



'A' Grade
NAAC Re-Accredited
(3rd Cycle)

NORTH MAHARASHTRA UNIVERSITY, JALGAON

POST BOX NO.80, UMAVINAGAR,

JALGAON- 425 001

Tel.No. (0257) 2257236&237

Fax No. (0257) 2258406

**E-TENDER DOCUMENTS FOR
SUPPLY AND INSTALLATION OF
SCANNING PROBE MICROSCOPE
WITH RAMAN ACCESSORIES**

REF :- NMU/UICT/ET/SPM/545/2017

FOR MORE DETAILS VISIT THE PORTAL OF

<https://mahatenders.gov.in> /www.nmu.ac.in

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TENDER DOCUMENTS FOR SUPPLY AND INSTALLATION OF SCANNING PROBE MICROSCOPE WITH RAMAN ACCESSORIES

NORTH MAHARASHTRA UNIVERSITY, JALGAON

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Tender Schedule and Contact details

Sr.No.	Key Dates of the tender	Start date & time	End date and time
01	Tender Release	29/08/2017 17.00 hrs.	----
02	Tender documents downloading	02/09/2017 10.00 hrs.	23/09/2017 12.00 hrs.
03	Online submission	02/09/2017 10.00 hrs.	23/09/2017 15.00 hrs.
04	Technical Bid opening	27/09/2017 16.00 hrs. (if Possible)	----

Contact below if any query

- 1) Sumit Katkar. 7745827385
For any Information / difficulty 7843024910
Regarding online submission of tender

- 2) Technical query Dr. Jitendra S. Narkhede
Off. No. : 0257-2257442
Mobile No. +91 9423485907

Dr. Pawan D. Meshram
Mobile No. +91 8805976960

- 3) Tender Enquiry 0257-2257236 (Purchase Dept.)



Grade-A(3.11)
NAAC ACCREDITED IIIrd cycle

NORTH MAHARASHTRA UNIVERSITY, JALGAON

E-TENDER NOTICE

North Maharashtra University, Jalgaon invites tender for “**Supply and Installation of Scanning Probe Microscope with Raman Accessories**” from manufacturer/ distributors/ authorized dealers. For the detailed tender documents, interested bidder should visit <https://mahatenders.gov.in> and www.nmu.ac.in

The filled tender must be submitted online on or before 23/09/2017 up to 15.00 hrs. Any extension to last date of submission of tender, Corrigendum of any changes will be published only at above websites.

Ref.: NMU/UICT/ET/SPM/545/2017

Date: 29/08/2017

(Dr. B. D. Karhad)
Finance and Accounts Officer

Instructions for filling of E-Tender

The Finance and Accounts Officers, North Maharashtra University, Jalgaon invites E-Tender for “**Supply and Installation of Scanning Probe Microscope with Raman Accessories**” from Manufacturer/ Distributors/ Authorized Dealers for direct import only. The details in this regard are given below.

1. Procedure to submit the tender: All eligible/ interested tenderer are required to be enrolled on Portal <https://mahatenders.gov.in> before downloading tender documents and participate in e-tendering. The vendors should submit online tender in two bid system i.e. Technical Bid and Commercial/ Financial Bid. (BOQ)
2. Technical Bid: The technical bid shall contain the following documents. The Bidder must Scan the documents and upload all these documents online with first page in technical bid Compulsorily. All the documents must be valid and self-attested by bidder Non-submission of following requested documents may lead to rejection of offers.

Sr. No.	Name of Document
I	Information of the bidder as per Annexure –A. (The same should be submitted on letter head of bidder)
II	Registration certificate of Incorporation of the company issued under the company act or by any other competent authority in case of proprietary /partnership firm etc.
III	Copy of GST Registration certificate
IV	Copy of PAN card
V	Copies of Income tax return filed during last three financial years. (i.e. 2013-14, 2014-15, 2015-16)
VI	Copies of SSI / NSIC registration certificate in case of exemption is claimed from payment of Tender Fee & Earnest Money Deposit.
VII	Proof of annual turnover for the last three financial years as per Annexure- B
VIII	List of clients to whom the tendered items supplied mentioning the name, address, Landline. No. / Mobile No. of the clients with quantity and date of supply. Copies of supply order of the last two to three years should be uploaded.
IX	Authorization letter from OEM in case of bidder is authorized Dealer/ Distributors of OEM. as per Annexure -C
X	An affidavit that the bidder has never been black listed by any government department / government under taking /any other agency as per Annexure- D
XI	The comparative Chart of technical specifications of each items in the format as per Annexure-E
XII	Bidder's Declaration on letter head (Annexure -F)
XIII	Receipts of payment of Tender Fee and Earnest Money Deposit paid through Internet Banking
XIV	Audited balance sheet & profit & Loss account of the company / firm duly audited by Chartered Accountant for last three financial years.
XV	Printed Literature / broacher / catalogue of the quoted product.
XVI	Full set of tender documents with seal and signature of bidder or his authorized representative on each page of the tender.

3. Financial Bid:-The tendering authority will first open the Technical Bid documents of all bidders and after scrutinizing these documents will shortlist the Bidders who are eligible for Financial Bidding process. Otherwise the tender may be disqualified. Financial bid should be submitted online by Vendor in Appendix-A in the form of BOQ excel sheet given over www.mahatender.gov.in, the supplier shall fill up the column of rate per unit offered by him.
4. Bidder should have valid Digital Signature Certificate (DSC) obtained from any Certifying Authorities.
5. The specifications/details of the “Supply and Installation of Scanning Probe Microscope with Raman Accessories” provided in the tender documents.
6. The Technical and Financial bid shall be submitted online as per the schedule.
7. Bidder may be invited for discussions in University, if needed/required.
8. The Bidders are strictly advised to follow the dates and times allocated to each stage. As indicated in the time schedule. All the online activities are time tracked and the Electronic Tendering System enforces time-locks that ensure that no activity or transaction can take place outside the Start and End Dates and Time of the Stage as defined in the tender schedule. At the sole discretion of the Tender Authority, the time schedule of the Tender stages may be extended.
9. Rate to be quoted should be mentioned at appropriate place in provided in Schedule (BOQ) by the bidder, more over the rate should not be quoted anywhere else in the tender booklet as well as in the blank pages.
10. The university reserves the right to decide whether to open or not open the commercial Bid of the supplier and no objection of any supplier shall be entertained on any ground whatsoever it may be regarding this.
11. No Bid shall be accepted without payment by online earnest money deposit and tenderfee.
12. The rate should be inclusive of all taxes, duties, Installation F.O.R. delivery at respective Schools/ Departments of North Maharashtra University, Jalgaon.
13. The rate should be offered for only the item as mentioned in the Schedule.
14. The rates quoted for the items other than specifications specified in the tender form shall not be considered for comparison of rate.
15. The University is not to bind to accept lowest tenders and reserve the right to accept/cancel any or all tenders without assigning any reasons thereof.

Finance and Accounts officer

: General Terms and Conditions:

- 1) The online tender is called for “**Supply and Installation of Scanning Probe Microscope with Raman Accessories**” for direct import only. The tenderer must quote the rates for direct import from OEM. Therefore the rates should be quoted in foreign currency (i.e. USD, Euro, JPY, etc.)
- 2) **Earnest Money Deposit & Tender Fees:** - Vendors are required to pay Rs.16000/- (Rs. Sixteen Thousand only) and Rs.1,60,000/- (Rs. One Lakh Sixty Thousand only) towards Tender Fee and EMD respectively through Net banking.
- 3) **Security Deposit:** The successful bidder to whom the purchase order is given shall be required to deposit an amount equivalent to 5% of total value of purchase order (inclusive of all taxes, duties etc) as security deposit within 7 days from the date of purchase order. The security deposit will not carry any interest which shall be refunded after supply and successful installation of the system. If the bidder fails to keep the security deposit, then the second lowest quoted bidder will be issued the similar purchase order or the University with holds the total authority for the necessary action to be taken. The Security deposit will be forfeited if the supplier fails to execute the purchase order
- 4) **Cancellation of Purchase Order:-**University reserves the right to cancel the purchase order in case bidder fails to supply and Install and Commissioning of the Scanning Probe Microscopy with Raman Accessories within the stipulated time. The University reserves the right to go for next lowest tenderer or other appropriate action will be taken.

If due to the above mentioned reason purchase order is canceled, earnest money and/or security deposit shall be forfeited and also the tender may be allotted to the next lowest tender or the university reserves the right to take any other appropriate decision including legal action against the bidder to whom purchase order was given.
- 5) The Bid E.M.D. will be forfeited :
 - a) If the bidder withdraws his bid during the period of bid validity specified in the bid.
 - b) In case of successful bidder, if the bidder
 - i) Fails to sign the contract/ agreement in accordance with the terms of the tender documents.
 - ii) Fails to furnish required performance security in accordance with the terms of tender document within the time frame specified by the client.
 - iii) Fails or refuses to honor his own quoted price for the product offer.
- 6) **The successful bidder is required to execute an agreement on Rs.100/- stamp paper with his own cost. The agreement should be registered with notary.**
- 7) Conditional tender shall not be accepted.
- 8) F.O.R : -The rates quoted should be C.I.F Mumbai (By air). The clearance of equipment from customs will be the responsibility of the Supplier. The necessary documents required for customs clearances including custom duty exemption certificate will be provided by University.
- 9) **Payment:** 100% payment shall be made through irrevocable letter of credit. 90% payment against proof of dispatch and 10 % after submission of PBG and satisfactory installation and commissioning testing of the equipment.
- 10) **Performance Bank Guarantee:** The Successful bidder will have to submit the performance Bank guarantee along with invoice equivalent to 10% of total value of invoice towards performance bank guarantee for the period of 60 days beyond warranty period. The Bank Guarantee will be forfeited if the supplier fails / refuse to provide the satisfactory services during the period of warrantee.
- 11) **Delivery Period:** - **Scanning Probe Microscope with Raman Accessories** must be supplied within 60 days from the date of receipt of confirmed letter of credit. If the

successful bidder fails to deliver goods/material within the period prescribed for delivery, the University will entitle to recover penalty as liquidated damages @ 0.5% of total value of invoice each week or parts thereof during which the delay of such stores delays subject to maximum in limit of 5%. Also installation and commissioning of the equipment will have to be completed within Two/Three weeks from the date of receipt of equipment to NMU. Delay in installation and commissioning will attract the penalty as mentioned above.

- 12) **Warranty:-** Three Years from the date of Installations.
- 13) Only online tender submitted through Government of Maharashtra portal for e-procurement will be consider. (<https://mahatenders.gov.in>)
- 14) Tender offer must be valid for a period of minimum 120 days from the date of opening of commercial / financial bid. Any offer failing short of the validity period is liable for rejection.
- 15) Bidder shall quote for “**Supply and Installation of Scanning Probe Microscope with Raman Accessories**” as per technical specifications provided in the tender documents.
- 16) Only internationally well-known brand of **Scanning Probe Microscope with Raman Accessories** should be quoted and assembled brands are not eligible for this tender. It will be the prerogative of the University to select the brand /company on the basis of technical specifications, past experience regarding performance of the brand, market reputation of the brand etc.
- 17) The tenderers are requested to read the tender document carefully and ensure to comply with all the instructions herein. Non-compliance of the instructions contained in this document may disqualify the tenderer from the tendering exercise.
- 18) **Jurisdiction:** The courts at Jalgaon alone will have the jurisdiction to try any Matter, dispute or reference between parties arising out of this tender / contract. It is specifically agreed that no court outside and other than Jalgaon court shall have Jurisdiction in the matter.
- 19) Provide technical data sheets/Literature/product brochure of each item along with the tender offer.
- 20) The University reserves the right to accept or reject any or all the tenders from any or all the parties without assigning reason thereof.
- 21) Offer should be complete in all respect. Incomplete offers would not be entertained.
- 22) The University is looking for well proven branded products conforming to ISO 9002 etc. which are volume produced and are used by a large number of users in India/Abroad. All products quoted should be associated with specific model numbers and names and with printed literature describing configuration any functionality.
- 23) The University reserves the right to delete/increase/decrease items from the schedule of requirement specified in the tender.

Finance and Accounts Officer

DETAIL TECHNICAL SPECIFICATIONS FOR SPM WITH RAMAN ACCESSORIES

Sr.No	Description / Specification	Qty.
(A.1)	<p>Scanning Probe Microscope (SPM) Specification: System should be integrated with Raman spectrometer to do microscopy & spectroscopy mapping on the same spot for both opaque and transparent samples and TERS (Tip Enhanced Raman Spectroscopy). In addition, capability of using both SPM & Raman as a standalone unit even after integration.</p> <p>Application Modes: The SPM must be capable of performing measurements in the below listed operating/application modes: Phase imaging and Liquid imaging (In liquid imaging, the cantilever resonance should be detected via laser excitation so that only cantilever resonance without other interfering amplitude peaks is detected). Contact SPM mode. Intermittent/ Tapping / non-contact mode. Magnetic force microscopy mode (variable field module upto 0.5 T or better). Force modulation microscopy/force spectroscopy (with force sensitivity <20 pN).</p> <p>All the required accessories along with cantilever tool kit, calibration gratings, test samples and necessary software to conduct the above mentioned measurements and analysis must be included within the quotations.</p> <p>Scanner : Scanner must be low noise, high precision, and able to operate in closed loop in all three (X, Y & Z) directions. The system must include tip scanning or sample scanning options with complete decoupling possibility of XY and Z scanning. The operator can chose any scanning direction in between 0 to 180 deg. range not being limited to standard 0 & 90 scanning directions. XY scanner with closed loop Scan range: 90 μm x 90 μm or better Noise: ≤ 0.5 nm RMS (closed loop), ≤ 0.1 nm RMS (open loop) Z scanner with closed loop Scan range: ≥ 10 μm Noise: ≤ 0.25 nm RMS (closed loop)</p> <p>Sample Stage: The SPM must have motorized XY and Z positioning stage. Sample Size: XY ≥ 70 nm and Z ≥ 10 nm Sample positioning: XY sample positioning with travel range > 6 mm and accuracy of minimum 1micron.</p> <p>Optics: Top view optics with digital zoom On axis optical microscope with 10X objective lens. Resolution ≤5 μm ≥ 5 megapixel camera with digital pan and zoom and fully software integrated</p>	01

	<p>Controller and Electronics: Digital control of feedback gains for adjusting scanning parameters such as PID gains, set points, drifts during scan, color adjustments etc. All the required electronics and softwares for scanning, data acquisition, image processing, as well as image analysis for all modes of operation with detail operational and service manual should be provided with the systems. The controller should have at least one built in dual lock in operating at ≥ 4 MHz (16-bits) for detection of cantilever detection signals.</p> <p>SPM Software module: Microsoft windows based/ user-friendly (with latest configuration and support to be provided for at least for 10 years in case of up gradation of the OS) operating system, supporting TCP/IP for networking. The software must be sole package for all modes and attachments with no need for additional software programmes. The software package must include image acquisition, data processing and analysis in one package. Suitable PC workstation with latest configuration must be supplied with the system.</p> <p>Probe details: Vendor should supply at least 50 probes (25 during installation and 25 later based on institute's choice) according to application criteria of different modes described.</p>	
(A.2)	<p>Optional for SPM: A.2.1 SPM Application Modes: Conductive AFM, Kelvin probe/surface potential microscopy, Electrical field microscopy mode, Scanning thermal microscopy (thermal conductivity and thermal resistivity imaging), Piezoresponse force microscopy , Nano manipulation mode.</p> <p>A.2.2 Measurements can be performed in inert atmosphere (The sample/tip space can be evacuated)</p> <p>A.2.3 Heating and cooling stage for sample temperature control with a range of -20 deg Celsius to 300 deg Celsius with temperature resolution of 0.1 deg Celsius.</p> <p>A.2.4 Upgradation of the system with Near field scanning optical microscopy (both reflection & collection NSOM) should be quoted separately.</p>	
(B.1)	<p>Raman Spectrometer Specifications: Micro Raman Spectrometer: An achromatic spectrograph equipped with gratings; Lasers with transfer & Filtering optics; a confocal microscope; a multichannel CCD Detector & necessary software.</p> <ul style="list-style-type: none"> • Spectral range: 200nm-1050nm. • Spectral Resolution : 0.5cm^{-1} or better in the entire spectral range. • Laser wavelength: 532 nm (other laser sources with different wavelengths should be quoted separately as optional). • Spectrometer: Single spectrometer with Two gratings- 1800 gr/mm or better & 600 gr/mm Motorised grating mount driven by software. • Possibility of obtaining AFM and Raman images, if possible 	01

	<p>simultaneously during single scan. Internal source for Raman calibration, wavelength calibration, response calibration for automatic calibration procedure. Automatic beam path alignment.</p> <ul style="list-style-type: none"> • Switching the lasers through software should be possible • Excitation Laser: Air Cooled Laser at 532nm (≥ 10 mW) compatible for Raman application. • Necessary Optics and Set of “edge filters” & “interference filters” with a lower cutoff of 50 cm^{-1} or better. • Laser spot: Diameter approx. 1 micron on sample. • High efficiency thermoelectrically cooled CCD: A fully automated multichannel detectors with active pixels 1024 X 256 pixels or more, and pixel size of $26\text{ }\mu\text{m}$ X $26\text{ }\mu\text{m}$ (or better). (Please mention dark current and quantum efficiency.) • Software permitting the control of instrument, data acquisition, data manipulation with work station; • Objective: 100x, 50x LWD, 10x • White light illumination system for sample viewing 	
(B.2)	<p>Optional for Raman Spectrometer : Laser wavelength: 488 nm, 633 nm and 785 nm excitation laser for Raman along with compatible edge/notch and interference filters.</p>	
(C.1)	<p>Package Accessories for SPM with Raman Integrated system: All standard start up accessories required for the complete operation of the system and execution of the specified modes (hardware and software) must be included with the quotation. The quotation must include at Thermal, vibration and acoustic isolation system. It should also include room preparation including but not limited to UPS with battery backup, AC, dehumidifier, grounding work, etc and installation.</p>	
(C.2)	<p>1.The quotation should separately include the cost of operator for three year from the date of installation.</p> <p>Other terms and conditions: Warranty: 3 years</p>	
(C.3)	C.3.1 AMC for First year after Warranty	01
	C.3.2 AMC for Second year after Warranty	
	C.3.3 AMC for Third year after Warranty	
	C.3.4 AMC for Fourth year after Warranty	
	C.3.5 AMC for Fifth year after Warranty	

Information of the Bidder

Sr. No.	Particular	
1	Name of the Company/ Organization	
2	Registered office Address, Telephone no., and E-mail ID	
3	Correspondence / Contact Address. Details of contact person name, designation, address, mobile no & e-mail ID.	
4	Type of the Organization /(Proprietary / Partnership/ Pvt. Ltd./PSU/Govt./Public Ltd) certified copy in respect of registration must be enclosed	
5	Year of establishment and Experience in business (In number of years)	
6	Annual Turnover 2013-14 2014-15 2015-16	
7	GSTIN Registration No.	
8	PAN Card No.	
9	TIN NO.	
10	Details of Bank – Name of Bank Account Name of Bank Type of Account Account Number IFSC Code MICR no.	
11	Capacity in which the bidder has signed the bid	

Signature & Seal of the Tenderer

Certificate of Annual Turn Over

Sr.No.	Financial year	Annual turnover (In Lakhs)
1	2013-14	
2	2014-15	
3	2015-16	

Seal & Signature of the
Chartered Accountant

Seal & Signature of the
bidder authorized representative

Manufacturers Authorization Form

Ref.No./

Date: / /2017

To,
The Finance & Accounts officers,
Post Box No.80,
Umavinagar, Jalgaon.

Subject : Authorization letter for tender for “SCANNING PROBE
MICROSCOPE WITH RAMAN ACCESSORIES”

Ref.No. : NMU/UICT/ET/SPM/545/2017

Dear Sir,

This is with reference to above subject of procurement “**Supply and Installation of Scanning Probe Microscope with Raman Accessories**” for your University. We would like to authorize M/s. ----- who is a business associate / partner of OEM/ authorized distributors /authorized dealers in India to participate in the above tender and execute the same if awarded.

We here by extended our full support as per terms and conditions of the tender and the contract for the services offered against this invitation for tender offered by the M/s. _____

We here by commit to the tender terms and conditions and will not withdraw our commitment during the process and or during the period of contract.

Thanking you,

Yours faithfully,

Name of the company and seal
Name, Signature and Designation
of the person

Note :- The Manufactures Authorization form must be signed by competent authority of the manufacturer.

DECLARATION REGARDING BLACKLISTING / DEBARRING FOR TAKING PART IN TENDER.

(To be executed & attested by Public Notary / Executive Magistrate on Rs.20/- non judicial Stamp paper by the bidder)

I / We _____ Manufacture / Partner(s)/ Authorized Distributor /agent of M/S. _____ hereby declare that the firm/company namely M/s. ----- has not been blacklisted or debarred in the past by Union / State Government or by any other organization from taking part in tenders in India.

Or

I / We _____ Manufacture / Partner(s)/ Authorized Distributor/agent of M/s. -----hereby declare that the Firm/ company namely M/s.----- was blacklisted or debarred by Union / State Government or any Organization from taking part in tenders for a period of _____ years w.e.f. _____ to _____. The period is over on _____ and now the firm/company is entitled to take part in tenders.

In case the above information found false I / we are fully aware that the tender/ contract will be rejected/cancelled by University and EMD / SD shall be forfeited. In addition to the above University will not be responsible to pay the bills for any completed / partially completed work.

DEPONENT

Name _____

Address _____

Attested:

(Public Notary / Executive Magistrate)

**COMPARATIVE CHART OF TECHNICAL SPECIFICATIONS OF
SCANNING PROBE MICROSCOPE WITH RAMAN ACCESSORIES**

Sr.No.	Name of Item	Specifications As per tender	Specifications offered by the bidder	Warranty offered	Name of OEM, Make & Model	Name of currency in which prices are mentioned in BOQ(i.e. Financial Bid)

Note :1) The above chart should be submitted on letter head of the bidder.

Name, Signature and
Seal of the bidder

Bidder's Declaration

**E-TENDER DOCUMENT FOR SUPPLY AND INSTALLATION OF
SCANNING PROBE MICROSCOPE WITH RAMAN ACCESSORIES**

Ref.No:- **NMU/UICT/ET/SPM/545/2017**

I hereby certify that I have gone through all the information and terms and conditions stipulated in the tender document and hereby confirm to abide by the same. I also hereby certify that the rates quoted in financial/ commercial bid (BOQ) are not more than the rate charged to any other Institution/ Department / Organization.

Signature : -----

Name of signatory : -----

Seal of the bidder