



राष्ट्रीय विज्ञान शिक्षा एवं अनुसंधान संस्थान, भुवनेश्वर
(परमाणु उर्जा विभाग, भारत सरकार का एक स्वयं शासित संस्थान)
NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH
(AN AUTONOMOUS INSTITUTE UNDER DEPT. OF ATOMIC ENERGY, GOVT. OF INDIA)

Notice Inviting E-Tender No. NIT-05/2018-NC-001191-12-R&D-NIS-5.10-0100-17-18 (2 Part Tender)

Multi-probe AFM/MFM/NSOM

Cost of Tender is 1500.00 (Non Refundable)

Paper Notice



**NATIONAL INSTITUTE OF SCIENCE EDUCATION & RESEARCH
JATNI CAMPUS, P.O. - JATNI
KHURDA – 752050, ODISHA, INDIA**

Notice Inviting E-Tender No. NIT-05/2018-NC-001191-12-R&D-NIS-5.10-0100-17-18 (2 Part Tender)

E-Tenders are invited on behalf of the Director, National Institute of Science Education and Research, Jatni from the manufacturers(Indian or Foreign) and their authorised reseller/Indian agent only for supply & installation of the following items:-

Sl. No.	Name of the Items	Tender No.	Name of Department	Indent No.	Qty.	EMD in INR
01	MULTIPROBE AFM/MFM/NSOM	NIT- 05/2018	School Of Physical Sciences (CIS)	NC-001191-12- R&D-NIS-5.10- 0100-17-18	01 unit	500000.00

Tender can be downloaded and bided from website address: www.tenderwizard.com/NISER. Tender documents for viewing only are also available in NISER web-site address: www.niser.ac.in. further all corrigendum and addendum will be published on NISER website and tenderwizard portal.

NISER is publishing all its public and limited tender on NISER website.

Sd/-.
Stores & Purchase Officer



**NATIONAL INSTITUTE OF SCIENCE EDUCATION & RESEARCH
JATNI CAMPUS, P.O. –BHIMPUR-PADANPUR, VIA-JATNI
KHURDA – 752050, ODISHA, INDIA**

**Notice Inviting E-Tender No. NIT-05/2018-NC-001191-12-R&D-NIS-5.10-0100-17-18
(2 Part Tender)**

Sl. No.	Name of the Items	Tender No.	Name of Department	Indent No.	Qty.	EMD in INR
01	MULTIPROBE AFM/MFM/NSOM	NIT- 05/2018	School Of Physical Sciences (CIS)	NC-001191-12- R&D-NIS-5.10- 0100-17-18	01 unit	500000.00

E- Tenders are invited on behalf of the Director, National Institute of Science Education and Research, Jatni from the manufacturers(Indian or Foreign) and their authorised reseller/Indian agent only for supply & installation of the following items:-

NB: PARTIES REGISTERED WITH SSI/DGS&D/DAE/MSME/NSIC AND FOREIGN PARTIES QUOTING DIRECTLY ARE EXEMPTED FROM PAYING EMD and Tender Fee.

Standard e-Tender Terms & Conditions

1. The details of tender notification can be downloaded from www.tenderwizard.com/NISER under "**Tender Free View**" link.
2. Vendors should obtain the USER ID and PASSWORD from www.tenderwizard.com/NISER by clicking on "**REGISTER ME**" link in the homepage.
3. The Vendor registration fee has to be paid to ITI Ltd for Rs. 1180/- including GST using the e-payment link provided at the time of registration, and the mode of payments are Credit Card, Debit Card and Internet Banking. Vendor Registration is Valid for 01 year.
4. For further details on e-Tender participation, please contact ITI Help desk on
 - Telephone: 080-49352000/9686115318
 - Email: harishkumar.kb@etenderwizard.com, ambasa@etenderwizard.com.
5. Tenders should be submitted only through E-Tender portal and obtain the Tender Acknowledgement copy as a proof of successful submission.
6. **For any query regarding tender terms & conditions please sent email to spo@niser.ac.in.**

**Sd/-
Stores & Purchase Officer**



**NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH
NIT OPEN DOCUMENT (2 PART BID)
SUPPLY & INSTALLATION
OF
MULTIPROBE AFM/MFM/NSOM
Notice Inviting E-Tender No. NIT-05/2018-NC-001191-12-R&D-NIS-5.10-0100-17-18
(2 Part Tender)**

National Institute of Science Education & Research (NISER), Jatni is an Autonomous Institute under Dept of Atomic Energy. NISER would like to procure the following equipment. The Technical Specifications Schedule of Requirements and Allied Technical details are given in Part-1 of tender document.

- **Item: AFM/MFM/NSOM**
- **Tender Enquiry No: NIT-05/2018 (NC-001191-12-R&D-NIS-5.10-0100-17-18)**
- **Last date of submission of E-bid : 01/10/2018 up to 12:30 p.m**
- **Opening of Technical Bid : 01/10/2018 at 2:30 p.m**
- **Date and Time of Pre-Bid meeting: 24/09/2018 at 3:00 p.m at SPS Conference Hall**
- **Contact Person – Dr. Subhankar Bedanta (sbedanta@niser.ac.in)**

**Sd/-,
(Deepak Srivastava)
Stores & Purchase Officer**

The Institute can provide following documents.

1. **Custom Duty exemption certificate (for custom duty @5.15%)**
2. **GST Exemption Certificate (for GST @ 5%)**

COST OF TENDER IS RS.1500/- (NON REFUNDABLE).

This is payable in cash or Demand Draft of a scheduled Bank in favour of Director, NISER payable at Bhubaneswar/Jatni



PART - 1
TERMS & CONDITIONS
FOR SUPPLY AND INSTALLATION OF
MULTIPROBE AFM/MFM/NSOM
FOR
NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH, JATNI
Notice Inviting E-Tender No. NIT-05/2018-NC-001191-12-R&D-NIS-5.10-0100-17-18
(2 Part Tender)

1. Director, National Institute of Science Education & Research, Jatni (NISER) invites E-Tenders for **MULTIPROBE AFM/MFM/NSOM** from the Manufacturer and their authorised reseller only having following credentials.
 - A. Should have satisfactorily completed **03 similar supplies** (at least one of them in Central Government/Central Autonomous Body/Central PSU) in last 05 years.
 - B. **Similar or Similar Nature of work means** Supply & Installation of **MULTIPROBE AFM/MFM/NSOM** for any of the following :
 - a) **Government/Autonomous Institutions**
 - b) **Government Research Centres**
 - c) **Universities**
 - d) **Autonomous/Reputed Private Research Centres**
 - e) **Purchase Orders / Completion certificates if any, for supporting above requirements.**

The Bidders are requested to give detailed tender in the prescribed forms in two Bids
i.e. Part - I Technical Bid.
Part - II Commercial Bid.

2. **Contact for information** :(Only E-mail enquiries will be entertained)

For Technical Information of MULTIPROBE AFM/MFM/NSOM

Dr. Subhankar Bedanta,

School of Physical Sciences, NISER.

E-Mail – Dr. Subhankar Bedanta <sbedanta@niser.ac.in>

For Information regarding Commercial& all other Terms & Conditions:

Mr. Deepak Srivastava

Stores & Purchase Officer

National Institute of Science Education & Research, Jatni

E-Mail-spo@niser.ac.in

3. Supply means:

“Supply, Installation, Commissioning and satisfactory demonstration of the whole equipment”.

4. Tender Document:

The Technical Offer should comprise of the following:

- a) Tenders, which are submitted without following the Two-Bid Offer System, will summarily be rejected.
- b) The technical offer should be complete to indicate that all products and services asked for are quoted.

c) The purpose of certain specific conditions is to get or procure best product/service etc. for NISER. The opinion of Technical Committee shall be the guiding factor for technical short listing.

d) The earnest money deposit as indicated against the item should be sent by post so that it reaches on or before the opening of the technical bid of e-tender system in the form of Account Payee Bank Draft payable on any branch of Nationalised/Schedule Bank at Bhubaneswar/ Jatni in favour of “Director, National Institute of Science Education & Research, Jatni”, in a separate sealed envelope. All tenders submitted without requisite amount of earnest money shall be rejected and their technical and financial bids shall not be opened. No interest is payable on EMD.

The EMD will be returned to the bidders(s)/Agents whose offer is not accepted by NISER within one month from the date of the placing of the final order(s) on the selected bidder(s). In case of the bidder(s) whose offer is accepted the EMD will be returned on submission of Performance Bank Guarantee (if applicable). However, if the return of EMD is delayed for any reason, no interest /penalty shall be payable to the bidders.

EMD EXEMPTION:

PARTIES REGISTERED WITH SSI/DGS&D/DAE AND FOREIGN PARTIES QUOTING DIRECTLY ARE EXEMPTED FROM PAYING EMD & TENDER COST. FOREIGN PARTIES QUOTING DIRECTLY UNDER ORIGINAL SEAL AND SIGNATURE (NOT SCANNED) WILL GET THE EXEMPTION.

The EMD shall be forfeited:

If the bidder withdraws the bid during the period of bid validity specified in the tender. In case a successful bidder fails to furnish the Performance Bank Guarantee.

a) Undertaking that the successful bidder agrees to give a Performance Bank Guaranty of 10% of the purchase order value in favour of “Director, National Institute of Science Education & Research, Jatni valid till warranty period.

Performance Bank Guarantee:

Within ten (10) days of the award of contract, the vendor shall furnish a Performance Bank Guarantee amounting to 10% of the purchase order value in the form of Bank Guarantee favouring the Director, National Institute of Science Education & Research, Jatni valid till completion of warranty period. Following documents needs to be uploaded on E-Tender portal.

a) If the bid is for branded makes, authorization letter from principals clearly indicating that the vendor is the competent authority to sell and provide services towards the items mentioned in the scope of supply given in this tender document.

b) Copy of GST No. and PAN No. allotted by the concerned authorities.

c) List of deliverables / Bill of materials and services.

d) Compliance sheet with any deviation with reference to the terms and specifications.

e) The item should be supplied with manuals and the manuals including technical drawings should be complete in all respects to operate the system without any problem.

“Commercial Bid” shall contain:

a) Price schedule shall complete in all respects. **Tender with any condition including conditional rebate shall be rejected forthwith.**

b) Cost of all the items should be mentioned clearly and individually in the Commercial Offer only.

c) **The Bidders are requested to quote for Educational/Institutional Price for Machine/ Equipment and, since we are eligible for the same.**

d) **Printed conditions of the vendor submitted with the tender will not be binding on NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH.**

5. Tender process & award of contract.

The technical bids will be evaluated to shortlist the eligible bidders. The commercial bids of only the short listed bidders shall be considered for further processing. Bidders whose technical offer is found acceptable and meeting the eligibility requirements as specified in this tender will be informed about the date and time of the opening of the commercial bid.

- (a) NISER will open commercial bids of only the short listed bidders, The Date and Time of opening the Commercial Bid will be intimated only to pre-qualified and technically acceptable Bidders for the item at a later date.
- (b) ONLY TECHNICALLY accepted competitive bids will be considered for placing Purchase Order.
- (c) **Purchaser's Right to vary Quantities at the time of Award:** NISER reserves the right at the time of award of Contract to increase or decrease the quantity of items specified in the Schedule of Requirements without any change in price or other terms and conditions.

6. The Director NISER reserves the right to accept the offer in full or in parts or reject summarily or partly.

7. Delivery Period / Timeliness

The deliveries, installation must be completed within 180 days, after placement of purchase order. The time is the essence of the contract. It is mandatory for the bidders who respond to this bid to meet these expectations, as they are tightly linked to NISER's plans of completing the project within the time frame.

8. Locations for the Supply / Services

The Laboratory Equipment covered by this document is required to be supplied and installed at CIS, School of Physical Science of NISER, Jatni.

9. Order Placement and Release of Payment

The Purchase Order and payment shall be processed by –

**Stores & Purchase Officer
National Institute of Science Education & Research,
Jatni Campus, P.O. – Bhimpur-Padanpur, Via-Jatni,
Khurda – 752050, Odisha, INDIA**

Payment for the items to be supplied by the vendor against the purchase order shall be made by National Institute of Science Education & Research as follows:-

Foreign Currency payment:-

100% payment will be made through Letter of Credit. 80% will be paid after submission original shipping documents & balance 20% will be released after satisfactory installation, commissioning, warranty certificate and along with submission of Performance Bank Guarantee.

INR payment:-

80% will be released after receipt of material in good condition & balance 20% will be released after satisfactory installation, commissioning, warranty certificate and along with submission of Performance Bank Guarantee.

Agency Commission: Agency Commission to be paid to Indian Agent should be specified separately and same will be paid in INR.

The tenderers who are not agreeing to above payment terms are requested not to submit their tender otherwise their EMD will be forfeited.

10. NISER will not provide any accommodation/transportation for the engineers/ representatives for attending installation, commissioning and demonstration work. It is the absolute responsibility of the Principal Supplier/Indian Agent to make their own arrangements.

11. The successful bidder, on award of contract / order, must send the contract / order acceptance in writing, within 7 days of award of contract / order failing which the EMD will be forfeited.

12. Period of validity of bids

- (a) Bids shall be valid for a period of 90 days from the date of opening the Technical bid.
- (b) NISER may ask for the bidder's consent to extend the period of validity. Such request and the response shall be made in writing only. The bidder is free not to accept such request without forfeiting the EMD. A bidder agreeing to the request for extension will not be permitted to modify his bid.
- (c) Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

13. Corrupt or Fraudulent Practices

NISER requires that the bidders who wish to bid for this project have highest standards of ethics. NISER will reject a bid if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract. NISER may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the execution of contract.

14. Interpretation of the clauses in the Tender Document / Contract Document

In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, Director, NISER's interpretation of the clauses shall be final and binding on all parties.

15. Price

- (a) The price quoted shall be considered firm and no price escalation will be permitted at any time. The quotation should be in Indian Rupees or any known foreign currency. Packing, forwarding, freight, insurance, **Agency commission** and commissioning charges, if any extra may be quoted separately in Commercial Bid.
- (b) In case of INR bids the price criteria should be on delivered at NISER, Jatni including Free onsite comprehensive **01year** warranty, installation, commissioning, Training, demonstration, packing, transportation, insurance, loading & unloading (At NISER) etc. charges. Govt. Levies like GST, etc., if any, shall be paid at actual rates applicable on the date of delivery. Rates should be quoted accordingly giving the basic price, GST, etc., if any.
- (c) Please provide GST No. of the firm allotted by the concerned authorities in your quotation.
- (d) In case of Foreign Currency bid: - Price criteria will be FOB nearest International Airport/Sea Port including Free onsite comprehensive **01year** warranty, installation, commissioning & Training & demonstration charges. Agency Commission if any is required to be quoted separately in Financial bid which will be paid directly to Indian agent in INR.

16. Pre-installation:

Pre-installation facilities required for installation may please be intimated in the technical bid. Subsequently, before the consignment lands in NISER, Jatni the bidder shall confirm that the pre-installation requirements are sufficient for installation of the equipments. In other words the bidder should continuously monitor the pre-installation requirements and see that everything is ready before the consignment is taken to the site for installation.

17. Installation, Warranty & Support

- Bidder shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty and thereafter.
- The items covered by the schedule of requirement shall carry minimum ***One (01) year free comprehensive warranty from the date of installation of the equipment*** by NISER. Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should prolong for more than 24 hours. The comprehensive warranty includes onsite warranty with parts.
- ***The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, GST, local taxes if any should be borne by the beneficiary or his agent. A clear confirmation should be given for this item.***
- The OEM/bidder shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of 7 years from the date of supply of equipment on payment on approved price list basis.
- The equipment must be supported by a Service Centre manned by the principal vendor's technical support engineers. The support through this Centre must be available 24 hours in a day, three days a week and 365 days a year. Also it should be possible to contract the Principal's vendor support Centre on a toll free number/web/mail.
- The vendor will have to arrange for all the tools required for installation, testing & maintenance etc.

18. Indemnity

- The vendor shall indemnify, protect and save NISER against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the equipment's supplied by him.
- The successful bidder will be fully responsible for payment of wages and other dues as prescribed and compliance of various Labour Laws.
- The successful tenderer should give an undertaking that the staff deployed at the centre in terms of this contract at all time will be employees of the agency exclusively and they shall not be entitled to any claim of employment or permanency of job with NISER.
- NISER reserves the right to forfeit whole or part of the security money towards any damage/lose caused due to the negligence on the part of the agency engaged.

19. Insurance

The equipment to be supplied will be insured by the vendor against all risks of loss or damage from the date of shipment till such time it is delivered at NISER site or as per agreed terms, in case of Rupee/Foreign currency transaction.

20. Penalty for delayed Services / LD

As time is the essence of the contract, Delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the EMD/SD will be forfeited and also LD clause will be applicable /enforced.

If the supplier fails to Supply, Install and Commission the equipment as per specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of 1% of order value per every week of delay subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.

NISER reserves the right to cancel the order in case the delay is more than 30 days Penalties, if any, will be deducted from the EMD.

21. Jurisdiction

If a dispute arises out of or in connection with the contract, or in respect of any defined legal relationship associated therewith or derived there from, the parties agree to submit that dispute to arbitration under the ICADR Arbitration Rules, 1996.

The authority to appoint the arbitrator(S) shall be the International Centre for alternative dispute resolution.

The International Centre for Alternative Dispute Resolution will provide administrative services in accordance with the ICADR arbitration Rules, 1996.

Sd/-.
Stores & Purchase Officer
NISER, Jatni

DECLARATION BY THE VENDOR

It is hereby declared that I/We the undersigned, have read and examined all the terms and conditions etc. of the tender document for which I/We have signed and submitted the tender under proper lawful Power of Attorney. It is also certified that all the terms and conditions of the tender document are fully acceptable to me/us and I/We will abide by the conditions from serial no. 1 to 21 and we have not given any printed conditions beyond the scope of this tender. This is also certified that I/We/Our principal manufacturing firm has no objection in signing the purchase contract if the opportunity for the supply of the items against this tender is given to me/us.

Date:

Signature:

Address:

Name:

Designation:

On behalf of:

(Company Seal)



PART - 1
FOR SUPPLY AND INSTALLATION OF
MULTIPROBE AFM/MFM/NSOM
FOR
NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH, JATNI
Notice Inviting E-Tender No.NIT-05/2018-NC-001191-12-R&D-NIS-5.10-0100-17-18 (2 Part Tender)

General Information –Self Attested			
www.tendewizard.com/NISER			
Vendor Name			
Sl. No.	Basic Information	Please fill details	Page No. with name of the documents attached in support of information required
1	Name of the Company		
2	Full address of company along with Telephone no. Fax no. E-mail address :		
3	Local address of company for communication, if any		
4	Are you a manufacturer or dealer/reseller		
5	If dealer please attach certificate from your principal company clearly showing validity of the certificate		

6	<p>If foreign supplier : Please give details of your Indian authorised partner if any</p>		
7	<p>Annual turn over in last 3 financial years in Rs. Crores. (i) Year 2014-2015 (ii) Year 2015-2016 (iii) Year 2016-2017 Please attach balance sheet</p>		
8	<p>Supply & Installation of MULTIPROBE AFM/MFM/NSOM to our tendered of last 3 financial years in State Government or Govt. of India Department(s) /Reputed Organisation(s) (in Nos. and Value) (Please attach list of clients) (i) Year 2014-2015 (ii) Year 2015-2016 (iii) Year 2016-2017 Please attach copy of Purchase Order/ Completion Certificate</p>		
9	<p>GST Registration no. with Place</p>		
10	<p>Income Tax Registration no. with place</p>		
11	<p>Photocopy of EMD (If Applicable)</p>		
12	<p>Name and address on whom purchase order will be placed</p>		

13	Bank details of the supplier on which order will be placed		
14	If you are claiming exemption certificate under SSI/DGS&D/DAE, Please attach self attested copy of certificate which should be valid during the tender process		
15	Service centre details & principal vendor support centre		
16	Delivery period :Please mention time of delivery & Installation		
17	Declaration to be submitted by Vendor		
18	Warranty :- 01 year free comprehensive warranty from the date of installation of the equipment (Accepted/Not Accepted)		



**TECHNICAL BID
SUPPLY AND INSTALLATION
OF
MULTIPROBE AFM/MFM/NSOM
FOR
NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH, JATNI
Notice Inviting E-Tender No. NIT-05/2018-NC-001191-12-R&D-NIS-5.10-0100-17-18**

www.tenderwizard.com/NISER

Vendor Name		-	
SL. No.	Item Specification	Accepted/Not Accepted/Deviation if any. Please specify your specification if deviation is there	Page No. of your specifications/Brochure/Deviation, etc attached in support of your specification/deviation
	“MULTIPROBE AFM/MFM/NSOM”		

MultiProbeCryoView (two probe)

MultiProbeCryoView Low Temperature NSOM/SPM Tip and Sample Scanning Scan Head Assembly

Tip scanning tuning fork feedback
~30 micron flat scanner piezo stage incorporating:

- 8 mm central opening of better
 - Scan Range: Lateral – 30 micron or better
 - Scan Range: Axial – 30 micron or better
 - Ten probe mounts for non contact AFM

Closed Loop Scanner:

Precision XYZ Sample Scanner of minimum 100x100x20um.

Capacitive Sensors, Digital Multi Channel Piezo Controller

Cryostat Chamber

- Optical cryostat with top and bottom windows to be fitted into an optical microscope.

- Hermetic connectors for optical and electric connections.

- Calibrated temperature measurements.

- Rough x,y sample positioning using motorized stage, Transfer tube.

- Ultra High Vacuum System

- Turbo molecular pump

- Mechanical (oil free) pump

- Ion pump

- All necessary valves and gauges

- Cold Finger and Thermal Shield

System to be ready for attachment to Helium or Nitrogen Dewar to be provided by the customer.

Note: An additional 10 probes are to be provided free of charge upon final payment of system and after technical discussions with the customer to determine the most appropriate probe specifications required.

Additional probe tower assembly for Cryoview MP System

Includes:

-Tip scanner with an XYZ range of

1 (i)

	<p>30 microns. -XYZ stepper motors, Controllers, Computer, Monitor</p>		
(ii)	<p>A LabView based SPM Controller with capability of controlling two multiprobe tower Hardware specifications: Supports various imaging modes including AFM (contact and non-contact), phase, error signal and NSOM. Up to 8 data channels can be read and imaged simultaneously. All ADCs are 16 bit and DACs have 16-bit resolution. Inbuilt lock-in amplifier. - Open design enabling customization by user and interfacing to other LabVIEW modules. Computer: Desktop PC Intel Core i7-Processor (3.70 GHz, 6 MB Cache) Intel HD Graphics 2000 Intel® Q67 Express Chipset 8GB DDR3-1600 DIMM (2x4GB) RAM 1T 7200 RPM 3.5 1st Hard Drive SuperMulti DVDRW Optical Drive Video VGA, USB Standard Keyboard USB Optical BLK Mouse, 6 X USB2, 2PCI Slots Monitor:23" LCD Screen</p>		

(iii)	<p>Tip/Sample Scanning Controller Module Individual placement of tip and sample relative to the lens of the optical microscope for spatially controlling photo excitation and detection. High Voltage Piezo Driver Three channel Paraphase high voltage amplifier with • 3 Analog inputs (+-10V) • 3 Paraphase HV Outputs (+-130V) • Manual Control option • 3 Voltage displays Includes switching control box to interchange between top and bottom scanner, for such applications as Photonics, Tip Enhanced Raman Scattering (TERS), and energy transfer.</p>		
(iv)	<p>Upright Microscope for CryoView Upright Microscope comprising: Working Range: 400nm – 700nm Focusing unit BXFM-F Counter spring BXFM-ILH Illuminator Holder BXFM-ILH Quintuple nosepiece U-5ER-2 Trinocular tube U-TR30 Wide field eyepiece WHN10X/22 Power supply 220V TH4-2 Mirror unit F. BF U-MBF Bulb Xenodhot 12V 100W for microscope Hand Switch TH4-H2 U-OCMCO10/100X EXEP. MICROM. 24M Large Stand SZ-STL Halogen lamphouse U-LH100-3. 100W Custom X stage to align the microscope relative to the CryoView CCD Viewing System: Digital Camera Eyepiece Image Sensor Size 5.2µm x 5.2µm Resolution 1280x1024 pixels Communication: USB 2.0 Objective 10x LMPLFL10x Recommended height for the surface top of the Optical Table should not be higher than 500 mm from the floor.</p>		

	<p>All MultiView AFM/TERS/NSOM systems can be used in upright backscattering mode or inverted backscattering mode. The same head is usable in both modes of operation.</p>		
(v)	<p>Microscope Objective for CryoView MP System 50x Superlong working distance (21 mm) high numerical aperture (0.42) objective. MP Cryoview base plate and optical microscope interface plate.</p>		

(vi)	<p>Software module for Raman and CCD camera spectroscopy control. This module provides for control of the Raman System via the software for combined AFM-Raman imaging.</p> <p>Advanced Raman AFM/TERS/NSOM Integration Package:</p> <p>Independent isolation of MultiView Series head from all Raman and external laser sources. Allowing for connection of an independent upright microscope with the MultiView SPM head to a microRaman system without affecting the noise floor of the AFM/TERS/NSOM system.</p> <p>The package includes:</p> <ul style="list-style-type: none"> • The optical and mechanical infrastructure for connecting the microscope directly to the Raman spectrometer or microscope while completely isolating the system from all Raman and external laser noise sources. 		
(vii)	<p>Vibration isolation platform with Optical Breadboard</p>		
(viii)	<p>NSOM Controller Detector Electronic Module including power supply</p>		
(ix)	<p>APD detector system Sensitivity range: 400nm - 1100nm -APD mount for Reflection mode</p>		

(x)	<p>Confocal illumination module for stage scanning confocal operation. Sample illumination from above and below with high beam confocality through upright/inverted optical microscope.</p> <ul style="list-style-type: none"> •Sample illumination for Confocal Imaging •Flexible illumination under optical microscope view for sample excitation for variety of applications in photonics, plasmonics and others •Flexible mounting of the device on microscope eyepiece •Suitable for SM and MM fiber •Manual XYZ movement for beam positioning •Designed for integration into the Full Dual Microscope 		
(xi)	<p>Illumination system:• Nd:YAG 20mW 532 nm laser• Single Mode Fiber Coupler mounting and alignment system• Bandpass filter</p>		
(xii)	<p>Electrical Measurements & STM Module: Module for electrical measurements for conducting AFM and spreading resistance measurements. Allowing to switch from AFM to Tunneling feedback using the same probe as a result of the lack of jump to contact with tuning fork feedback.</p>		
(xiii)	<p>Acoustic hood features</p> <ul style="list-style-type: none"> • Compact design • Fits Ultra Low Noise Vibration Isolation Platform • Easy Access from All sides 		

(xiv)	<p>Workstation for computer and controllers SPM Kit including: - XYZ calibration/linearization sample - HOPG with atomic steps sample for noise determination - Fischer sample for lateral resolution determination - Set of samples mounts for various sample thicknesses - Glass cover slips, Maintenance specific tool kit - Essential spares for routine maintenance - Hard Copy of Manuals</p>		
(xv)	<p>Scanning Electrochemistry Microscopy Module (SECM) : Including appropriate cell for electrochemical microscopy integrated into the control system. Including 5 cantilevered force and SECM glass probes and allows for on-line viewing with an optical microscope - CHI Potentiostat for Electrochemical measurements.</p>		
(xvi)	<p>AFM Probes: 10nm diameter NSOM Probes: 100nm aperture TERS Probes for AFM/Raman/TERS Electrical probes for electrical resistance measurements, I-V curves and STM feedback. Electrochemical probes for SECM measurements.</p>		
(xvii)	<p>MFM: Magnetic Force Microscopy imaging fully correlated with AFM topographic scan. Hardware and software operate with two pass methodology for lifting the tip above the surface topography in a constant offset. AFM and MFM images can be collaged for complete correlation and characterization of the imaged data. with Hybrid Controller upgrade. - Magnetic Field Module for Cryo: Variable magnetic field allowing near-field optical imaging with alteration in magnetic field</p>		

	integrated in NSOM/SPM & Raman system. Field strength: +1 to -1 Tesla in horizontal direction with out of plane field (vertical direction) capability.		
2	OPTIONAL ITEMS		
(i)	Kelvin Probe Module for monitoring chemical potential alterations with standard AFM cantilevers. Includes external lock-in, kelvin probe controller and 10 Atec probes for Kelvin Probe operation.		
(ii)	NanoFountain Pen Gas Delivery: Components for NanoFountain Pen gas delivery for use with the 3D Lithography Package via NanoFountainPen probes which Includes: <ul style="list-style-type: none"> •Probes for gas delivery •Software package for correlation of the position of the AFM sensor for gas delivery patterns. This includes patterning exclusive nanofountain pen nanochemical lithography package. The software also permits external triggers via the controller for either electrical pulses or optical pulses or other external sources in concert with the patterning operation. 		
(iii)	Thermal Conductivity Module: Electronic module for use with Patented thermal conductivity probes.		

3	AMC:- 02 years Comprehensive AMC charges after expiry of warranty period (in %) of basic price only.		
---	---	--	--



**FINANCIAL BID
SUPPLY AND INSTALLATION
OF
MULTIPROBE AFM/MFM/NSOM
FOR
NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH, JATNI
Notice Inviting E-Tender No. NIT-05/2018-NC-001191-12-R&D-NIS-5.10-0100-17-18**

www.tenderwizard.com/NISER

www.tenderwizard.com/NISER							
Vendor Name							
SL. No.	Item Specification	Qty	Type of Currency	Unit Price in Foreign currency as per terms & condition no.15(d) of Tender document.	Total Price in Foreign Currency as per terms & condition no.15(d) of Tender document.	Unit Price in INR as per terms & condition no.15(b) of Tender document.	Total Price in INR as per terms & condition no.15(b) of Tender document.
	MULTIPROBE AFM/MFM/NSOM						
1(i)	MultiProbeCryoView (two probe) MultiProbeCryoView Low Temperature NSOM/SPM Tip and Sample Scanning Scan Head Assembly (Specification as per Technical Bid)	1 unit					

1(ii)	A LabView based SPM Controller with capability of controlling two multiprobe tower along with Computer: Desktop PC (Specification as per Technical Bid)	1 unit					
1(iii)	Tip/Sample Scanning Controller Module (Specification as per Technical Bid)	1 unit					
1(iv)	Upright Microscope for CryoView Upright Microscope c (Specification as per Technical Bid)	1 unit					
1(v)	Microscope Objective for CryoView MP System (Specification as per Technical Bid)	1 unit					
1(vi)	Advanced Raman AFM/TERS/NSOM Integration Package: (Specification as per Technical Bid)	1 unit					
1(vii)	Vibration isolation platform with Optical Breadboard (Specification as per Technical Bid)	1 unit					
1(viii)	NSOM Controller Detector Electronic Module including power supply (Specification as per Technical Bid)	1 unit					

1(ix)	APD detector system (Specification as per Technical Bid)	1 unit					
1(x)	Confocal illumination module for stage scanning confocal operation. (Specification as per Technical Bid)	1 unit					
1(xi)	Illumination system: (Specification as per Technical Bid)	1 unit					
1(xii)	Electrical Measurements & STM Module: (Specification as per Technical Bid)	1 unit					
1(xiii)	Acoustic hood features (Specification as per Technical Bid)	1 unit					
1(xiv)	Workstation for computer and controllers SPM Kit including: (Specification as per Technical Bid)	1 unit					
1(xv)	Scanning Electrochemistry Microscopy Module (SECM) : (Specification as per Technical Bid)	1 unit					
1(xvi)	AFM Probes, NSOM Probes, TERS Probes for AFM/Raman/TERS , Electrical probes for electrical resistance measurements, I-V curves and STM feedback. Electrochemical probes for SECM	1 unit					

	measurements. (Specification as per Technical Bid)						
1(xvii)	MFM: Magnetic Force Microscopy imaging fully correlated with AFM topographic scan (Specification as per Technical Bid)	1 unit					
	Sub Total				0.00		0.00
	Agency Commission						
	GST Charge If Any						
	Grand Total				0.00		0.00
2	OPTIONAL ITEM						
(i)	Kelvin Probe (Specification as per Technical Bid)	1 unit					
(ii)	NanoFountain Pen Gas Delivery (Specification as per Technical Bid)	1 unit					
(iii)	Thermal Conductivity Module (Specification as per Technical Bid)	1 unit					
3	AMC:- 02 years Comprehensive AMC charges after expiry of warranty period (in %) of basic price only						