



भाकृअनुप -राष्ट्रीय अजैविक स्ट्रेस प्रबंधन संस्थान  
ICAR-National Institute of Abiotic Stress Management

(समतुल्य विश्वविद्यालय)/(Deemed to be University)

भारतीय कृषि अनुसंधान परिषद, कृषि अनुसंधान एवं शिक्षा विभाग

Indian Council of Agricultural Research, Department of Agricultural Research & Education

कृषि एवं किसान कल्याण मंत्रालय, भारत सरकार

Ministry Of Agriculture & Farmers Welfare, Government of India

मालेगांव, बारामती- 413 115, पुणे, महाराष्ट्र, भारत

Malegaon, Baramati- 413 115, Pune, Maharashtra, India



F. No: 4-6/2018-19

Date:27.11.2018

## Notice Inviting E-Tender

The Director, ICAR-NIASM, Baramati invites e-tenders for the "SUPPLY OF LABORATORY EQUIPMENT" through the website [www.eprocure.gov.in](http://www.eprocure.gov.in) under two bid system from reputed firms as per Schedule given below:

Sr. No	Tender ID	Equipment	Start of Sale of Tender	Last date for submission of Tender/EM D	EMD in Rs.	Opening of Tender
1	2018_DARE_360805_2	UV-Vis-Spectrophotometer	27-Nov-2018 03:00 PM	19-Dec-2018 01:00 PM	Rs.15,000/-	20-Dec-2018 03:00 PM
2	2018_DARE_360845_2	Vacuum Concentrator				
3	2018_DARE_360754_2	Soil Tensiometer System				
4	2018_DARE_360820_2	Microscope Fluorescent				
5	2018_DARE_360828_2	Gel Docs System	28-Nov-2018 11:00 AM			
6	2018_DARE_360837_2	Microscope (Light)				

Sd/-

Assistant Administrative Officer

**Important Notes:**

1. Tender Document can be downloaded from ICAR-NIASM website [www.niam.res.in](http://www.niam.res.in) or from Central Public Procurement Portal [www.eprocure.gov.in](http://www.eprocure.gov.in). Bidders should enroll / register in the e-procurement module of Central Public Procurement Portal through the website: [www.eprocure.gov.in](http://www.eprocure.gov.in). Bidders should also possess a valid DSC for online submission of bids.
2. Bids received on e-tendering portal only will be considered. Bids in any other form sent through sealed cover/email/post/fax/by hand etc. will be rejected.
3. ICAR-NIASM, Baramati reserves the right to accept / reject any /all tenders in part /full without assigning any reason thereof.
4. ICAR-NIASM will not be responsible for any delay in enrollment/registration as bidder or submitting/uploading the offer on e-tender portal. Hence, bidders are advised to register in e-tendering website [www.eprocure.gov.in](http://www.eprocure.gov.in) and enroll their Digital Signature Certificate and upload their quotation well in advance.
5. Any changes/corrigendum/ extension of opening date in respect of this tender shall be issued only through websites and no press notification will be issued in this regard. Bidders are therefore requested to regularly visit our website for updates.

Sd/-

Assistant Administrative Officer



भाकृअनुप -राष्ट्रीय अजैविक स्ट्रेस प्रबंधन संस्थान  
ICAR-National Institute of Abiotic Stress Management

(समतुल्य विश्वविद्यालय)/(Deemed to be University)  
भारतीय कृषि अनुसंधान परिषद, कृषि अनुसंधान एवं शिक्षा विभाग  
Indian Council of Agricultural Research, Department of Agricultural Research & Education

कृषि एवं किसान कल्याण मंत्रालय, भारत सरकार  
Ministry Of Agriculture & Farmers Welfare, Government of India

मालेगांव, बारामती- 413 115, पुणे, महाराष्ट्र, भारत  
Malegaon, Baramati- 413 115, Pune, Maharashtra, India



F. No: 4-6/2018-19

Date:27.11.2018

**NOTICE INVITING ONLINE TENDER FOR SUPPLY OF LABORATORY EQUIPMENTS AT ICAR-NIASM, BARAMATI (MAHARASHTRA).**

**THE ONLINE TENDER SHALL BE OPENED ON 20.12.2018 at 15.00 hrs**

1. Name & address of the Proprietor : \_\_\_\_\_
2. Name & address of firm/address of firm : \_\_\_\_\_
3. Telephone No : Office \_\_\_\_\_  
Residence \_\_\_\_\_  
Mobile No \_\_\_\_\_
4. Particulars of firm/agency/company  
(Partnership Deed/Constitution in case of Society) : \_\_\_\_\_
5. P.A.N. : \_\_\_\_\_
6. GST Registration No. : \_\_\_\_\_
7. Name of Banker with full postal address : \_\_\_\_\_
8. Account No : \_\_\_\_\_
9. IFSC No : \_\_\_\_\_

10. The Bidder(s) may note that ONLINE BIDS will ONLY be accepted. All the requisite supporting documents as mentioned in the online bid document must be uploaded On-line <https://eprocure.gov.in/eprocure/app>. The Bids sent through any other mode shall not be considered and will be summarily rejected. The Demand Draft towards cost of EMD must reach this office in **original** by hand/post latest by 1.00 PM on 19.12.2018.

11. Visit us at our website: [www.nism.res.in](http://www.nism.res.in)

Signature of Tenderer



भाकृअनुप -राष्ट्रीय अजैविक स्ट्रेस प्रबंधन संस्थान  
ICAR-National Institute of Abiotic Stress Management

(समतुल्य विश्वविद्यालय)/(Deemed to be University)  
भारतीय कृषि अनुसंधान परिषद, कृषि अनुसंधान एवं शिक्षा विभाग  
Indian Council of Agricultural Research, Department of Agricultural Research & Education

कृषि एवं किसान कल्याण मंत्रालय, भारत सरकार  
Ministry Of Agriculture & Farmers Welfare, Government of India

मालेगांव, बारामती- 413 115, पुणे, महाराष्ट्र, भारत  
Malegaon, Baramati- 413 115, Pune, Maharashtra, India



F. No: 4-6/2018-19

Date:27.11.2018

**NOTICE INVITING ONLINE TENDER FOR SUPPLY OF LABORATORY EQUIPMENT AT ICAR-NIASM, BARAMATI (MAHARASHTRA).**

1. The Director, ICAR-NIASM, Baramati invites Online bids from the reputed Companies/firms:
2. Tender for above can be downloaded free of cost from the website [www.niam.res.in](http://www.niam.res.in). The tender schedule is as under:

<b>Tender ID</b>	Shall be notified on the website of Institute <a href="http://www.niam.res.in">www.niam.res.in</a>
<b>Tender Reference No.</b>	F.No.4-6/2018-19
<b>Date of release of tender through e-procurement</b>	27.11.2018 from 3.00 PM and 28.11.2018 11.00 AM
<b>Last date &amp; time for submission of Online</b>	19.12.2018 up to 1.00 PM
<b>Pre bid Meeting</b>	11.12.2018 on 3.00 PM
<b>Date &amp; time for opening of online Technical Bid</b>	20.12.2018 at 3.00 PM
<b>Address for communication</b>	The Director, ICAR- National Institute of Abiotic Stress Management, Malegaon (Kh), Baramati Pin-413 115.

3. The Bidder(s) may note that ONLINE BIDS will ONLY be accepted. All the requisite supporting documents as mentioned in the online bid document along with duly signed Tender and scanned copies of DD of EMD must be uploaded On-line immediately. The Bids sent through FAX, E-mail, by hand and/or by post shall not be considered and will be summarily rejected.
4. The bidders may submit duly filled in and completed documents ONLINE as per instructions contained in the bidding documents. Incomplete online bid shall be rejected.
5. In case, holiday is declared by the Government on the day of opening the online bids, the online bids will be opened on the next working day at the same time. The Director, ICAR- NIASM, Baramati reserves the right to accept or reject any or all the tenders without assigning any reason(s) whatsoever.
6. The detailed instruction(s) for online submission(s) of online bid(s) through e-procurement module of Central Public Procurement of NIC, the bidder(s) may visit following link:-  
<https://eprocure.gov.in/eprocure/app>

Sd/-

Assistant Administrative Officer



भाकृअनुप -राष्ट्रीय अजैविक स्ट्रेस प्रबंधन संस्थान  
ICAR-National Institute of Abiotic Stress Management

(समतुल्य विश्वविद्यालय)/(Deemed to be University)  
भारतीय कृषि अनुसंधान परिषद, कृषि अनुसंधान एवं शिक्षा विभाग  
Indian Council of Agricultural Research, Department of Agricultural Research & Education

कृषि एवं किसान कल्याण मंत्रालय, भारत सरकार  
Ministry Of Agriculture & Farmers Welfare, Government of India

मालेगांव, बारामती- 413 115, पुणे, महाराष्ट्र, भारत  
Malegaon, Baramati- 413 115, Pune, Maharashtra, India



F. No: 4-6/2018-19

Date:27.11.2018

### INVITATION FOR BIDS

The Director, ICAR-NIASM, Baramati invites e-tenders for the “**SUPPLY OF LABORATORY EQUIPMENT**” for the supply of following equipment’s from manufacturers / firms/ authorized dealers of Indian/foreign manufacturers only **FOR basis**.

### TECHNICAL SPECIFICATION

Sr. No	Name of Equipment	Quantity
1.	UV-Vis-Spectrophotometer (Technical Specification as Per Annexure-1 of Tender Document)	01
2.	Vacuum Concentrator (Technical Specification as Per Annexure-2 of Tender Document)	01
3.	Soil Tensiometer System (Technical Specification as Per Annexure-3 of Tender Document)	01
4.	Microscope Fluorescent (Technical Specification as Per Annexure-4 of Tender Document)	01
5.	Gel Docs System (Technical Specification as Per Annexure-5 of Tender Document)	01
6.	Microscope (Light) (Technical Specification as Per Annexure-6 of Tender Document)	01

### INSTRUCTION TO THE TENDERERS

The Tender shall be submitted in accordance with these instructions and any tender not confirming the instructions as under is liable to be rejected. These instructions shall form the part of the tender and contract.

1. For Online Bid Submission, as per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (URL:<http://eprocure.gov.in/eprocure/app>). The bidders are required to submit soft copies of their bids electronically on the CPP Portal using valid Digital Signature Certificates. More information useful for submitting online bids on the CPP Portal may be obtained at [www.eprocure.gov.in/eprocure/app](http://www.eprocure.gov.in/eprocure/app).

2. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
3. The manufacturers/authorized distributors/dealers shall upload a self-declaration on their letterhead as PDF file in Cover-I of e-tender, along with the tender documents, confirming that they are regular in manufacturing/supplying of the item.
4. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF formats. Bid documents may be scanned with 100 dpi with black and white option.
5. A pre bid meeting will be held on 11.12.2018 at 3.00 PM. Bidders are requested to attend either themselves or through their authorised representatives to clarify any doubt relating to specifications etc.
6. The Technical Bids will be opened on 20.12.2018 at 03:00 P.M. The date & time for opening of Financial Bids will be notified on the portal. The bidders may regularly check the portal regarding the date of opening of financial bid.
7. While submitting the tender, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender is liable to be rejected. If any Tenderer stipulates any condition of his own, such conditional tender is liable to be rejected.
8. The Director, ICAR-NIASM, reserves the right to reject any tender/bid wholly or partly without assigning any reason.
9. All the tender documents & Price Bid to be uploaded as per this tender are to be digitally signed by the bidder.
10. **Earnest Money Deposit (EMD):** An amount of **Rs.15,000/- (Fifteen Thousand rupees)** in the form of **Demand Draft drawn in favour of "ICAR Unit NIASM" payable at Baramati.** This EMD should be submitted in sealed envelope super-scribed as **"SUPPLY OF LABORATORY EQUIPMENT -(Name of Equipment)"**. Failure to deposit Earnest Money will lead to rejection of tender. In the event of the awardee bidder backing out, EMD of that bidder will be forfeited. The EMD of the accepted Tender will be refunded only after on receipt of Contract Form.  
  
**Note: EMD envelop should be placed in another sealed envelope and address to: "The Director, ICAR-National Institute of Abiotic Stress Management, A/p. Malegaon Kh, Tal- Baramati, Dist-Pune-413115. This envelop having tender fee & EMD should reach on or before last date & time of submission of bid.**
11. The payment shall be arranged by this Institute within reasonable period of time on production of proper Printed Invoice/Bills (3 SETS) along with ORIGINAL, DUPLICATE AND TRIPLICATE SHEET with full details with advance stamped receipt.
12. The Tender Documents are not TRANSFERABLE under any circumstances.

13. Only Courts in Pune shall have the jurisdiction over any dispute arising out of this Tender.

14. The Tenderer(s) shall furnish the complete **BANK DETAILS** for arranging payment through RTGS as per the details below:

1. The following documents/certificates should also be furnished online:-

- a) Certificate of registration of Firm and GST Certificate.
- b) List of supply of Laboratory equipment/instruments executed during last three years with other Govt. organization/Institutes/Departments.
- c) A Certificate that the firm is not blacklisted or debarred from dealing by any Government Organization/Institute/Department etc.
- d) All documents/certificates etc. uploaded in the tender must be signed with seal by the firm.
- e) Authorization certificate must be submitted from foreign supplier showing latest validity date.
- f) Bank details for e-payment should be furnished as below:-

ACCOUNT NAME	
BANK & BRANCH NAME	
BANK ADDRESS	
BANK SWIFT CODE	
BANK CODE NO.	
BANK ACCOUNT NO.	
9 DIGIT (MICR) CODE NO.	
PAN ACCOUNT NO.	

(PAN No. is mandatory for principal firm and their authorized dealer)

15. The last date of tender (along with EMD) etc, is 19.12.2018 up to 1.00 PM. The Online tender shall be opened on 20.12.2018 at 3.00 PM. The incomplete tender will not be considered in any case and will be rejected.

16. In case, holiday is declared by the Government on the day of opening of online bids the received proposal will be open on the next working day at the same time.

#### **GENERAL TERMS AND CONDITIONS OF PURCHASE ENQUIRY:**

##### **1. Validity of Tender:**

- a) The tender shall be valid for a period of 180 days from the date of opening of the tender.
  - b) No representation for the enhancement of the prices of the accepted tender or alteration of the terms and conditions will be entertained till supplies are completed.
2. All the tenderers should give an undertaking that they would render after sales service of the equipment/machine and will supply all spares/consumable for at least 5 years from the date of installation of the same.
  3. The firm qualifying technical specification may be asked to demonstrate the performance/working of the quoted model of the equipment/machinery, if needed.

4. **The tenderers should quote their rates of imported equipments/machine on FOR basis. Rates should be quoted in Indian Rupees.**
5. **PRICE:**
  - i. Price schedule must be properly filled in for each equipment based on its Foreign/Indian components/parts & related service, otherwise bid may be rejected.
  - ii. As per notification of Government of India, Ministry of Finance (Department of Revenue), Notification no. 45/2017-Central Tax (Rate) dated 14<sup>th</sup> November, 2017, this institute seeks exemption due to which GST payable will be 5% only (CGST @2.5% and SGST @2.5%)
6. **Qualification Criteria:**
  - i. The bidder firm should not be blacklisted firm any Govt. department/organization during last 5 years
  - ii. Copies of satisfactory Performance certificate for minimum last 3 years may be enclosed.
  - iii. Three purchase orders received during last 3 years for similar items with copies of purchase orders.
7. **MAKE:** You should clearly indicate the name of the manufacturers (Make) and Model along with brochure containing full specifications against each of the item.
8. **Terms of Delivery and Destination:**
  - i. Within 90 days from the date of opening of clear and acceptable Letter of Credit for imported goods/components.
  - ii. The delivery of items securely and neatly packed should be made at ICAR-NIASM, Baramati.
  - iii. **The successful tenderer shall complete supplies strictly within the accepted delivery period. Material ordered by the ICAR-NIASM, Baramati shall be delivered FOR destination securely packed as may be necessary.**
  - iv. The items shall have to be delivered and installed at ICAR-NIASM, Baramati to the satisfaction of Stores Team at ICAR-NIASM, Baramati.
  - v. Supply and Installation of equipment/ instrument has to be carried out free of charge at ICAR-NIASM, Baramati. Within 60 days from date of issuing of purchase order for Indian goods/components.
9. A valid certificate of authorization in the format enclosed with the tender from the Principal firm must be enclosed by the Indian agents/firms quoting rates on behalf of their Principal.
10. In case of imported equipment, Principal firm should give guarantee for after sales service of their equipment through their agent/authorized dealer located in India.



11. If the Indian agent is changed, it would be responsibility of the Principal firm to ensure to intimate the ICAR-NISAM office about their changed agent in India and ensure after sale service through him.
12. If handling of the equipment requires training of the lab technician/scientist, the same will have to be provided in India either at the Institute or their Indian establishment, as the case may be, free of cost.
13. The tenders received late will be rejected.
14. The Director, ICAR-NIASM, Baramati reserves right to accept/reject any or all the tenders without assigning any reasons.
15. Any tender not accompanied by Earnest Money will be straight way rejected.
16. **Performance Security:**
  - i. Within thirty (30) days, the successful tenderer shall furnish to the purchaser the Security Deposit equivalent to 5% of the purchase value.
  - ii. The Security Deposit shall be in one of the following forms: (a) Bank Guarantee, issued by a scheduled bank or a FDR/Demand Draft payable to "ICAR Unit NIASM, Baramati".
  - iii. Failure of the successful Tenderer/bidder to sign the contract and/or furnish the Security Deposit shall constitute sufficient grounds for the annulment of the award and forfeiture of the Earnest Money, in which event the Purchaser may make the award to the next lowest evaluated Tenderer or call for new tenders.
  - iv. The Security Deposit will be discharged by the purchaser and returned to the Supplier following the date of completion of the Supplier's performance obligations under the contract, including any warranty obligations after receiving agreement letter.
17. **Incidental Services:**
  - i. The supplier may be required to provide any or all of the following services, including additional services, as specified in Technical Specifications:
  - ii. Performance or supervision of on-site installation, etc. of the system. b) Furnishing of tools required for assembly and/or maintenance of the System.
  - iii. Furnishing of detailed operations and maintenance manual for each appropriate unit of system.
18. **Warranty:**
  - i. There should be a comprehensive warranty of 24 (twenty four) months post installation and operationalisation of the equipment.
  - ii. Subsequent to the period of comprehensive warranty, rate for comprehensive Annual Maintenance Contract (AMC) may also be quoted on year-to-year basis for 3 years.
19. **You are also required to fulfil the following conditions and furnish the details as indicated in subsequent paragraphs.**

- i. At the time of awarding the order, the purchaser reserves the right to increase or decrease the quantity of goods, without any change in the unit price or other terms & conditions.
- ii. Please indicate if you are currently registered with any Govt. organization and if registered, furnish all relevant details.
- iii. Please states whether business dealings with you presently stand banned by any Government organization and if so, furnish relevant details.
- iv. A supplier/ manufacturer shall not submit more than one quotation for the same set of goods.
- v. The supplier shall at all times indemnify the purchaser, at no cost to the purchaser, against all third party claims of infringement of patent, trademark or industrial design rights arising from the use of the goods or any part thereof, with respect to the goods quoted by the supplier in its offer.
- vi. The contract shall be governed by the laws of India and interpreted in accordance with such laws.
- vii. The Director, ICAR-NIASM, Baramati reserves the right to reject any tender in part or full without assigning any reason thereof.

20. **Contract:** The technically qualified vendor who is awarded the order will have to submit acceptance letter within 15 days of issue of order and will supply material within the stipulated time given in purchase order as per the quoted specifications.

Sd/-

Assistant Administrative Officer

**TECHNICAL SPECIFICATION OF UV-VIS-SPECTROPHOTOMETER****Item No 1: UV-Vis-Spectrophotometer****Specification:**

1. Double beam optical system.
2. Monochromator/Diffractional Monochromator(ranged between 1100 to 1250 grooves/nm )
3. Light path through sample: 10 mm (standard)
4. Spectral bandwidth: 1nm
5. Wavelength range: 190–1100nm (0.1nm increment)
6. Wavelength accuracy:  $\pm 0.3$ nm
7. Wavelength repeatability:  $\pm 0.1$ nm
8. Photometric modes T, A, and conc. measurement.
9. System self-testing (wavelength, light sources, etc.)
10. Light sources: Tungsten-Halogen & Deuterium.
11. Screen touch color display.
12. Provision to connect PC for inter communication and equipment should function in stand alone mode also”.
13. Separate data handling system for interpretation with standard software package (Intel core I5 or equipment, RAM 4GB, suitable OS, Hard disc-1 TB, all in one)”.
14. Signal output USB & Printer Port.
15. Detectors- minimum 2 silicon photodiodes.
16. Storage function 128 standard curves.
17. Power requirement (110/200VAC).
18. Equipment should be CE/21CFR compliance.
19. **Warranty:**
  - i. There should be a comprehensive warranty of 24 (twenty four) months post installation and operationalisation of the equipment.
  - ii. Subsequent to the period of comprehensive warranty, rate for comprehensive Annual Maintenance Contract (AMC) may also be quoted on year-to-year basis for 3 years.

**TECHNICAL SPECIFICATION OF VACUUM CONCENTRATOR****Item No 1: Vacuum Concentrator****Specification:**

1. System should be a Centrifugal Vacuum concentrator with integrated vacuum pump for biological applications
2. System and pump should be made of noncorrosive material and should be highly resistant for organic solvent like Acetonitrile, DMSO, and Chloroform etc.
3. System should have at least three operational modes for Aqueous, Alcohol and Highly Volatile solvents
4. System should possess at least four temperature selections (room temperature, 30<sup>0</sup> C, 45<sup>0</sup> C and 60<sup>0</sup> C) to allow safe and efficient concentration of biological sample and additional 4<sup>0</sup> C for concentrating the sample at low temperature will be preferred
5. System should support centrifugation and Desiccator function
6. Run time: 1 min t 9:59 hrs in increment of 1 minute or infinite
7. Centrifuge should have a fixed rotational speed of 1,400 rpm or more
8. System should have imbalanced detection
9. System should support multiple lab ware formats (0.2ml, 0.5ml, 2ml, 15ml conical tubes, 96 well PCR plates, MTP and Deep well plates) with different rotors
10. System should be able to concentrate sample up to a maximum capacity of 300ml
11. Rotor and adapters must be autoclavable.
12. Capacity of built-in pump:1.7 m<sup>3</sup>/h
13. Max. vacuum; <20 hPa (<20 mbar)
14. System should have an emission condenser with volume approximately 275 ml to purity outlet air
15. Should be supplied a suitable cold trap

**Rotors required:-**

1. Rotor for 1.5/2ml with 48 positions should be supplied
2. Rotor for 0.2 ml, 0.5ml, 1.5ml, 2ml, 15ml, conical tubes, 50ml conical tubes, 96 well PCR plates, MTP and deep well plates 15ml and 50ml flacon tubes should be supplied.

**Warranty:**

- i. There should be a comprehensive warranty of 24 (twenty four) months post installation and operationalisation of the equipment.
- ii. Subsequent to the period of comprehensive warranty, rate for comprehensive Annual Maintenance Contract (AMC) may also be quoted on year-to-year basis for 3 years.

**TECHNICAL SPECIFICATION OF SOIL TENSIO METER SYSTEM****Item : Soil Tensiometer System****Specification:**

1. Tensiometer tubes: UV resistant plastic tubes.  
No. of Tensionmeter tubes must be 10 each of all 5 length(15,30,45,60,75 cms).
  - 15 cm depth
  - 30 cm depth
  - 45 cm depth
  - 60 cm depth
  - 75 cm depth
2. Computer gauge: for reading and storing soil moisture tension readings from all tubes.
  - Measuring unit: KPa
  - Measuring range: 0-100 Kpa.
  - Accuracy :<=1 %
  - Portable and battery operated.
  - Display: LCD which displays Date, Time, Tube Number and reading in kPa.
  - Software: Software which is compatible with Windows 7 and above for downloading readings and easily plotting graphs on computer.
3. Accessories:
  - Auger for installing tensiometer tubes in soil.
4. **Warranty:**
  - i. There should be a comprehensive warranty of 24 (twenty four) months post installation and operationalisation of the equipment.
  - ii. Subsequent to the period of comprehensive warranty, rate for comprehensive Annual Maintenance Contract (AMC) may also be quoted on year-to-year basis for 3 years.

**TECHNICAL SPECIFICATION OF MICROSCOPE FLUORESCENT****Item No 1: Microscope Fluorescent****Specification:**

1. Research Microscope stands for Biology with transmitted light LED at least 4W illumination with long life of more than 50,000 Hours.
2. 3-step focus drive coarse, medium & Fine adjustment with focus torque adjustment.
3. Objective nosepiece for 6/7 or better objectives.
4. DIC turret to be available with empty DIC slots.
5. Infinity corrected / Harmonic Corrected (HC) Optical System.
6. Universal Condenser 0.90/1.25 Oil, Colour Coded and or non-color coded, Universal with Condenser lens & accommodation for DIC prism, Phase rings with rotatable Polarizer & analyser.
7. X/Y mechanical stage either for right hand operation or for left hand operation.
8. Trinocular phototube with beam splitter. Provision to adapt two cameras simultaneously
9. Eyepiece pair 10x/22 or better.
10. Immersion Oil - 20ml
11. Infinity corrected Objectives suitable for DIC, Phase & Fluorescence: Fluorite / Semi Apo 4x, 10x, 20X, 40x & 100x (oil). objectives should be with fluorescence or better.
12. Dust cover for the complete set.
13. High Pressure mercury or Ultra high pressure mercury Hg-Lamp, HG 100W, Fluorescence Filter turret should be at least 5- positions or more. Along with 5 or more position.
14. Neutral Density filters to control Fluorescence Intensity to be incorporated into the microscope.
15. Fluorescence zero pixel shift free filters for DAPI, FITC and TRITC with band pass.
16. High sensitive and high speed Monochromatic cooled digital camera with a CCD sensor of minimum 1.3 / 1.4 mPixel resolution. Speed shall be 16 -22 fps or higher in full frame or better Peltier cooling shall be available. The camera should be controllable from Komet assay software The bidders can quote for single or two independent cameras meeting all above specification.
17. Digital USB Colour digital camera for on-screen microscope image display; 2048 x 1536 with 3.1 M Pixels, Exposure time 2 m sec- 2 sec, A/D converter 10 bit, dynamic range >45dB, Max.15 frames per sec, Gain 1x - 20x, shading correction, CMOS sensor progressive scan, Pixel Size – 3.2 um x 3.2 um, Colour depth 24 bits Colour filter RGB.
18. Software should meet wide variety of multidimensional imaging requirements like multi- channel acquisition, time lapse imaging, basic analysis to capture uneven surface, feature like annotations and labeling, distance measurement, area, and perimeter.
19. A latest configuration computer system with 2 TB hard drive, core i7 processor, frequency 3.6 GHz. Or better, at least 8 GB RAM memory and Monitor 27" should be provided.
20. External Hard drive 1 TB.
21. Compatibility with comet assay procedure.
22. **Warranty:**
  - i. There should be a comprehensive warranty of 24 (twenty four) months post installation and operationalisation of the equipment.

- ii. Subsequent to the period of comprehensive warranty, rate for comprehensive Annual Maintenance Contract (AMC) may also be quoted on year-to-year basis for 3 years.

**TECHNICAL SPECIFICATION OF GEL DOX SYSTEM****Item : GEL DOCS SYSTEM****Specification:**

1. A Gel-Doc system with imaging software able to provide automated and reproducible results for image acquisitions and analysis.
2. It should be able to autofocus at any required zoom levels to get quality image.
3. It is able to provide publication ready image without any further manipulation.
4. Software should have options for image analysis.
5. It should be able to image protein and DNA gel imaging for stain free and dyed gels.
6. It should have options for colony counting.
7. It should be able to image film and 2-D protein gel and their analysis.
8. All of the accessories related to user safety must be supplied with the system.
9. High end computer with a 27" screen should be supplied for loading software and image analysis.

**10. Warranty:**

- i) There should be a comprehensive warranty of 24 (twenty four) months post installation and operationalization of the equipment.
- ii) Subsequent to the period of comprehensive warranty, rate for comprehensive Annual Maintenance Contract (AMC) may also be quoted on year-to-year basis for 3 years.



**TECHNICAL SPECIFICATION OF MICROSCOPE (LIGHT)****Item : MICROSCOPE (LIGHT)****Specification:**

- 1. Type:** Motorised upright microscope facilitated with Bright field, Phase contrast & upgradable for fluorescence.
- 2. Light source:** Transmitted pre-centered LED illuminator LED at least 5W illumination with long life of 50,000 hours or better.
- 3. Eyepiece:** Paired wide field eyepiece 10X with minimum 22mm FOV, eyepiece 12.5x or 15x with minimum 16mm FOV, eyepiece 16x with minimum 14 mm FOV and spacer rings if required..
- 4. Objectives:** Automated objective turret fluorite/Semi Apochromatic objectives 1.25x, 2x, 2.5x, 4x, 10X phase, 20x phase, 40X phase and 100x phase oil objective. All objectives shall be suitable for fluorescence as well.
- 5. Observation tube:** Trinocular tube, for selection of light path for 100%:0 & 50%:50% observation.
- 6. Revolving nosepiece:** Interchangeable six-fold revolving motorized nosepiece with DIC and analyzer slot.
- 7. Condenser:** Universal automated condenser with automated switchable condenser top for Bright field, phase, polarized and DIC applications.
- 8. Mechanical stage:** Rectangular XY stage with slide holder suitable for analysis of thick tissue specimen.
- 9. Camera:** Scientific(dedicated for microscopy)Digital HD CMOS/CCD Camera, with High definition &Resolution 10 mp, with a provision for software interpolation,1/2"scan with software kit, color filter RGB, 30 fps with full HD. Fire wire/USB connection to PC. Upgradable to others s/w modules. Preview images on an HD monitor, Projector,Saving directly on SD card & SD card provided.
- 10. Software:** Imaging system automatically upgraded software that allows quantification of distance between two points and related morphometric measurements and intensity measurements, contrast and other adjustments. Microscope, camera and software should be provided from single manufacturer. Please enclose the compliance statement.
- 11. Computer:** A high end computer with 21 inch monitor should be supplied for offline image analysis and loading of software. All necessary image editing software's are required.
- 12. Warranty:**
  - i. There should be a comprehensive warranty of 24 (twenty four) months post installation and operationalization of the equipment.
  - ii. Subsequent to the period of comprehensive warranty, rate for comprehensive Annual Maintenance Contract (AMC) may also be quoted on year-to-year basis for 3 years.
- 13. Technical document: Vendor should supply all the required technical document in support of their compliance sheet.**

## Annexure- I

### Online Bid Submission Details

#### Online Bid Submission:

The Online bids (complete in all respect) must be uploaded online in Two Covers as explained below:-

<b>COVER - I (Following documents to be provided as PDF file)</b>			
<b>Sl. No.</b>	<b>Documents</b>	<b>Content</b>	<b>File types</b>
1	Technical Bid	Scan copy of PAN and GST Registration	.PDF
2		Scan copy of Earnest Money Deposit by way of Demand Draft	.PDF
3		Scan copy of certificate for EMD exemption, if claiming.	.PDF
4		Certificate that the firm is not black-listed or debarred from dealing by any Govt. organization/Institute/Department etc.	.PDF
5		Department/organization/Institute to whom the Firm is having supplies of similar item to other organization(s), if any (attach copies)	.PDF
6		Scan copy of Authorization letter	.PDF
7		Undertaking regarding after sale repair up to 5 years	.PDF
8		Technical literature/brochure (Original copy) etc. of the equipment/machinery offered by the firm	.PDF
9		Scan copy of self-declaration that all the terms and condition of contract is acceptable	.PDF
10		Compliance sheet for technical specification	.PDF
11		Self-declaration in letter-head that they are regular in manufacturing/supplying of the item	.PDF
<b>COVER - II</b>			
1	Financial Bid	Price bid (BOQ) to be filled in Excel format	.XLS

All the documents has to be digitally signed by the bidder.

Sd/-

Assistant Administrative Officer

**Format for Financial Bid**

Please submit as per BOQ in the CPP Portal