



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, 4-385/2018-19

Date:10.01.2019

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 under two bid system from reputed firms as per Schedule given below:

Tender ID	Start of Sale of Tender	Name of Equipment	Last date for submission of Tender/EMD	EMD in Rs
2018_DARE_409172_2	11-Jan-2019 10:00 AM	UV Spectrophotometer	01-Feb-2019 01:00 PM	Rs.15,000
2018_DARE_360837_3	11-Jan-2019 10:00 AM	Microscope Light	01-Feb-2019 01:00 PM	Rs.15,000
2018_DARE_360845_3	11-Jan-2019 10:00 AM	Vacuum Concentrator	01-Feb-2019 01:00 PM	Rs.15,000
2018_DARE_403741_2	11-Jan-2019 4:00 PM	Photosynthesis Meter	01-Feb-2019 01:00 PM	Rs.60,000

Sd/-

Assistant Administrative Officer

Important Notes:

1. Tender Document can be downloaded from ICAR-NIASM website www.niam.res.in or from Central Public Procurement Portal 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. 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 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 CPPP website for updates.

Sd/-

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



F. No: 4-385/2018-19

Date:10.01.2019

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

THE ONLINE TENDER SHALL BE OPENED ON 02.02.2019 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 01.02.2019.

11. Visit us at our website: www.nism.res.in

Signature of Tenderer



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F. No: 4-385/2018-19

Date:10.01.2019

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. The tender schedule is as under:

Tender ID	Shall be notified on the website of Institute www.niam.res.in
Tender Reference No.	F.No.4-385/2018-19
Date of release of tender through e-procurement	11.01.2019 from 10.00 AM
Last date & time for submission of Online	01.02.2019 up to 1.00 PM
Date & time for opening of online Technical Bid	02.02.2019 at 3.00 PM
Address for communication	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/-

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INVITATION FOR BIDS

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

TECHNICAL SPECIFICATION

As per Annexure – I.

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.
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. The Technical Bids will be opened on 02.02.2019 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.

6. 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.
 7. The Director, ICAR-NIASM, reserves the right to reject any tender/bid wholly or partly without assigning any reason.
 8. All the tender documents & Price Bid to be uploaded as per this tender are to be digitally signed by the bidder.
 9. **Earnest Money Deposit (EMD): An amount of 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. Valid EMD Exemption Certificate is applicable (if claiming).
- Note: EMD envelope 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 envelope having tender fee & EMD should reach on or before last date & time of submission of bid.**
10. The Tender Documents are not TRANSFERABLE under any circumstances.
 11. Only Courts in Pune shall have the jurisdiction over any dispute arising out of this Tender.
 12. 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)

13. 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.
14. The last date of tender (along with EMD) etc , is 01.02.2019 up to 1.00 PM. The Online tender shall be opened on 02.02.2019 at 3.00 PM. The incomplete tender will not be considered in any case and will be rejected.
15. 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 14th 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 ICAR-NIASM, Baramati.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. The tenders received late will be rejected.
15. The Director, ICAR-NIASM, Baramati reserves right to accept/reject any or all the tenders without assigning any reasons.
16. Any tender not accompanied by Earnest Money will be straight way rejected.
- 17. 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. That can measure the concentration and purity of nucleic acids, tissue sample, protein samples and the density of bacterial cell cultures at a broad range of sample volumes.
2. It should be pre-programmed with a range of standard methods for the convenient. Quantification of proteins, nucleic acids, and bacterial cell cultures.
3. In addition, there has to be the flexibility to design and store methods double beam optical system.
4. Photometric range: Absorbance : -4 to 4 Abs Transmittance : 0% to 400%
5. Wavelength range 190-1100 nm or wider
6. Wavelength calibration automatic upon switch on.
7. Spectral bandwidth 1 nm.
8. Speed of acquisition of spectre should be at least 29,000 nm/min to facilitate ultra-fast scan for chemical reactions in a short time
9. Wavelength accuracy ± 0.1 nm.
10. Wavelength reproducibility ± 0.1 nm or better
11. There should be provision to save check conditions so that they can be called when needed without doing the same exercise again for each set of measurements
12. Measurement modes : Absorbance, reflectance, transmittance, time scan & quantitative etc
13. In addition to measurement of samples at particular wavelength or multiple wavelength there should be provision to automatically obtain calibration curve from the measurement of standards, and then calculates the concentrations of unknowns
14. Real-time transfer of the spectrum waveform to Excel during measurement.
15. There should be in built functions in the software to determine display the quantity of DNA and Protein in the sample
16. Communication port : USB
17. Light source of Xenon lamp/ halogen-deuterium lamp.
18. Detector with CCD Array/PMT/ photodiode.
19. Option for data transfer to PC.
20. Power requirements 100-240 V($\pm 10\%$), 50/60 Hz. (Suitable for Indian condtion)
21. Supplied with 3 sets of quartz cuvettes and glass cuvetts for sample volume of 500 μ l, 1ml and 3 ml and 5 ml
22. The bidder must quote for a latest configuration suitable branded data acquisition system having preloaded operating system and requisite software along with laser printer
23. Options for multi cell sample compartment should be quoted
24. Onsite warranty should be at least 2 years
25. Original brochure highlighted the desired specification
26. The instrument should meet the standard requirements for running checks for items stipulated in the Japanese Pharmacopoeia (JP), United States Pharmacopeia (USP), and the European Pharmacopoeia (EP).
27. CE/ equivalent international certification should be specific to quoted model

1. 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 (LIGHT)

Item 2: 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.

Item No 3: 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, 30⁰ C, 45⁰ C and 60⁰ C) to allow safe and efficient concentration of biological sample and additional 4⁰ 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 m³/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.

Item No 4: Photosynthesis Meter

Specification:

Sr	Specification (IRGA)
1	Portable Photosynthesis System should be ideal for field or lab work that should include the Fluorescence measurement and Gas Exchange. System to be supplied complete with following System Configuration :
2	System should have facility to control CO ₂ , H ₂ O/RH, temp, VPD
3	System Console with at least 512 MB RAM with 8GB Flash Memory/USB for Data storage with high speed Processor. The system should be Capable of survey measurements in less than one minute. System must have User-cleanable optics and simple maintenance procedures minimize down time and maintenance costs.
4	Display : Sunlight-readable TFT Color LCD Display with facility to view graphics as well as numeric data with full touch screen and self-diagnostic for any error with the measurement and control setting.
5	CO₂ Gas Analyzer : Absolute non dispersive IR Gas Analyzer Measurement Range: 0- 3000 $\mu\text{mol mol}^{-1}$ or PPM or equivalent conversion Precision/ Linearization: at least 0.1 $\mu\text{mol mol}^{-1}$ or better Accuracy: $\pm 1\%$ or better
6	The system should be supplied with Chamber Apertures for 8-9,6,3 cm ² ,area.
7	H₂O Gas Analyzer Absolute non dispersive IR Gas Analyzer Measurement Range: 0-75 mmol mol ⁻¹ or equivalent.
8	PAR sensor: <ul style="list-style-type: none"> External for ambient PAR measurement and Internal light sensor Range:0-2500 or better $\mu\text{mol m}^{-2} \text{ s}^{-1}$
9	Light measurement <ul style="list-style-type: none"> Range: 0-2500 or better $\mu\text{mol mol}^{-2} \text{ s}^{-1}$ Resolution:<1 $\mu\text{mol m}^{-2} \text{ s}^{-1}$ Calibration accuracy: $\pm 5\%$ of reading Detector: Silicon photodiode
10	Temperature measurement Operating temp: 0-50°C Temperature Control Range: $\pm 10^\circ\text{C}$ from ambient <ul style="list-style-type: none"> Sensitivity range: -10 to 50 °C or better
11	Air flow rate: leaf chamber flow rate 0-1400 $\mu\text{mol s}^{-1}$
12	External Co₂ source: supplied with minimum 8 gm cylinder (nos.200)
13	Chamber pressure Console: operating range 50-110 kPa Chamber: range -2 to 2 kPa, resolution <1 kPa <ul style="list-style-type: none"> Or alternate mechanism to perform similar function.
14	Chlorophyll Fluorescence <ul style="list-style-type: none"> Modulated frequency: 1Hz – 250 kHz and should be capable for OJIP studies Actinic Light Output: 0-3000 $\mu\text{mol mol}^{-2} \text{ s}^{-1}$ Saturation light Intensity: 0-16,000 $\mu\text{mol m}^{-2} \text{ s}^{-1}$ Far-red light intensity: 0-20 $\mu\text{mol m}^{-2} \text{ s}^{-1}$
15	<ul style="list-style-type: none"> Battery: Lithium Ion Batteries, should be sufficient to whole day field measurement With option of external and internal charging. For continuous measurement minimum 4 Batteries should be supplied.
16	System should have Ethernet connectivity for remote access over internet and networking.
17	Accessory and consumable: tripod, stand, sodalime (minimum 5), drierite (minimum 5), system spare kit etc should be supplied
18	The system should have 6-8 extra port to connect the other sensors for simultaneous measurement of Other parameter like soil moisture, soil temp during photosynthesis measurement. Price for two units

	of Soil Moisture & soil temperature Sensors along with standard length cable may be quoted
19	Warranty: Minimum 2 year comprehensive from date of installation
20	Bidder must competent to provide training and handle the instrument and to trouble shoot during use. Onsite training after installation should be given.
21	Supplied with printed user manual , software, carrying case etc.
22	Original brochure with highlighted the desired specification,
23	User list with complete address with phone no should be given
24	The selected vendor may be host for demonstration of the equipment, if required by NIASM before issuing purchase order.

2. Warranty:

- iii. There should be a comprehensive warranty of 24 (twenty four) months post installation and operationalisation of the equipment.
- iv. 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.

Online Bid Submission Details**Online Bid Submission:**

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

COVER - I (Following documents to be provided as PDF file)			
Sl. No.	Documents	Content	File types
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 supplied 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/Model 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
	COVER - II		
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