

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

GT ROAD, KALYANPUR, KANPUR – 208016

UTTAR PRADESH, INDIA

TENDER REFERENCE NO.: IITK/PHY/SC/2024/01

TENDER DOCUMENTS

For

"Purchase of Biological High Resolution Atomic Force Microscopy"

BID DOCUMENT

The Indian Institute of Technology Kanpur ("the IITK") invites Bids ("Bids") from eligible, qualified, and capable companies for the supply and delivery of "the Goods" and provision of associated services ("Associated Services") according to the requirements as defined in the Tender document.

Date of Publishing	19.02.2024 (10.00 hrs)
Clarification Start Date and Time	19.02.2024 (11.00 hrs)
Clarification End Date and Time	28.02.2024 (16.00 hrs)
Queries (if any)	No queries will be entertained after clarification end date and time
Bid Submission Start Date	19.02.2024 (11.00 hrs)
Last Date and time of uploading of Bids	29.02.2024 (12.00 hrs)
Last Date and time of submitting , EMD and other documents at IIT Kanpur (if any)	NA
Date and time of opening of Technical Bids	29.02.2024 (14.00 hrs)
Date and time of opening of Financial Bids	Will be separately notified for Technically shortlisted/qualified bidders

Interested parties may view and download the tender document containing the detailed terms & conditions from the website <u>http://eprocure.gov.in/eprocure/app</u>

(The bids must be submitted online in electronic form on www.eprocure.gov.in only. No physical bids will be accepted.)

(A) Instructions for Online Bid Submission

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <u>https://eprocure.gov.in/eprocure/app</u>.

1 REGISTRATION

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <u>https://eprocure.gov.in/eprocure/app</u>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

2 SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

3 PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.
- **Note:** My Documents space is only a repository given to the Bidders to ease the uploading process.
- If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

4 SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the

details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

5 ASSISTANCE TO BIDDERS

- Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender. The contact number of the end user is 0512-259-2164. Please call between 10:30 hrs to 17:00 hrs.
- 2) Any queries relating to the process of online bid submission or queries relating to the CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

INSTRUCTION FOR e-PROCUREMENT

1. PREPARATION AND SUBMISSION OF BIDS:

- a. The detailed tender documents may be downloaded from <u>http://eprocure.gov.in/eprocure/app</u> till the last date of submission of tender. The Tender may be submitted online through CPP Portal <u>http://eprocure.gov.in/eprocure/app</u>
- **b.** The bidder should submit the bid online in two parts viz. Technical Bid and Financial Bid. Technical Bid should be uploaded online in cover 1, and Financial Bid in ".Xls" should be uploaded online in cover-2

2. SUBMISSION OF THE BID:

All interested eligible bidders are requested to submit their bids online on CPP Portal: <u>http://eprocure.gov.in/eprocure/app</u>as per the criteria given in this document:

- a. Technical Bid should be upload online in cover-1.
- **b.** Financial Bid should be upload online in cover-2

Both Technical and Financial Bid covers should be placed online on the CPP Portal (<u>http://eprocure.gov.in/eprocure/app</u>).

3. TECHNICAL BID:

Signed and Scanned copies of the Technical bid documents as under must be submitted online on CPP Portal: <u>http://eprocure.gov.in/eprocure/app</u>.

- a. List of Documents to be scanned and uploaded (Under Cover-1) within the period of bid submission:-
- i. Scanned copy of Bank details.
- ii. Scanned copy of work experience.
- iii. Scanned copy of certificate of GST.
- iv. Scanned copy of specifications/brochures & tender acceptance letter on Appendix 1-2.
- v. Scanned copy of other documents mentioned in tender terms and conditions (if any)
- vi. Declaration for local content, Country of Origin of goods and Bid Security on Appendix 3-4.
 - 1. For The tender value upto Rs. 10 Crores Self-Certificate for local content from the bidder.
 - 2. For the tender value above Rs. 10 Crores Certificate for local content from Statutory Auditor/Cost Auditor/Cost Accountant/CA.
- b. For Import Shipments Shipping Terms Ex-Works/FOB are preferred.

<u>NOTE - no indication of the rates/amounts be made in any of the documents submitted with the TC-BID.</u>

4. FINANCIAL BID

- **a.** The currency of all quoted rates shall be Indian Rupees/Multicurrency. All payments shall be made in Indian Rupees/Multicurrency.
- b. In preparing the financial bids, bidders are expected to take into account the requirements and conditions laid down in this Tender document. The financial bids should be uploaded online as per the specified ".XIs" format i.e. Price Bid Excel sheet attached as '.XIs' with the tender and based on the scope of work, service conditions and other terms of the Tender document. It should include all costs associated with the Terms of Reference/Scope of Work of the assignment.
- c. The Financial Proposal should be inclusive of all applicable taxes, duties, fees, levies, and other charges imposed under the applicable laws. The rates quoted in the Tender are inclusive of all applicable taxes, duties etc. except service tax. The service tax component shall be re-immersible by the department after receipt of paid challans etc. if applicable.

5. LAST DATE FOR SUBMISSION OF TENDER:

- **a.** Online bids, complete in all respects, must be submitted on or before the last date and time specified in the schedule of events.
- **b.** The IIT, Kanpur, may, at its own discretion, alter/extend the last date to submit tenders.

6. BID VALIDITY

- **a.** All the Bids must be valid for a period of 90 days from the last date of submission of the tender for execution of the Contract. However, the quoted rates should be valid for the initial/ extended period of the Contract from the effective date of the Contract. No request will be considered for price revision during the original Contract period.
- **b.** A bid valid for a shorter period shall be declared as non-responsive.
- c. In exceptional circumstances, before the expiry of the original time limit, the IIT may request the bidders to extend the validity period for a specified additional period beyond the original validity of 90 days. The request and the bidders' responses shall be made in writing. The bidders, not agreeing to such extensions, will be allowed to withdraw their bids without forfeiture of their Bid Security.

7. MODIFICATION / SUBSTITUTION / WITHDRAWAL OF BIDS:

- **a.** No Bid shall be modified, substituted or withdrawn by the Bidder after the Bid's due Date.
- **b.** Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid's due Date, unless the same has been expressly sought for by the Authority, shall be disregarded.

8. <u>REJECTION OF THE BID:</u>

The bid submitted shall become invalid and tender fee shall not be refunded if:-

- a. The bidder is found ineligible.
- **b.** The bidder does not upload all the documents as stipulated in the bid document.

9. SELECTION CRITERIA:

Phase-I: Technical Evaluation & Sample Approval

Technical evaluation will be done on the basis of information given by technical bid submitted by the bidders. Bid containing partial, incomplete, uncleared and superfluous and unwanted information will be summarily rejected.

Technical declaration must be supported with relevant document. Discrepancy in relevant supporting document and technical compliance sheet shall lead to rejection of technical bids.

Sample Approval:

Bidders should have to display their samples (if asked) on DD.MM.YYYY at the Central Store & Purchase Section of IIT Kanpur. Non-display of sample shall be considered as non-responsive technical bids.

Phase-II

- **a.** Financial bids of technically qualified and approved sample bidders shall be opened.
- **b.** Financial evaluation is purely done on the total financial implication.
- c. Any superfluous, unreasonable asset rate quotes will be summarily rejected.

10. Late Delivery:

Delivery must be completed within the period mentioned in the tender document from the date of receipt of the order. Penalty @ 1% per week or part thereof subject to a maximum of 10% of the delivery price will be deducted from the balance payment if supply is not completed within the stipulated period.

11. <u>Instruction to the bidder of countries which share a land border with India (Rule</u> <u>144(xi) GFRs)</u>

- Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT).
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- **III.** "Bidder from a country which shares a land border with India" for the purpose of this Order means: -
- a. An entity incorporated, established, or registered in such a country; or
- b. A subsidiary of an entity incorporated, established, or registered in such a country; or

- **c.** An entity substantially controlled through entities incorporated, established, or registered in such a country; or
- d. An entity whose beneficial owner is situated in such a country; or
- e. An Indian (or other) agent of such an entity; or
- f. A natural person who is a citizen of such a country; or
- **g.** A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- **IV.** The beneficial owner for the purpose of (iii) above will be as under:
 - 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation-

- **a.** "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company.
- **b.** "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.
- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- **3.** In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals ;
- 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official.
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee , the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. In case of tenders for Works contracts, including Turnkey contracts, The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

12. MII & Purchase Preference:

As per the Ministry of Commerce and Industry Order No. P-45021/2/2017-PP(BE-II) dated 04.06.2020 preference shall be given to Make in India products for which it is mandatory for bidders to declare Country of Origin of goods and percentage of Local contents in the product.

Definitions:

"Local Content" means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

"Class-I local supplier" means a supplier or service provider, whose goods, services or works offered for procurement, has local content to or more than 50%, as defined under this order.

"Class-II local supplier" means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under this order.

"Margin of purchase preference" means the maximum extent to which the price quoted by a Class-I local supplier may be above the L1 for the purpose of purchase preference. (shall be 20%)

Purchase Preference:

- (a) Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-I local supplier' in procurements undertaken by procuring entities in the manner specified here under.
- (b) In the procurements of goods or works, which are covered by para 3(b) above and which are divisible in nature, the Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is Class local supplier', the contract for full quantity will be awarded to L1.
 - ii. If L1 bid is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.
- (c) In the procurements of goods or works, which are covered by para 3(b) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-1 local supplier' shall get purchase preference over 'Class-ul local supplier' as well as 'Non-local supplier', as per following procedure:
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-1 local supplier', the contract will be awarded to L1.
 - ii. If L1 is not 'Class-1 local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.
 - iii. In case such lowest eligible 'Class-1 local supplier' fails to match the L1 price, the 'Class-1 local supplier' with the next higher bid within the margin of purchase

preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-1 local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

- (d) "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.
- **13.** Bidders will get all benefits under GFR Rule-153.

INTEGRITY PACT

(To be executed on a non-judicial Stamp Paper of Rs.100 and applicable for all tenders of threshold value above Rs. 1 Crore)

This **INTEGRITY PACT** is made and executed at..... on this day of, 2023.

BY AND BETWEEN

The Indian Institute of Technology Kanpur represented through The Registrar, having its office located at GT Road, *Kalyanpur, Kanpur, Uttar Pradesh – 208016* (hereinafter referred to as **"The Principal"** which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the **First Part**;

AND

M/s.....a company incorporated under the Companies act,..... through its representative /authorized signatory (insert name and designation of the officer) vide resolution dated...... passed by the board of directors, having its office at(hereinafter referred to as **"The Bidder/Contractor"** which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the **Second Part;**

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for_____ ____(Name of the work/goods/services). The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relations with its Bidder(s) and/or Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal:

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b) The Principal will during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process,

provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

- c) The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/Contractor(s):

- (1) The Bidder(s)/Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s)/Contractor(s) commits themselves to observe the following principles during participation in the tender process and during the contract execution.
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other persons or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage or any kind whatsoever during the tender process or during the execution of the contract.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to other, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address d) of the Agents/representatives in India, if any. Similarly, the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines of Indian Agents of Foreign suppliers" shall be disclosed by the Bidders(s)/Contractor(s). Further, mentioned the a s in Guidelines all payments made to the Indian Agent/representative have to

be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" as annexed and marked as Annexure-A.

- e) The Bidder(s)/Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- f) Bidder(s)/Contractor(s) who have signed the Integrity Pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision in the matter.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disgualification from tender process and exclusion from future contracts:

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealing". Copy of the "Guidelines on Banning of business dealing" is annexed and marked as Annexure-B.

Section 4 : Compensation for Damages

- 1. If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent toEarnest MoneyDeposit/BidSecurity.
- 2. If the Principal has terminated the contract according to Section3, or if the Principal is entitled to terminate the contractaccording to Section3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee

Section 5 : Previous Transgression

- 1. The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anti-corruption approach or with any public sector enterprise in India that could justify his exclusion from the tender process.
- 2. If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealing".

Section 6: Equal treatment of all Bidders / Contractors / Sub-Contractors.

1. In case of sub-contracting, the Principal Contractor shall take the responsibility of adoption

of Integrity Pact by the Sub-contractor.

- 2. The Principal will enter into agreements with the identical conditions as this one with all bidders and Contractors.
- 3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7: Criminal charges against violating Bidder(s) / Contractor(s) / Sub-contractors(s).

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 : Independent External Monitor

- 1. The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is toreview independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2. The Monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all contract documents, whenever required. It will be obligatory for him/her to treat the information and documents of bidders /contractors as confidential. He/she reports to the Director, IIT Kanpur.
- 3. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Subcontractors.
- 4. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality. The Monitor has also signed declarations on "Non Disclosure of Confidential Information" and of "Absence of Conflict of Interest" In case of any conflict of interest arising at a later date, the IEM shall inform the Director, IIT Kanpur.
- 5. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 6. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant

action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

- 7. The Monitor will submit a written report to the Director, IIT Kanpur within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8. If the Monitor has reported to the Director, IIT Kanpur, a substantiated suspicion of an offence under relevant IPC/PC Act, and the Director, IIT Kanpur has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- 9. The word "Monitor" would include both singular and plural.

Section 9: Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealing.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by the Director, IIT Kanpur.

Section 10 - Other provisions:

- 1. This agreement is subject to Indian Law, Place of performance and jurisdiction is the Office of the Director, IIT Kanpur.
- 2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 3. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 4. Should one or several provisions of this Pact turn out to be invalid, the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 5. Issues like Warranty/Guarantee etc. shall be outside the purview of the IEMs.
- 6. In the event of any contradiction between the Integrity Pact and its Annexure, the clause in the Integrity Pact will prevail.
- 7. The actions stipulated in this Integrity Pact are without prejudice to any other legal action(s) that may follow in accordance with the provisions of the extent law in force relating to any civil or criminal proceedings.

IN WITNESS WHEREOF, the parties hereunto set their hands and seals and executed this INTEGRITY PACT as of the day/month/year first above written:

For & on behalf of Indian Institute of Technology Kanpur (First Party) SIGNED, SEALED AND DELIVERED BY

Name:
Designation:
Address:
Authorized Signatory

For and on behalf of M/s.(Second Party) SIGNED, SEALED AND DELIVERED BY

Name:..... Designation:.... Address:.... Representative/authorized signatory vide resolution datedpassed by the Board of Directors

In the presence of Witness:

1.

2.

(A) COMMERCIAL TERMS AND CONDITIONS

1. DEFINITIONS

These Commercial Terms and Conditions shall constitute the General Conditions of Contract, where no separate contract is signed with the selected Bidder(s), and, the Bidders by putting their signature and stamp on each page of this Section V are binding themselves to these Terms and Conditions. In the Commercial Terms and Conditions as defined below, words and expressions shall have the following meanings assigned to them:

- a. "Contract" means the agreement of the Parties relating to the procurement of Goods and / or the IITK Purchase Order (PO), and all attachments incorporated by reference, which shall form an integral part of the Contract. In the event of any discrepancy, the documents to prevail shall be given precedence in the following order: (i) the Contract (where separately signed), (ii) the IITK Purchase Order, (iii) its attachments, and (iv) these Commercial Terms and Conditions.
- **b.** "Contractor" means the person or entity named in the 'CONTRACTOR' named field of the IITK Purchase Order and any agreed in writing by the IITK legal successor(s) in title.
- c. "Day" means any calendar day.
- **d.** "Delivery Date" means the latest possible date by which the Goods shall be delivered by the Contractor to the IITK, as specified in the 'DELIVERY DATE' named field of the IITK Purchase Order.
- e. "Force Majeure" shall mean any unforeseeable exceptional situation or event beyond the Parties' control which prevents either of them from fulfilling any of their obligations under the Contract, was not attributable to error or negligence on their part (or of their partners, contractors, agents or employees), and could not have been avoided by the exercise of due diligence. Defects in equipment or material or delays in making them available, labour disputes, strikes or financial problems cannot be invoked as Force Majeure by the defaulting Party. Neither of the Parties shall be held liable for breach of its obligations under the Contract if it is prevented from fulfilling them by Force Majeure. The Party invoking Force Majeure shall notify the other without delay, stating the nature, likely duration and foreseeable effect, and take any measure to minimize possible damage.
- **f.** "Goods" means all of the goods to be supplied to the IITK by the Contractor under the Contract.
- g. "IITK" means the Indian Institute of Technology Kanpur.
- h. "IITK Purchase Order" means the IITK's official Purchase Order document.
 (i) "Party" means the IITK, or the Contractor and "Parties" means the IITK and the Contractor; and

(ii) "Place(s) of Delivery" means the location(s) or place(s) where the Goods are to be delivered, as specified in the 'SHIP TO' named field of the IITK Purchase Order.

2. CONCLUSION OF THE CONTRACT

2.1. The Contract is made between the IITK and the Contractor. The Contractor is engaged as an independent contractor for the sole purpose of delivering the Goods.

2.2. The Contract shall be concluded upon the Contractor duly following the countersigning procedure as stated in the IITK Letter of Intent (LOI).

3. FUNDING

This Contract shall become and remain effective only on the condition that an official Purchase Order is issued by IITK following the conclusion of tender exercise. In the event this is not or no longer shall the case, the IITK without unreasonable delay notify the Contractor thereof.

Any continuation of the Contractor's performance under this Contract after being notified by the IITK shall be at the Contractor's risk and expense.

4. DELIVERY AND TAKE-OVER OF GOODS

The Contractor shall deliver the Goods at the Place(s) of Delivery. On behalf of the IITK, a duly authorised representative(s), shall take-over the Goods upon delivery. Take-over of the Goods by the IITK shall not be deemed acceptance of the Goods by the IITK. The time of delivery as specified in the Contract / PO shall be strictly adhered to, and time shall be of the essence.

5. QUALITY OF GOODS

- 5.1. The Contractor shall deliver Goods that are:
 - a. of the quality, quantity and description as required by the Contract / PO; and
 - **b.** free from any right or claim of a third party, including rights based on industrial property or other intellectual property.
- **5.2.** Should the Goods be of the type "homogeneously defined" or disposable, the Contractor shall provide a sample and undertake, certify, and guarantee that all Goods delivered shall be of the same quality and characteristics as the sample(s) provided.

6. INSPECTION AND ACCEPTANCE

- **6.1.** The duly authorized representative(s) of the IITK shall have the right, before payment, to inspect the Goods either at the Contractor's stores, during manufacture, at the ports and/or in places of shipment, or at the Place(s) of Delivery. The Contractor shall provide all facilities for such inspection. The IITK may issue a written waiver of inspection. Any inspection carried out by representative(s) of the IITK, or any waiver thereof shall be without prejudice to other provisions of the Contract concerning obligations assumed by the Contractor, including specifications of the Goods.
- **6.2.** Upon delivery and inspection of the Goods, the IITK shall inspect the goods as soon as possible and complete the Goods Receiving Document. Should any Goods fail to conform to the technical specifications, codes and standards under the Contract, the IITK may reject the Goods. The Contractor shall, at no cost to the IITK, replace the rejected Goods or, alternatively, rectify the non-conformity.
- **6.3.** In the case of Goods ordered on the basis of specifications or samples, the IITK shall have the right to reject the Goods or any part thereof and terminate the Contract if the Goods do not conform to the specifications and/or samples. Nothing in this clause shall in any way release the Contractor from any warranty or other obligations under the Contract.

7. SHIPPING AND INSURANCE

For overseas orders, shipping arrangements shall be co-ordinated by IITK. Original shipping documents including the packing list shall be airmailed/emailed by the Contractor to the (Assistant Registrar (S&P), IIT, Kanpur – 208 016, UP, India).

8. OBSERVANCE OF LAW AND EXPORT LICENCES

The Contractor shall comply with all laws, ordinance, rules and regulations bearing upon the performance of its obligations under the terms of the Contract. If an export licence or any other governmental authorisation is required for the Goods, it shall be the obligation of the Contractor to obtain such licence or governmental authorisation. In the event of the Contractor's failure to obtain such licence or authorisation within a reasonable time, the IITK may immediately terminate the Contract. Where the award procedure or execution of the Contract is vitiated by substantial errors or irregularities or by fraud, the IITK shall suspend execution of the Contract.

Where such errors, irregularities or fraud are attributable to the Contractor, the IITK may also refuse to make payments or may recover monies already paid, in proportion to the seriousness of the errors, irregularities or fraud. The purpose of suspending the Contract shall be to verify whether presumed substantial errors and irregularities or fraud have actually occurred. If they are not confirmed, execution of the Contract shall resume as soon as possible. A substantial error or irregularity shall be any infringement of a contract or regulatory provision of India, resulting from an act or an omission that causes or might cause a financial loss.

9. PRICE

The price of the Goods shall be as stated in the Purchase Order and may not be increased.

10. PAYMENT

- **10.1.** Unless otherwise stipulated in the Purchase Order, the IITK shall make payment within thirty (30) Days of the later of:
 - Successful delivery of the goods to IITK as confirmed by the consignee (Assistant Registrar, Store & Purchase, IIT-Kanpur), endorsed by the indenter and approved by the indenters' Head of Department / Section.
 - **b.** Receipt of customary shipping documents and any other documents specified in the Contract; and (c) Receipt of the original invoice issued by the Contractor.
- 10.2. All invoices shall be in original and shall contain the IITK Purchase Order number, and a description, the quantities, unit and total price(s) of the Goods delivered. The currency of the invoice and payment shall be as specified in the Purchase Order. Unless otherwise authorized by the IITK, a separate invoice shall be submitted for each shipment under the Contract / PO. Subject to Clause 11 below ('Tax Exemption'), if applicable, the GST amount shall be separately identified in the invoice.
- **10.3.** Payments shall be made in the currency stated in the Contract / PO, on the basis of the equivalent value of INR on the day of payment and paid directly into the nominated bank account.
- 10.4. The IITK shall not pay any charge for late payments.

11. TAX EXEMPTION

The Contractor's price shall reflect any tax exemption to which the IITK is entitled. If it is subsequently determined that any taxes that have been included in the price are not required to be paid or if, having been paid, any such taxes are subject to refunding, the IITK shall deduct the amount from the Contract price. Payment of such adjusted amount shall constitute full payment by the IITK. In the event that any taxing authority refuses to recognize the IITK's exemption from taxes, the Contractor shall immediately consult with the IITK to determine a mutually acceptable procedure for settling the applicable amount.

12. WARRANTY

- **12.1.** The Contractor warrants that the Goods furnished under the Contract conform to the technical specifications, description and standards specified in the Contract, and are new and unused, and free from defects in design, workmanship and/or materials.
- **12.2.** The Contractor shall provide a warranty for the Goods for a period of one year from the date of acceptance of the Goods by the IITK, unless the standard manufacturer's warranty period is longer in which case the longer period shall apply.
- **12.3.** In the case of "homogeneously defined" or disposable goods, should any portion of the Goods, at any time, not comply with clause 5.1 or 5.2 herein or otherwise prove to be defective, the Contractor shall, upon written notification from the IITK, replace that portion of the Goods and bear all costs associated with the replacement of same.

13. PACKING

- **13.1.** The Goods shall be packed and marked in a proper manner and in accordance with the Contract and any statutory requirements and any requirements of the carrier(s). In particular, the Goods shall be marked with the IITK Purchase Order number and the net, gross and tare weights, the name of the contents shall be clearly marked on each container and all containers of hazardous goods (and all documents relating thereto) shall bear prominent and adequate warnings.
- **13.2.** The Contractor shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination and the absence of appropriate handling facilities at all points in transit.
- **13.3.** All packaging materials shall be non-returnable.

14. DEFAULT AND DAMAGES

- **14.1.** If due to reasons attributable to the Contractor, the Contractor fails or refuses to:
 - **a.** deliver any or all of the Goods under the Purchase Order.
 - b. comply with any or all of the terms and conditions set out in the Purchase Order; or
 - **c.** deliver any or all of the Goods under the Purchase Order on or before the Delivery Date; the IITK may hold the Contractor in default under the Purchase Order.
- **14.2.** When the Contractor is thus in default, the IITK may, by written notice to the Contractor, immediately terminate the Purchase Order in whole or in such part or parts thereof in respect of which the Contractor is in default.
- **14.3.** Alternatively, to clause 14 above when the Contractor is thus in default, the IITK may, at its own discretion, set a reasonable period of time for the Contractor to remedy its default. Any new Delivery Date shall be specified in a written amendment to the Purchase Order, duly countersigned by the Contractor.
- **14.4.** The IITK may, at its discretion, impose penalties upon the Contractor calculated in accordance with clause 15 for each Day the Contractor is late in delivering the Goods past the Delivery Date initially specified in the Purchase Order.
- **14.5.** If the Contractor does not remedy its default within the period accorded under clause 16, the IITK may, by written notice to the Contractor, terminate the Purchase Order with immediate effect.
- **14.6.** Upon any termination of the Purchase Order, in whole or such part(s) thereof in respect of which the Contractor is in default, the IITK may engage another contractor to deliver the Goods and recover any difference in price and any additional costs from the Contractor.
- **14.7.** The Contractor shall indemnify the IITK for all losses, charges, costs and expenses, which the IITK may suffer or incur as a result the Contractor's default, including those resulting from engaging another contractor pursuant to this clause 14.

15. PENALTIES

If, in accordance with clause 15, the IITK imposes penalties on the Contractor, such penalties shall amount to One percent (1%) of the total Purchase Order price for each week following the initial Delivery Date specified in the Purchase Order but shall not amount to more than Ten percent (10%) of the total Purchase Order value. The penalties for the delay may be deducted by IITK from any sum(s) due, or to become due, by the IITK to the Contractor.

16. DELAY NOT ATTRIBUTABLE TO THE CONTRACTOR

If the Contractor is delayed at any time in the delivery of the Goods or fulfilment of any other of the Contractor's obligations by any act or omission of the IITK, or by any of its officials, or by any separate contractor(s) contracted by the IITK, or by changes ordered in the type and/or quantity of the ordered Goods, or the Place(s) of Delivery, or any causes beyond the Contractor's reasonable control, or by any other cause, which the IITK determines may reasonably justify the delay, the Delivery Date of the Goods, or fulfilment of any other of the Contractor's applicable obligations shall be extended for such reasonable period of time as the IITK and the Contractor mutually determine. The set reasonable period of time and any amended delivery date shall be specified in a written amendment to the Contract / PO, duly countersigned by the Contractor.

17. FORCE MAJEURE

As soon as possible after the occurrence of any event constituting Force Majeure, but no later than three (3) Days, the Contractor shall give notice and full particulars in writing to the IITK of the Force Majeure. If the Contractor is thereby rendered unable, wholly or in part, to meet its obligations under the Contract, the IITK may terminate the Contract / PO with immediate effect by providing written notice to the Contractor.

18. INDEMNITY

- **18.1.** The Contractor shall indemnify, hold and save harmless and defend at its own expense the IITK, and all of the foregoing's officials, agents, servants and employees from and against all suits, claims, demands and liability of any nature or kind, including costs and expenses, arising out of acts or omissions of the Contractor or its employees, agents or subcontractors in the performance of the Contract.
- **18.2.** Clause 18 shall include, without limitation, claims and liabilities in the nature of workmen's compensation and claims and liabilities arising out of the use of patented inventions or devices.

19. ASSIGNMENT

- **19.1.** The Contractor shall not assign, transfer, pledge or make other disposition of the Purchase Order or any part thereof or of any of the Contractor's rights, claims or obligations under the Purchase Order except with the express written consent of the IITK. Any assignment made without such consent shall be void and of no effect.
- **19.2.** The Contractor shall not subcontract any of its obligations under the Contract / PO without the express written consent of the IITK. The IITK may require the Contractor to furnish particulars of the proposed subcontract as the IITK deems necessary.
- **19.3.** The IITK's approval of any subcontracting shall not relieve the Contractor from any liability or obligation under the Contract. In any subcontract, the Contractor agrees to bind the subcontractor by the same terms and conditions by which the Contractor is bound under the Contract / PO.

20. INSOLVENCY AND BANKRUPTCY

- **20.1.** Should the Contractor become insolvent or should control of the Contractor change by virtue of insolvency, the IITK may with immediate effect and without prejudice to any other right or remedy available to it, suspend the performance of the Contractor's obligations or terminate the Purchase Order with immediate effect, by providing the Contractor with written notice thereof.
- **20.2.** Should the Contractor be adjudged bankrupt, or should the Contractor make a general assignment for the benefit of its creditors, or should a receiver be appointed on account of the Contractor's insolvency, the IITK may, without prejudice to any other right or remedy available to it, terminate the Purchase Order with immediate effect by providing the Contractor with written notice thereof.

21. TERMINATION

21.1. The IITK shall have the right to terminate the Purchase Order or any of the provisions thereof at any time by serving a three days' notice to the Contractor.

22. WAIVER

A waiver of any breach of or default under the Contract / PO shall not constitute a waiver of any other breach or default and shall not affect the other terms of the Contract / PO. The rights and remedies provided by the Purchase Order are cumulative and are not exclusive of any other rights or remedies.

23. ADVERTISING

The Contractor shall not advertise or otherwise make public the fact that it is a contractor to the IITK. The Contractor shall not in any way use the name, emblem, logo, official seal, or any abbreviation of the IITK.

24. DISCRETION AND CONFIDENTIALITY

The Contractor is required to exercise the utmost discretion in all matters relating to the Contract / Purchase Order. Unless required in connection with the performance of the Purchase Order or expressly authorised in writing by the IITK, the Contractor shall not disclose at any time to any third party any information which has not been made public and which is known to the Contractor by reason of its association with the IITK. The Contractor shall not, at any time, use such information to any private advantage. These obligations do not lapse upon any completion, expiration, cancellation or termination of the Contract / PO.

25. NOTICES

Any notice given in connection with the Contract shall be given in English and in writing and shall be deemed to be validly given if sent by registered mail or by fax or by email to the other Party at the following:

- **a.** for the IITK: the contact details set out in the 'IITK BUYER' name field of the Purchase Order; and
- **b.** for the Contractor: the contact details set out in the 'CONTRACTOR' named field of the IITK Contract/Purchase Order.

26. STAFF MEMBERS NOT TO BENEFIT

The Contractor shall not grant to any official of the IITK any direct or indirect benefit or preferential treatment on the basis of the Purchase Order or the award thereof. Any breach of this provision shall constitute a fundamental breach of the Purchase Order.

27. GOVERNING LAW

The Contract shall be governed by and construed in accordance with the substantive laws of the Republic of India.

28. SETTLEMENT OF DISPUTES

- **28.1.** The Parties shall use their best efforts to negotiate and amicably settle any disputes, controversies or claims arising out of, or in connection with, the Contract / Purchase Order or its interpretation.
- **28.2.** If the Parties fail to settle the dispute amicably within thirty (30) Days of commencement of the negotiations, the dispute shall be settled through arbitration. One (1) sole arbitrator shall be appointed by the Director of IITK who shall have full powers to make final and binding decisions subject to prevailing laws of India. The appointing authority shall be the Director of IITK. The place of arbitration shall be Kanpur and the language used in the arbitration proceedings shall be English.

29. PRIVILEGES AND IMMUNITIES

No provision of the Contract / Purchase Order shall be deemed, or interpreted as, a waiver of the privileges and immunities enjoyed by the IITK.

30. AMENDMENTS

No modification, amendment or change to the Contract/Purchase Order, or waiver of any of its provisions, or any additional contractual relationship with the Contractor shall be valid unless approved in the form of a written amendment to the Contract/Purchase Order, signed by a fully authorised representative of each Party.

31. VALIDITY

The invalidity in whole or part of any condition of the Contract / Purchase Order or clause thereof shall not affect the validity of the remainder of such condition or clause.

32. ENTIRE AGREEMENT

The Contract / Purchase Order constitute the entire agreement and understanding of the Parties and supersede any previous agreement, whether orally or in writing, between the Parties relating to the subject matter of the Contract.

33. GOVERNING LANGUAGE

The Contract / Purchase Order shall be executed in the English language which shall be the binding and controlling language for all matters relating to the meaning and interpretation of the Contract / Purchase Order.

- Note: The CVC vide its letter No. 022/VGL/078/546789 dated 04.05.2023 and subsequently Ministry of Education vide No. C-34014/1/2022-Vig. Dated 25.05.2023 has appointed following persons as IEMs for IIT Kanpur for three years:
 - i. Shri Ranvir Singh, <u>IEM1@iitk.ac.in</u>
 - ii. Shri P. V. V. Satyanarayana, <u>IEM2@iitk.ac.in</u>

Technical Specifications:

Biological High Resolution Atomic Force Microscopy

A complete Bio AFM system for high resolution imaging with single molecules, biological samples like Bacteria, Virus, Mammalian cells, DNA, RNA, Protein, Nano Particle, etc. The following specification should be met.

- 1. System must **cover imaging in both air and liquid** with high-resolution molecular level imaging.
- 2. All accessories and cantilever for the following modes should be supplied.
 - Contact mode,
 - o Lateral force, AC modes (e.g., tapping, non-contact),
 - Phase imaging, force mapping,
 - Force distance spectroscopy with complete accessories.
 - Electrostatic Force Microscope
 - Magnetic Force Microscope
 - Conductive Force Microscope
 - o Quantitative Nano-Mechanical Property
 - Must include advanced force spectroscopy experiments like force ramp and force clamp.
 - Must allow user to configure n-number of force curve segments with multiple feedback like constant force, height, etc.
 - AFM head should automatically compensate for height.
 - Viscoelastic measurements using dedicated advanced modes like contact resonance mode and similar allowing experimental mapping of Storage Modulus, Loss Modulus, Loss Tangent, Adhesion, and Dissipation. Participating companies should detail the modes that they will offer.
 - Mechanical properties of samples with a wide range of modulus a few kPa to 100 GPa of more – should be accessible.
 - Include pre-calibrated probes with spherical radii tip for accurate mechanical property measurement (50-100 nm radii and 5um or greater tip radii tips are preferred).
 - Advanced and extensive software modules specially designed for quantitative viscoelastic measurements that generates simultaneous and real-time quantitative nanoscale maps of stiffness, adhesion, storage and loss modulus, and loss tangent, at high pixel resolution. Data capture must occur during normal AC mode imaging of topography at normal scan rates. *Proposals for techniques that map storage modulus only are insufficient and will be rejected.*
 - The system's software *must include contact mechanical models* for interpreting the sample modulus from a wide range of force-curve tip-sample interactions. At the very least, it must include the Hertz/Sneddon, DMT, JKR and Oliver-Pharr contact mechanics models.

3. Scanner:

- Flexure-piezo based should be decoupled made of Piezo material for all XYZ axis with open loop and closed loop control to ensure the positioning accuracy and high resolution.
- $\circ \quad \text{Sample engagement should be automated.}$
- $\circ~$ XY scan range: at least 100 $\mu m\,x$ 100 $\mu m,$
- \circ Z scan range: at least 15 μ m.

- XY scanner drive resolution <0.6nm
- Z sensor noise level <0.25nm,
- Z-noise: <50pm,
- Linearity error: <0.05%,
- Cantilever deflection noise: <15pm,
- o Deflection detection bandwidth: 3MHz,
- Thermal noise cantilever calibration: up to 2MHz
- Low coherence light source to ensure no overlap with Epi fluorescence.
- Four-quadrant position sensitive photo detector
- All noise measurements are the average deviation measured with 0.1 Hz to 1.0 kHz Bandwidth in closed loop and should be demonstrated at the time of system installation. Representative data of noise number should be documented and submitted at other installations in India with similar model as offered.
- 4. **Optics for alignment**: Suitable optics should be top-down view perpendicular to sample plane, 10x magnification, CCD camera. It should be possible to image opaque, transparent, insulating, conducting, and biological samples. Top view optics with intensity aperture diaphragm and field diaphragm optics to control them as per user requirement.

5. Control station minimal requirements

- Should be high speed and low noise data capture built in lock in amplifier or better.
- High speed 24-bit digital to analog converter (DAC) for scan signal generation.
- The system allows digital Q-Control in the range of 2 kHz 2 MHz.
- o 6 or more high speed ADC
- Software controllable digital filters, CE Compliant.
- >8K pixel density for AFM imaging without image stitching.

6. Sample Stage and Environment Control

- Environmental Controller: Temperature controller with bi-directional current supply for use with heating and cooling sample stages. A built-in microcontroller regulates closed loop temperature feedback independent from the AFM controller or PC computer. Smart Start compatible for plug and play ease of use. Fully operated through the graphical interface of the AFM software.
- The system should have manual XY stage to accommodate sample sizes up to 80mm wide and 10mm thick.
- Manual / Motorized XY movement is acceptable with a precision Z.
- Variable temperature stage varies from ambient to 300 deg C or more.
- Should accommodate large samples like petri dish at least 80 mm diameter and height of 10mm with independent X Y and Z stage.
- Should include petri-plate heater with possibilities of perfusion gas exchange.
- Supports different sample holders, fluid cells, different heaters/coolers, standard glass slides etc.
- 7. **Instrument Isolation**: The system includes a thermally- and acoustically isolating enclosure. The system must include a vibration isolation platform suitable for the system performance and specifications. Table to accommodate both vibration isolation system and acoustic hood.
- 8. Computer and hardware should have at least following features or better:
 - Operate CPU: AMD Ryzen 3700X/Intel processor.
 - Graphic: Nvidia GeForce

- o SSD M.2, 512 GB
- HDD: 4 TB
- DVD: +/- RW
- Power supply: 500 Watt, modular
- Keyboard and mouse
- o 1 x 32" VA-LCD panel display, QHD, 10-bit
- Or better configuration
- Linux or Windows based OS
- 9. Software: Multiple user platform with
 - o user programable software,
 - Cantilever Calibration through thermal noise method,
 - o Data Processing including data export,
 - o fitting,
 - filtering,
 - 3D rendering,
 - FFT and cross section.
 - Must include drift compensation software within 1 nm precision.
- 10. AFM must be supplied with a convenient cantilever exchange system that is available as latest technology with the principal company and all required/available accessories for easy cantilever transfer.
- 11. **Probe holders:** Specific probe holders that are autoclavable to avoid bio contamination should be included. If vendor has no such probe holder, they can supply 5 separate probe holders to be used for different bio samples.
- 12. The system should also have adaption capability with advanced optical microscopy techniques for IOM, Fluorescence, and Phase contrast.
- 13. At least 50 standard cantilevers each for contact and AC modes should be supplied. In addition, a box (at least 10) of a complete set of cantilevers with all accessories for all other modes asked for in this specification (*see point 2*) must be supplied with the main equipment.
- 14. The AFM system should be compatible for third party purchased cantilevers. Upgradable for other imaging or non-imaging modes.
- 15. Optional Items:
 - External magnetic field for performing Magnetic Force Microscopy.

16. Additional Important Clauses and requirements

- Any malfunctioning that arises either due to compatibility or some other reason should be corrected immediately, and this is sole responsibility of vendor/principle company.
- Must include a minimum one-year warranty on all parts and labor. Extended warranty for 2nd & 3rd year should be offered separately as an option.
- Training: Instrument operation and preventive maintenance training to be included.
- Must include free software upgrades for the life of the instrument.

- Complete list of users in India to be attached. Minimum five installations of the same model in India with the offered configuration is mandatory.
- Optional accessories, ancillary / additional attachments etc. shall be considered for purchase depending on the budget. Vendors must state / certify in unambiguous terms that the AFM system offered will be compatible with all these attachments in case these are purchased separately now or later. All these OPTIONAL items must be quoted.
- INSTALLATION / COMMISSIONING: The system must be installed and demonstrated by trained service engineers at our laboratory free of charge within 15 days once the site readiness confirmation is communicated.

Terms and Conditions:

- 1. All equipment must be compatible with Indian electrical standards and codes.
- 2. Ensure to specify make & model of offered product and provide the compliance sheet .
- **3.** Manufacturer Authorization Form from OEM Required.
- 4. The warranty of the product must be clearly specified.
- 5. The delivery period must be clearly mentioned.
- 6. Price should be F.O.R IIT Kanpur/CIP New Delhi/FOB.
- 7. Bidders must have at least three years of experience and supplied the same/similar product in IITs/NITs or any other Govt. Organization.
- 8. Bidders are advised to upload copies of the previous supply of offered items for price reasonability.
- **9.** The Institute reserves the right to cancel the tender at any stage without assigning any reason thereof.

Dr. Sivasurender Chandran Department of Physics Indian Institute of Technology Kanpur Kanpur 208 016, India

TENDER ACCEPTANCE LETTER (To be given on Company Letter Head)

Date: _____

To, The Officer-in-charge Central Stores IIT Kanpur-208016

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: ______

Name of Tender / Work: -

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

_____as per your

advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. ______ to _____ (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

<u>Certificate for Tender</u> (To be given on Company Letter Head)

Date: _____

To, The Officer-in-charge Central Stores IIT Kanpur-208016

Sub: Certificate of compliance as per Rule 144 (xi) GFR's 2017

Tender Reference No: _____

Name of Tender / Work: -

1."I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

2. "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all the requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

<u>Declaration for Local Content</u> (To be given on Company Letter Head - For tender value below Rs.10 Crores) (To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 <u>Crores</u>)

Date:

To, The Officer-in-charge Central Stores IIT Kanpur-208016

Sub: Declaration of Local content

Tender Reference No: ______

Name of Tender / Work: -

4. Country of Origin of Goods being offered: _____

5. We hereby declare that items offered has ____% local content.

"Local Content" means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

"*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law."

Bid Security Declaration (To be given on Company Letter Head)

Date: _____

To, The Officer-in-charge Central Stores IIT Kanpur-208016

Sub: Certificate for bid security declaration

Tender Reference No	:
Tender ID	:

Name of Tender / Work: -

"I/We have read the clause regarding Bid Security Declaration/Earnest Money Deposit and I/We are fully aware that if I/We withdraw or modify the bid during the period of validity I may be suspended for a period of 3 years ."