers & their excitation & collection optics should be fixed & pre-aligned.
  - Minimum Detectable Particle Size should be 0.5  $\mu\text{m}$
  - System should have minimum 10,000 events per second or more.
  - System should have Fluorescence Sensitivity at least MESF FITC <75; PE <50
  - System should be able to do absolute counting of cells without using any reference bead.
  - System should run on normal lab filtered distilled water (0.2 micron filtered DI water).
  - System should be able to accept many types of manual sample tubes such as 1.5ml, 2 ml, 5 ml, PCR tubes.
  - System should be upgradable to minimum 20 tubes along with 48 and 96 well plate loader as automation within the same assembly.
  - System should have 24 bit signal processing and digital data with 7decade dynamic range for an ease to user making all data available for analysis.
  - System should have free license system acquisition & analysis software.
  - System should be provided with latest compatible computer workstation from source with 23 inch full HD monitor and color laser printer.
  - At least 2 years warranty as per institute policy
  - System should be quoted with starter kits such as Apoptosis, Cell cycle assay kits *etc.*
  - One KVA branded online UPS with at least 60 min backup.
  - One temperature control module for maintaining adequate temperature for the machine.
  - On-site training, technical support and performance demonstration on basic operation, maintenance and usage of instrument.
  - Preferably provide trainings by company professionals for 2 years from date of installation.
  - Requested to submit User list & performance certificate from at least 05 Govt. teaching and research universities/institutes.
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**2. Name of Equipment: GAS CHROMATOGRAPH WITH MASS SPECTROMETER (GC-MS) Quantity: 01**

**GC Specifications**

System should support two injectors, should have EPC/PPC/APC controls for all the gases and should have Chromatography Data system which is based on Microsoft Windows operating system for instrument control, data acquisition, data analysis, quantitation, automation & customization with online and offline sessions.

System should comply with most of international regulations, safety and electromagnetic compatibility requirement. The quoted system should have provision for up-gradation to CI source & same should be confirmed by principal.

**The instrument should meet the following requirement:**

a	Provision to install at least two columns
b	Operating temp range of oven from near ambient to 450°C
c	Oven temp ramp rate of oven should be 120°C or better
d	Possible to program 8 temp ramps or better
e	EPC/PPC/APC channels for inlets, detectors or auxiliary gases
f	Flow sensor for control of all gas flow.
g	Pressure set point should be adjustable by increment of 0.1 psi upto 100 psi or better.
h	Injector should have capability to set split ratios through software
i	The system should be equipped with a suitable device operated through the EPC/PPC/APC.
j	GC oven should be suitable to house 2 GC columns at a time.
k	Injectors: Two injector points should be provided with split/splitless facility. a) FID b) MS Small injection volumes between 0.2-50 µl and large volume injections of 100 µl or better.
l	Auto sampler: Having capacity of 15 vials or more.
m	FID : sensitivity : < 1.5 pg C/s or better Temperature range : 450° C Dynamic range : 10 <sup>7</sup>

**MS SPECIFICATIONS:** MS system with non reactive/inert ion source conforming to International safety standards with appropriate computer & printer to support the system from original manufacturer. Should include at least 250 L/s or better turbo molecular pump with non reactive/inert EI ion source. System should be upgradable to CI source.

- Mass range of 2.0-1000 amu or better in 0.1 amu steps
- Mass axis stability should be 0.10 amu/48 hrs
- Scan speed up to 12,000 u/sec or better
- EI scan sensitivity and is a must parameter to demonstrate atleast: S/N of 1500:1 or better for 1 pg OFN.
- Quadrupole must be robust enough to allow cleaning of contaminates.
- Should have auto tunes features.
- Spectral libraries: NIST Latest licensed version.

**Accessories to be quoted separately as optional**

- DB-5MS (or equivalent) capillary column dimension : 0.25u x 0.25 u, 30 mt : 3nos
- DB Wax or equivalent : 0.25u x 0.25 u, 60 mt – 2 nos
- 624 (30mx0.25mmx0.25um)-2 nos.
- DB 35 or equivalent: 0.25u x 0.25 u, 30 mt – 1 nos
- Preferably quote SPME PDMS fiber (10m nos)
- Gas Purification system, all Gas cylinders (N2, Zero air, Hydrogen and Helium) & Two stage (SS frit) Regulator for functioning of the instrument
- 2 nos PC one for online data processing & 2<sup>nd</sup> for offline data processing with i3 processor, 21” monitor, 4 GB RAM, 1 TB HDD, Original Windows.
- 10 KVA online UPS with 60 mins backup and one cabin temperature control system to maintain the required environment.
- Three years system warranty.
- Three years AMC price.
- Please quote below mentioned consumables with main instrument:
  - 1) Septa CRS make: 150 nos
  - 2) Liner : 50 nos
  - 3) O-ring : 100 nos
  - 4) Ferrules : 100 nos
  - 5) RP Oil : 5 Lt
  - 6) Filament : 10 nos
  - 7) Grindstones SI Point : 5 nos

**Note:**

- Requested to submit User list, service details and performance certificate from at least 05 Govt. teaching and research universities/institutes for technical support and troubleshooting during experiments.
- Training should be provided at the customer site by company professionals on basic operation, maintenance and usage of instrument.



**FINANCIAL BID**

**Rates for Equipments:**

**1. FLOW CYTOMETER**

**Rs.....**

**Quantity: 01**

**2. GAS CHROMATOGRAPH WITH MASS SPECTROMETER  
(GC-MS)      Quantity: 01**

**Rs.....**

**Date:**

**Signature of Bidder**

**Seal**