This is a Request for Quote (RFQ) from domestic (India-based), for the supply and installation of atomic force microscope with various scanning probe capabilities at MNCF, CeNSE, IISc Bangalore

| 1 | Section 1 | Bid Schedule         |   |  |
|---|-----------|----------------------|---|--|
| 2 | Section 2 | Eligibility Criteria | As specified by IISc                                  |  |
| 3 | Section 3 | Terms and Conditions | As specified by IISc                                  |  |
| 4 | Section 4 | Specifications       | Technical specifications                              |  |
| 5 | Section 5 | Technical Bid        | Annexure 1: Bidder details                            |  |
|   |           |                      | Annexure 2: Declaration regarding experince of        |  |
|   |           |                      | bidder  |  |
|   |           |                      | Annexure 3: Declaration regarding clean track         |  |
|   |           |                      | record of the bidder                                  |  |
|   |           |                      | Annexure 4: Declaration of acceptance of tender       |  |
|   |           |                      | Annexure 5: Terms and conditions. Details of item     |  |
|   |           |                      | quoted  |  |
| 6 | Section 6 | Commercial bid       | Quotation with Price, Technical specifications of the |  |
|   |           |                      | Equipment   |  |
|   |           |                      |   |  |

# Section 1 - Bid Schedule

| 1 | Tender No                                 |  |  |  |  |
|---|---|--|--|--|--|
| 2 | Tender Date                               | 04 <sup>th</sup> February 2020   |  |  |  |
| 3 | Item Description                          | Supply and installation of atomic force microscope with various scanning probe capabilities at MNCF, CeNSE, IISc Bangalore                                     |  |  |  |
| 4 | Tender Type                               | Two bid system  (i) Technical Bid (Part A)  (ii) Commercial Bid (Part B)   |  |  |  |
| 5 | Place of tender submission                | Chairperson Office First Floor Centre for Nano Science and Engineering Indian Institute of Science, Bangalore 560012   |  |  |  |
| 6 | Last Date & Time for submission of tender | 25 <sup>th</sup> February 2021   |  |  |  |
| 7 | For further clarification                 | Dr. Suresha S J MNCF Centre for Nano Science and Engineering Indian Institute of Science, Bangalore 560012 Email: sureshasj@iisc.ac.in Phone: +91 80 2293 3253 |  |  |  |

# Section 2 – Eligiility Criteria

#### Prequalification criteria:

- 1. The Bidder's firm should have existence for a minimum of 5 years. (Enclose Company Registration Certificate)
- 2. The Bidder should belong to either class 1 or class 2 supplier distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter.
  - a) Class 1 supplier: Goods and services should have local content of equal to or more than 50%.
  - b) Class 2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
- 3. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to Class-1 supplier.
- 4. MSME can seek exemption to some qualification criteria. IISc follows GFR2017 for such details
- 5. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.
- 6. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect has to be given as per Annexure 3.

# Section 3 – Terms and Conditions

## A) Submission of Tender:

- 1. All documentations in the tender should be in English.
- 2. Tender should be submitted in two envelops (two bid system).
  - a. Technical Bid (Part-A) Technical bid consisting of all technical details and check list for conformance to technical specifications.

The technical proposal should contain a technical compliance table with 5 columns.

- i. The first column must list the technical requirements, in the order that they are given in the technical requirement below.
- ii. The second column should provide specifications of the instrument against the requirement. Please provide quantitative responses wherever possible.
- iii. The third column should describe your compliance with a "Yes" or "No" only. Ensure that the entries in column 2 and column 3 are consistent.
- iv. The fourth column should state the reasons/explanations/context for deviations, if any.
- v. The fifth column can contain additional remarks from the OEM. You can use this opportunity to highlight technical features, qualify response of previous columns, or provide additional details, compare your solution with that of your competitors or provide details as requested in the technical requirements table below.
- b. Commercial Bid (Part-B) Indicating item wise price for the items mentioned in the technical bid, as per the format of quotation provided in tender, and other commercial terms and conditions.
- 3. The technical bid and price bid should each be placed in sparate sealed covers, superscripting on both the envelopes the tender no. and the due date. Both these sealed covers are to be placed in a bigger cover which should also be sealed and duly superscripted with the Tender No, Tender Description & Due Date.
- 4. The SEALED COVER superscripting tender number / due date & should reach Chairperson Office, Centre for Nanoscience and Engineering, Indian Institute of Science, Bangalore 560012, India on or before due date mentioned in the tender notice. In case due date happens to be holiday the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.
- 5. All queries are to be addressed to the person identified in "Section 1 Bid Schedule" of the tender notice.
- 6. The items are required for research purposes, and IISc is a DSIR registered institution, hence eligible for GST exemption (i.e. GST @ 5%). While submitting the price quote, this point must be taken care. For getting GST exemption certificate, successful bidders must submit, a formal request together with Invoice copy and Purchase order copy.

- 7. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document.
- 8. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.
- 9. The purchase committee reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to the award of contract, without there by incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.
- 10. Incomplete bids will be summarily rejected.

### B) Cancellation of Tender:

Notwithstanding anything specified in this tender document, IISc purchase committee, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

- a. To accept OR reject lowest tender or any other tender or all the tenders.
- b. To accept any tender in full or in part.
- c. To reject the tender, offer not confirming to the tender terms.

# C) Validity of the Offer:

The offer shall be valid 90 Days from the date of opening of the commercial bid.

# D) Evaluation of Offer:

- 1. The technical bid (Part A) will be opened first and evaluated.
- 2. Bidders meeting the required eligibility criteria as stated in Section 2 of this document shall only be considered for Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
- 3. Pre- qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision in regard to acceptance and / or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and decision in this regard shall be binding on the bidders.
- 4. The award of contract will be subject to acceptance of the terms and conditions stated in this tender.
- 5. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
  - a. Non-submission of complete offers.

- b. Receipt of bids after due date and time and or by email / fax (unless specified otherwise).
- c. Receipt of bids in open conditions.
- 6. In case any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bangalore shall construe that the BIDDER had accepted the clauses as of the tender and no further claim will be entertained.
- 7. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
- 8. Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, preprocessing and post processing, optional items, recommended spares, warranty, annual maintenance contract.

### E) Pre-requisites:

The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.

# F) Warranty:

The complete system is to be under warranty period of minimum 3 years (year wise breakup value should be shown in the commercial bid) Vendor should inloude cost of any spares that are expected to be needed during the warranty period, including electronics, subcomponents, and software. Vendors can assume usage of 2000 hours/year for this calculation If the instrument is found to be defective, it has to be replaced or rectified at the cost of the bidder within 30 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

# G) Annual Maintenance Contract:

An annual maintenance contract for a period of at least 3 years post warranty should be provided as an essential optional item on completion of warranty period. If the purchase committee opt for the AMC, then the L1 will be calculated as instrument cost (A) Including warranty + cost of AMC per year (B)\*no of year. If we opt AMC period as 3 years, L1 will be calculated as A+ 3\*B.

The AMC costs will not be considered towards classifying the domestic nature (class 1 or class 2) of the vendor (see eligibility criteria in section 2).

## H) Purchase Order:

- 1. The order will be placed on the bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.
- 2. The quantity of the items in tender is only indicative. IISc, Bangalore reserves the right to increase /decrease the quantity of the items depending on the requirement.
- 3. If the quality of the product and service provided is not found satisfactory, IISc, Bangalore reserves the right to cancel or amend the contract.

### I) Delivery, Installation and Training:

The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore from the date of receipt of purchase order. The system should be delivered, installed and made functional within 90 days from the date of receipt of purchase order. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore. After successful installation and inspection, the date of taking over of entire system by the IISc, Bangalore shall be taken as the start of the warranty period. No partial shipment is allowed.

The bidder should also arrange for technical training to the local facility technologists and users.

### J) Payment Terms:

100% payments (except AMC) will be released after completion delivery and satisfactory installation subject to TDS as per rules. AMC cost (if ordered), after completion of warranty period) will be released on half-yearly basis at the end of each six months subject to satisfactory services. Price basis must be on FOR-IISc Bangalore basis only.. As per GFR no advance payment can be made to domestic vendors, unless an equal amount of bank guarentee is provided.

# K) Statutory Variation:

Any statutory increase in the taxes and duties subsequent to bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bangalore.

# L) Disputes and Jurisdiction:

Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

# M) General:

1. All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension in the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.

- 2. The bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is however, advised not to furnish superfluous information.
- 3. The bidder may visit the installation site before submission of tender, with prior intimation.
- 4. Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.

# Section 4 – Technical Specifications

A. Technical Specifications of the atomic force microscope with various scanning probe capabilities

#### 1. Instrument Resolution

The instrument must have demonstrated atomic lattice resolution (sub  $A^{\circ}$ ) in AC mode and contact mode imaging. This must be done with the same large scan-range scanner that can also image at least  $100\mu m \times 100\mu m$  in closed loop. This allows large survey scans with the ability to zoom-in to get high resolution images at a region of interest.

#### 2. Instrument Geometry

- The XY scanner must be separate from the Z scanner to eliminate the "bowing" artefact commonly seen in Piezo-tube based (XYZ scanners) AFM systems. Piezo tube based scanner design will not be acceptable.
- The cantilever holder and the optical lever assembly (laser, optics and detector) must be housed within a single rigid frame. This eliminates artifacts due to relative motion between the optical lever arm and the cantilever during imaging and force measurements.
- The instrument must accommodate samples sizes up to 50mm (dia) and 10mm thick.

#### 3. Operating Modes and measurement options

- 3.1 The microscope must be capable of the following scanning modes, each of which requires at minimum that the signals noted in the corresponding parentheses be recordable simultaneously. Each of these signals must be recorded in both trace and retrace scan directions.
- Contact Mode
- Tapping Mode (AC Mode)
- Tapping Mode with Q-control
- Dual AC
- Phase Imaging
- Force Curve Mode
- Force Mapping Mode (Force Volume)
- Force Modulation

- Frequency Modulation
- Fluid imaging
- Lateral Force Mode (LFM)
- Kelvin Probe Force Microscopy (KPFM)
- Electric Force Microscopy (EFM)
- Magnetic Force Microscopy (MFM)
- Piezoresponse Force Microscopy (PFM)
- Switching Spectroscopy PFM
- Dual AC Resonance Tracking PFM
- Vector PFM
- Vertical PFM
- Lateral PFM with lateral force calibration option
- Nanoindentation
- Dual AC bimodal AFM
- High resolution mode for imaging delicate soft samples in both air & liquid environment while maintaining resolution & clarity.
  - Conducting AFM (also should be simultaneously performed with various modes of PFM). The system should allow allows conductive measurements while scanning as well as at user specified locations (I-V curves). A sample bias of -10V to 10V is possible. The software allows user-specified wave forms for I/V spectroscopy (square, sine, triangle, pulse, or user defined).
- Optional Dual Gain option to simultaneously monitor current in two separate gains stages of 1μA/V and 1nA/V sensitivities. With a range of ±10V, current from the noise floor of a few picoamps, up to 10 μA should be monitored. Since the two channels are acquired simultaneously, there should be no need to withdraw and switch the stages when the current saturates in the higher gain stage. The current sensing range should be 10pA to 10mA
- Options to measure frequency response of the cantilever at a specific tip-sample separation, and to measure amplitude response of the cantilever after holding the z-piezo at a specific tipsample separation.
- 3.2 The system must provide demonstrated imaging on piezo materials in the following imaging modes; Vertical PFM (out-of-plane polarization), Lateral PFM (in-plane polarization), Vector PFM (real space reconstruction of the polarization orientation) and Lithography for modification of the piezoelectric polarization.
  - The system must include demonstrated spectroscopy modes including: Simultaneous remnant and applied voltage hysteresis loops on ferroelectric materials and switching spectroscopy mapping (while measuring contact resonance frequency, PFM drive amplitude, PFM phase and tip-sample dissipation/Q-factor).
  - Pulse-relaxation measurements (while measuring contact resonance frequency, PFM drive amplitude, PFM phase and tip-sample dissipation/Q-factor)
  - The instrument must exhibit extremely low crosstalk between the tip-drive voltage and the measured deflection. The measure of crosstalk is defined as follows:
  - Position of the tip >1cm from the sample surface.
    - Apply the bias voltage to the tip.
    - The Sum signal should be at least 7 volts and the deflection zeroed to provide the highest measurement sensitivity.
    - The measured amplitude at all frequencies should be less than 300 microvolts.
  - The system control must allow the user to route the AC bias either to the tip or the sample through software control.

- The PFM control software must include a variety of PFM spectroscopy modes in various complexity levels to perform user defined bias curves.
- The software must include sufficient analysis routines within the data analysis environment to eliminate the need to export, re-import into third party software, or interpret the exported data scales

#### 4. Optical Lever Arm: Light Source and Photodetector

- The instrument optical lever arm must use a low coherence light source (for example, a super luminescent diode, SLD) to reduce artifacts from optical interference effects.
- The instrument must use an infrared SLD (or equivalent) for the optical lever arm to eliminate optical crosstalk with epi- and transmission- fluorescence measurements.
- Beam used for deflection detection must approach the probe at an angle that is significantly (>20
  degrees) off vertical relative to the sample, such that reflections from the sample surface do not
  reflect back into the light source or into the detector.

#### 5. System Scanner

- System must scan the sample in XY and the tip in Z. Alternate approaches using exclusively tipscanning or sample-scanning are not acceptable substitutes.
- Each axis of motion must independently actuated using its own piezo stack and flexure stage.
- Should have Integrated LVDT position sensors in all three axes provide seamless closed loop operation.
- System must include a closed-loop XY scanner with a minimum range of 120 μm (closed loop). X and Y sensor noise must be less than 600pm ADev in a 0.1Hz to 1 kHz BW, with sensor nonlinearity <0.5% at full scan. Scanner noise specifications and representative high resolution imaging examples must be available for inspection in publicly available brochures, datasheets or websites. The scanner must be compatible with all supplied scan modes and in both air and liquid environments.</li>
- System must include a Z scanner with a minimum range of 15μm that is capable of both open-loop and closed-loop operation. Z sensor noise must be less than 250pm ADev in a 0.1Hz to 1 kHz BW, with sensor Nonlinearity <0.05% at full scan.
- DC Height Noise must be less than 50pm ADev in a 0.1Hz to 1 kHz BW. Scanner noise specifications
  and representative high resolution imaging examples must be available for inspection in publicly
  available brochures, datasheets or websites.
- The scanner must be compatible with all supplied scan modes and in both air and liquid environments.
- The scanner must be closed-loop and independently actuated in X, Y and Z with dedicated piezo stacks.

#### 6. System Optics

**Sample viewing:** Suitable camera system for tip / sample viewing should be included. Following should be the minimal specifications - The Top View illumination and built-in CCD camera for viewing the cantilever and sample from above through the 10X objective located in the head. Field of view switchable between 720 and 240 microns.

#### 7. Controller and Electronics

System must use at least 24-bit digital-to-analog converters (DACs) in order to generate the XY and Z piezo scan signals. At both 120-micron and 10-nm scan sizes, the corresponding bit resolution must be sub-Angstrom (<0.1nm). Note that this specification applies to the generation of the scanner drive signals, not the sampling of the scanner position sensors.

- The system must provide thermal tunes of the cantilever up to at least 2 MHz.
- The instrument must allow digital Q-control in the range 2 kHz 2 MHz.
- The instrument must include software controlled relays for the X, Y and Z high voltage supplies and the laser power.
- The electronics must provide access to all major signals on BNC connectors on the controller front panel including deflection (A-B), sum (A+B), amplitude, phase, lateral force, X, Y and Z sensors, three user inputs, three user outputs, X,Y and Z piezo drive voltages, and user X, Y and Z modulation voltage inputs compatible with external hardware. There must also be an audio-out for ear phone.
- The instrument must include auto-configuration of external hardware and accessories. Device parameters must be stored in non-volatile RAM on the device itself and read into the software when the device is plugged in. This eliminates the need for parameter files.
- The instrument must include a user programmable control knob that can be used to fine tune and adjust all scan parameters.
- Heads, scanners, probe holders and optional environmental control cells must be "plug and play",
  meaning that the software automatically recognizes them and configures the software
  appropriately (e.g. calibration parameters).
- System must be able to support multifrequency AC mode (tapping mode) operation where two
  specific frequencies are driven simultaneously and detected simultaneously by lockin amplifiers
  to measure the amplitude and phase response at each frequency. Lockin detection alone at two
  frequencies is not sufficient, as both frequencies must be driven simultaneously with a mixed drive
  signal.

#### 10. Software

- Control and analysis must be user-programmable natively in an entirely open-source software programming language.
- The system's software must include a one-click configuration tool that sets up the software for standard and user-defined operation modes, such as AC imaging in air and liquid, contact mode, EFM, KPFM, PFM, force measurements, etc.
- The data acquisition system must be capable of recording individual image sizes of 8000x8000 pixels or greater.
- AFM control software environment must include 3D rendering technology for advanced image display. This feature must allow the user to generate, display and visualize 3 & 4D real-time scan images, as well as off-line processing.
- Must include drift compensation software. Software must allow a region of interest to be tracked
  in real time to within 1nm of precision while eliminating any scan distortion in the image. Drift
  compensation must be able to be applied to any imaging, spectroscopy or advanced
  characterization mode, and in conjunction with sample heating and cooling options.
- System must include a feature that automatically calibrates the cantilever sensitivity (deflection sensitivity/INVOLS) and spring constant by simply selecting the probe type and clicking a button.
   To avoid tip damage, at no point during the calibration may the tip touch the sample. The feature must actually calibrate the probe. It must not use nominal tabulated values for the sensitivity and spring constant.

• Software must include a feature that automatically optimizes the imaging gain and setpoint for AC Mode (tapping mode) operation. The feature must use a predictive algorithm such that operation is stable and producing high quality data within the first few scan lines.

#### 11. Instrument Isolation

- The system must include a thermally- and acoustically-isolating enclosure. The enclosure must provide at least 20dB of acoustic isolation.
- The system must include an active vibration isolation table.

#### 12. Support and Service

Must include free AFM software upgrades for the life of the instrument.

#### **Optional Accessories / Modules**

- Quantitative Nano Scale Maps System configuration must include an imaging mode that is
  capable of generating quantitative nanoscale maps of storage and loss modulus, and loss
  tangent (loss modulus divided by storage modulus), at high pixel resolution (at least 1024x1024
  pixels). Data capture must occur during normal AC mode imaging of topography at normal scan
  rates (<20 minutes per scan). Proposals for techniques that map storage modulus only are
  insufficient and will be rejected.</li>
- Nanolithography/nanomanipulation
- A dedicated high voltage (+/- 220V) module for tip or sample bias is also required to enable
  measurements on materials with weak piezoelectric response. The high voltage module must
  provide necessary safety features for safe and easy operation. With a tip bias voltage drive
  amplitude of 100V, sweep the drive frequency from 50kHz to 2MHz or better.
- System should include an accessory that allows application of a variable magnetic field parallel to the sample plane. Field strength capable of reaching +/-0.5T (+/- 5000G) with Maximum field ramp: 7000 G/minute. An integrated sensor measures the field strength near the sample with a resolution of ~1G and the field strength is software controlled. During steady state operation, the device generates no heat, even at the maximum field strength. The module should be based on a permanent magnet (not an electro-magnet) so that no cooling of the magnet is required. This module to include capabilities for both in-plane and out of plane operation. The out of plane magnetic fields are possible with the inclusion of required pole pieces which allow field ranges of approximately +/- 1500 Gauss in a bipolar configuration, or approximately 0 2000 Gauss in a unipolar configuration. A handheld gaussmeter for measuring fields is to be provided.
- Variable temperature stages covering a range from 20 deg C to 300 deg C should also be offered.
- Environmental control: RH, temperature, inert environment like N<sub>2</sub>

# B. Spares and accessories

Sample holder (Std. magnetic sample disks), generic holders, spring clips, Non contact mode probes, contact mode probes relevant for every mode, Necessary cords and cables.

# C. Training and demonstration

Training on usage of the machine (hardware and software) must be provide by the successful bidder at bidder's cost to the end users at IISc, Bangalore.

# Section 5- Technical Bid

The technical bid should furnish all requirements of the tender along with all annexure in this section and submitted to

The Chairperson,
Attn: Dr. Suresha S J
Centre for Nano Science and Engineering
Indian Institute of Science
Bangalore – 560012, India

# Annexure-1:

Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

## **Details of the Bidder**

| Sl. No | Items                                     | Details |
|--------|---|---------|
| 1.     | Name of the Bidder                        |         |
| 2.     | Nature of Bidder (Attach attested copy of |         |
|        | Certificate of Incorporation/ Partnership |         |
|        | Deed)                                     |         |
| 3.     | Registration No/ Trade License, (attach   |         |
|        | attested copy)                            |         |
| 4.     | Registered Office Address                 |         |
| 5.     | Address for communication                 |         |
| 6.     | Contact person- Name and Designation      |         |
| 7.     | Telephone No                              |         |
| 8.     | Email ID                                  |         |
| 9.     | ). Website                                |         |
| 10.    | PAN No. (attach copy)                     |         |
| 11.    | GST No. (attach copy)                     |         |

| Signature of the Bidder   |       |
|---------------------------|-------|
| Name<br>Designation, Seal | Date: |

#### Annexure-2:

Declaration regarding experience

To,
The Chairperson,
Centre for Nanoscience and Engineering,
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXXXXX

Dated: XXXXX

Supply and installation of atomic force microscope with various scanning probe capabilities at MNCF, CeNSE, IISc Bangalore

Sir,

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has ---- years of experience in supplying and installing Atomic Force Microscope systems.

(Signature of the Bidder) Printed Name Designation, Seal Date:

#### Annexure-3:

Declaration regarding track record

To,
The Chairperson,
Centre for Nano Science and Engineering
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXXX

Dated: XXXXX

Supply and installation of atomic force microscope with various scanning probe capabilities at MNCF, CeNSE, IISc Bangalore

Sir.

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company/ firm is not currently debarred / blacklisted by any Government / Semi Government organizations / institutions in India or abroad. I further certify that I'm competent officer in my company / firm to make this declaration.

Or

#### I declare the following

| Sl.No | Country in which the   | Blacklisted / debarred by | Reason | Since when and |
|-------|------------------------|---------------------------|--------|----------------|
|       | company is Debarred    | Government / Semi         |        | for how long   |
|       | /blacklisted / case is | Government/Organizations  |        |                |
|       | Pending                | /Institutions             |        |                |
|       |                        |                           |        |                |

(NOTE: In case the company / firm was blacklisted previously, please provide the details regarding period for which the company / firm was blacklisted and the reason/s for the same).

Yours faithfully (Signature of the Bidder)

Name

Designation, Seal

Date:

### Annexure – 4:

Declaration for acceptance of terms and conditions

To,
The Chairperson,
Centre for Nano Science and Engineering
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXX

Dated: XXXX

Supply and installation of atomic force microscope with various scanning probe capabilities at MNCF,

CeNSE, IISc Bangalore

Sir,

I've carefully gone through the Terms & Conditions as mentioned in the above referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I'm an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder) Name Designation, Seal

Date:

#### Annexure – 5:

#### Details of items quoted:

- a. Company Name
- b. Product Name
- c. Part / Catalogue number
- d. Product description / main features
- e. Detailed technical specifications
- f. Remarks

#### Instructions to bidders:

- 1. Bidder should provide technical specifications of the quoted product/s in detail.
- 2. Bidder should attach product brochures along with technical bid.
- 3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

# Section 6 – Commercial Bid

The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned under:

| S.No | Description   | Cat. Number | Quantity | Unit Price | Sub total |
|------|---|-------------|----------|------------|-----------|
| 1.   | Essential items noted in the technical specification        |             |          |            |           |
| 1.a  | (details of essential items)                                |             |          |            |           |
| 1.b  |   |             |          |            |           |
| 2.   | Optional items noted in the technical specification         |             |          |            |           |
| 2.a  | (details of essential items)                                |             |          |            |           |
| 2.b  |   |             |          |            |           |
| 3.   | Accessories for operation and installation                  |             |          |            |           |
| 4.   | All Consumables, spares and software to be supplied locally |             |          |            |           |
| 5.   | Warranty (3 years)  |             |          |            |           |
| 6.   | AMC 2 years beyond warranty                                 |             |          |            |           |
| 7.   | Cost of Insurance and Airfreight                            |             |          |            |           |
| 8.   | CIP/CIF IISc, Bengaluru                                     |             |          |            |           |

#### Any additional items

| S.No | Description | Cat. Number | Quantity | Unit Price | Sub total |
|------|-------------|-------------|----------|------------|-----------|
|      |             |             |          |            |           |

#### Addressed to

The Chairperson,
Attn: Dr. Suresha S J
Centre for Nano Science and Engineering
Indian Institute of Science
Bangalore – 560012, India

# Section 7 – Checklist

(This should be enclosed with technical bid- Part A)
The following items must be checked before the Bid is submitted:

# 1. Sealed Envelope "A": Technical Bid

- 1. Section 5- Technical Bid (each page signed by the authorized signatory and sealed) with the below annexures:
  - a. Annexure 1: Bidders details
  - b. Annexure 2: Declaration regarding experience
  - c. Annexure 3: Declaration regarding clean track record
  - d. Annexure 4: Declaration for acceptance of terms and conditions
  - e. Annexure 5: Details of items quoted
- 2. Copy of this tender document duly signed by the authorized signatory on every page and sealed.

# 2. Sealed Envelop "B": Commercial Bid

**Section 6: Commercial Bid** 

Your quotation must be submitted in two envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) super scribing on both the envelopes with Tender No. and due date and both of these in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No., Tender description & Due Date.