

**TATA INSTITUTE OF FUNDAMENTAL RESEARCH  
HYDERABAD**

Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District,  
Hyderabad - 500 107, Telangana, India.

Telephone: +91-40-2020 3020  
Website: [www.tifrh.res.in](http://www.tifrh.res.in)

Email: [purchasegroup@tifrh.res.in](mailto:purchasegroup@tifrh.res.in)  
Date: 12-01-2024

**Notice Inviting Tender cum Tender Document  
(Two Part Global Tender) for the following items:**

**Supply, Installation and Commissioning of High Resolution Transmission Electron Microscope for TIFR Hyderabad.**

As per technical specifications mentioned in Annexure - A.

Global Tender No.	<b>TIFR/PD/GT/CA23-07/23-24/M/07</b>
Published on	<b>12-01-2024</b>
Pre-Bid Meeting Date	19-01-2024 at 11.00 Hrs Through Zoom
Tender Fees	Rs. 00/- (USD 00)
Earnest Money Deposit	<b>Rs. 22,00,000.00 (USD 26,506)</b>
Estimated Cost (Estimated cost up to TIFR, Hyderabad premises inclusive of all applicable charges, taxes, duties etc.)	<b>Rs.11,00,00,000.00</b>
Last Date for Submission of Bid	<b>13-02-2024 up to 13.00 Hrs.</b>
Date of Opening Bids (Part A)	<b>13-02-2024 at 15.00 Hrs.</b>

**Both Technical Bid (Part A) and Financial Bid (Part B)** to be submitted within the due date and time in separate envelopes and marked on top as Part A and Part B. These two sealed envelopes should be further put in one Master Envelope super scribed with the Tender No., Due Date in Bold Letters.

The Bids should be addressed to the Administrative Officer, Tata Institute of Fundamental Research, Hyderabad, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District, Hyderabad- 500 107, Telangana, India.

TIFR Hyderabad reserves the right to accept/ reject any or all tenders either in part or in full without assigning any reasons there for.

**Estimate Cost of the tender was inclusive of all applicable charges i.e., Custom Duty, Taxes, IGST, Insurance etc., upto TIFR Hyderabad premises.**

Please see attached sheet for conditions of tender.

**Note: All future corrigendum/addendum will be published in CPPP/TIFR Hyderabad website only and no separate advertisement will be released for the same.**

**Pre- Bid meeting will be conducted through online. Bidders are requested to refer TIFR Hyderabad website tender page for pre-bid meeting zoom link. Bidder may also join the meeting on scheduled date and time at TIFR Hyderabad premises.**

**All prospective bidders are requested to visit our website regularly for any such updates/Corrigendum.**

**The Technical Bid received without payment of EMD/ documents for exemption of EMD shall be summarily rejected.**

**ADMINISTRATIVE OFFICER  
(PURCHASE SECTION)  
TIFR, HYDERABAD**

**ANNEXURE - A**

**Technical Specifications for Supply, Installation and Commissioning of High Resolution Transmission Electron Microscope for TIFR Hyderabad (Qty. 1 No)**

S.No.	Parameters	Specifications
1	Acceleration voltage	Minimum of 80 kV and Maximum of 200 kV. Supplier to provide lens data/alignments for at least 2 voltages 80kV and 200kV.
2	Electron Source	a. Cold field emission gun with energy resolution of $\leq 0.4$ eV or better.
		b. Life of an emitter should be for 5 years or more. It is the supplier's responsibility that the electron source should function satisfactorily within specification during the 5 years warranty period of the instrument. Source must be replaced as and when needed during the warranty period (including items procured from different OEM). Declaration on OEM letterhead should be submitted
		c. Adequate power back up to protect emitter in case of power outage.
3	Operation Modes	TEM Should be computer controlled with following operational modes: a) TEM imaging as bright field (BF), dark field (DF), HRTEM, and STEM mode
		b) Annular bright field & dark field imaging (ABF & ADF), high angle annular dark field (HAADF) imaging & imaging in STEM mode
		c) Selected area electron diffraction including nano diffraction and convergent beam electron diffraction (using TEM mode)
		d) Lorentz microscope: Quoted system should contain Lorentz lens assembly in proper geometry and place for analysing and imaging magnetic domains in the samples (For Lorentz lens give the maximum permissible field and resolution also)
		e) EDS using TEM/STEM modes, and EDS spectral imaging and mapping in STEM mode
4	Resolution:	High Resolution pole piece with
		a) Point Resolution $\leq 0.25$ nm
		b) Line resolution $\leq 0.10$ nm
		c) STEM resolution $\leq 0.14$ nm

		d) Pole piece gap should be compatible for EDS system and cryo-system for simultaneous operations.
5	Magnification	TEM: 1.0 Mx or higher
		STEM: 150Mx or higher
6	Probe Current	$\geq 2.5$ nA; mention the probe dimension at 0.7 nm probe size or similar
8	Stage and Specimen Chamber	a) Eucentric Goniometer fully motorized stage with accurate specimen position recalls and retrieve facility.
		b) Computer/software controlled 5-axis ultra stable specimen stage for recalling stored positions and tracking of the areas visited.
		c) Tilt angle (X/Y) range of $\pm 35/\pm 30$ degrees or higher for analytical low background double tilt holder to orient the maximum number of zone axes of one crystal in polycrystalline material. With tomography holder $\pm 70$ degrees tilt range or greater. Specimen tilt angle at least $\pm 80$ degree with standard 3 mm TEM grid on a single tilt holder.
		d) Automated stage, X and Y movement $\geq \pm 1$ mm or more Z movement range $\geq \pm 0.2$ mm or more (There must not be any x,y shift of specimen during z-movement)
9	Image/Data recording system	a) High resolution CMOS camera (bottom-mounted or retractable) with a pixel of minimum 4K x 4K (16MP) size. The minimum pixel size should be 14 $\mu\text{m}$ or better. Installed camera should be compatible with the provided HT range of TEM.
		b) Sensor active area should be $\geq 777$ mm <sup>2</sup> and pixel size of at least 6.4 x 6.4 $\mu\text{m}^2$ .
		c) The scintillator and fiber optic plate should be ideally matched to the CMOS sensor for both low dose and high dose applications.
		d) CMOS sensor should be optimized for sensitivity, speed and resolution. An ultrafast built-in shutter to image with 100% duty cycle.
		e) Camera should be able to align, search, focus and stigmatize at full resolution on a UHD monitor at 58 or better frames per second (fps).
		f) Conversion efficiency @ 200 kV should be equal to greater than 30 counts per primary electron.

		g) The software should include online (real time drift correction at 5.7k x 3.3k, and Live FFT for astigmatism correction) and offline data processing features such as FFT and full support for real space (image mode) and reciprocal space (diffraction mode) calibrations. Separate computing device with display unit for capture, processing and display with latest software running on 64 bit Windows OS. The camera should be supported by a computer of appropriate capacity, so that image acquisition and storage in hard disk is possible
		h) Camera sensor has enough wide dynamic range as electron diffraction patterns can be acquired without beam stopper.
10	Specimen Holder	System with automated sample insertion is preferred to avoid sample damage and safety in the student environment.
		a) Single Tilt
		b) Low background Double Tilt Holder
		c) Automatic and/or manual loading and unloading of specimen Holder should be offered as standard-
		d) High visibility EDX analytical holder 1 number
		e) High precision vacuum tweezer should be provided for sample holding
11	Vacuum system	a) Clean ultradry differential pumping system. The system should have sufficient number of oil free ion getter pumps for column, gun and specimen chamber. Vacuum should be suitable for cold FEG and EDS analysis. Pumping system should perform without the need for cleaning/maintenance for at least the first 5 years. Documentary evidence must be provided to support the performance and longevity of the pumping system.
		b) The vacuum system should possess a fail-safe mechanism with suitable electronics interlock. Software-based continuous monitoring and display of pressure
		c) Ultimate Pressure in specimen Chamber $\leq 10^{-5}$ Pa. Ultimate pressure at TEM GUN area $\leq 10^{-8}$ Pa. Column vent: Dry nitrogen leakage system, automatic control
12	Lens System	a) Lens System consisting of Condenser Lens, Objective Lens, and diffraction, Intermediate, Lorentz (for magnetic sample imaging) and Projection Lens.
		b) Lens system with minimal distortion
		c) The objective lens should enable the use of various in-situ holders and large angle double-tilt holders for analytical microscopy

		d) Distortion and rotation free images are required
13	LN2 Free EDS	The EDS data acquisition and analysis software should have the following features
		a) Liquid nitrogen free Peltier-cooled high resolution, high speed silicon drift detector (SDD).
		b) EDS system with overall detected area of 100 mm <sup>2</sup> or higher
		c) The EDS resolution must be $\leq 129$ eV Mn K $\alpha$
		d) The detector should be Windowless for excellent light element performance and capability to detect from B to U. The detector must have shutter attachment.
		e) The detector should be fully retractable, whenever required.
		f) The EDS should be capable of single point analysis, multipoint analysis, and selective element mapping, line scan, and selected area analysis, qualitative and quantitative analysis
		g) The system should be compatible for STEM analysis.
		h) The calibration standards for EDS should be provided. The supplier should arrange for seamless interfacing, software, installation and commission for EDS.
14	Chiller and Compressor	Suitable water chiller and air compressors (as required for your system) must be supplied to support the quoted system for smooth operation. Close circuit, automatic temperature and flow rate-controlled chiller.
15	Computer	Sub system distributed control Integrated control: Command control through network communication Control: Communication command control through personal computer (PC) PC for operation OS: Windows® 10 Professional 64 bit or later CPU: 2.26 GHz or higher, 4 cores or more Memory: 16 GB or larger SSD: 500 GB or larger Control panel: Separate (right/left) control panels, free positioning of trackball Function panel Angle variation function available Monitor: 27-inch wide monitor (display resolution 2560×1440 or more) External control function: Standard configuration, network communication via TCP/IP Multi user support: Maintains control system settings/acquired data destination directory settings for each user.
		In-built wifi should be included. There should be provision for data/image transfer via wifi or LAN.

16	Consumables	Standard sample for measuring resolution should be provided Supplier should provide following: a) Holey Carbon-coated 300 mesh Cu Grids: 500 No.s
		b) Lacey Carbon-coated 300 mesh Cu Grids: 500 No.s
		c) Carbon & Formvar-coated 300 mesh Ni grids: 500 No.s
		d) Carbon film 300 mesh Cu grid : 500 No.s
17	Optional Online UPS	a) System should be compatible with the local power supply requirement of 230 V/ 415V 50 Hz. should provide appropriate online UPS for the HR-TEM and Chiller with 30 mins back-up along with power supply, stabilizer and dehumidifier.
		b) On-line Uninterrupted Power Supply (UPS) systems should be supplied for whole system including Chiller. The branded UPS (please provide the brand name and power rating) should be able to keep the system operational in case of sudden power cut and/or spike and support the complete system with all accessories with full load for a duration of at least 30 mins.
		c) The UPS (for the microscope) should be of very high standard with distortion as low as possible. Upon adding and removing the load, the UPS inverter should accordingly adjust. Isolation transformer at the output (could be pure sine wave).
		d) The comprehensive warranty for UPS is the same as the system, i.e., 2 years from the date of installation
18	Microscope software	Software should be multiuser license and software upgrade has to be supplied free of cost as and when it is required within 10 years of microscope supply.
19	User Interface	a) Fully computer-controlled system with Latest Windows based software for Operating the microscope along with keyboard, mouse.
		b) Manual control panel using knobs, sample movement by trackball or joystick.
		c) Control Panel and Joystick-Control panel including multifunction keys/knobs for control and adjustment of TEM parameters (focus, Magnification etc.) and manual joystick for control stage in X, Y, Z tilt and rotation directions
20	Safety Devices	The TEM should be equipped with self-diagnostic functions to detect problems like pneumatic pressure abnormality, cooling water temperature

		abnormality, reservoir tank pressure abnormality, etc. Safety devices against power failure and water outage available, self-diagnosis function.
		Detected failures: pneumatic failure, rough pumping failure, heater disconnection of diffusion pump, cooling water abnormal temperature, pirani gauge disconnection, reservoir tank vacuum failure.
21	Deviations	Any deviation from above mentioned technical specifications should be supported by proper scientific explanation/documentation.
22	Site preparation and environmental conditions	Supplier or their authorized agent needs to verify/survey the site prior to installation. The supplier shall support the site preparation activity as per the requirement of the instrument.
		This includes complete precision air-conditioning (which shall be provided by the institute). Vibration parameters must be assessed on-site and necessary antivibration precautions/equipment must be included in the quotation.
		Nitrogen cylinder with regulator, liquid nitrogen and other consumables, including but not limited to electrical switches, standard samples to demonstrate complete functionalities, etc., and whatever is required for installation, testing and commissioning shall be quoted.
23	Installation and Commissioning:	Site inspection and qualification will be performed by the manufacturer's authorized representative, well in advance of system delivery. Installation, complete interfacing of the system with its subsystems, and commissioning should be carried out by the company with factory followed by a demonstration of the system's performance fully to the user's satisfaction. SF6 gas for high tension and emission chambers should also be provided by the supplier during warranty. The warranty period will start after successfully demonstrating the given specifications and acceptance of the system including all of the attachments.
24	Spare parts	Assurance about spares availability should be provided for 10 years. List of recommended set of spares should be provided in the Technical Bid with corresponding part numbers.
25	Mandatory items to be included in the quote	Standard samples to check system calibration i.e., magnification and resolution should be supplied along with the system. These standards should be supplied from ISO/CE certified suppliers with accuracy / traceability etc.
26	Tool kit	Suitable and essential tool kit is to be supplied with the system for the required maintenance.
27	Guarantee / Warranty	The entire equipment with all accessories (including items procured from different OEM) must have warranty for free repairs and replacement for the period 36 months from the date of installation and commissioning. The



		electron source (cold field emission gun) shall be provided a warranty for a period of 60 months from the date of installation and commissioning.
28	Training	The supplier or manufacturer should also provide adequate dedicated on-site applications training during the installation.

**NOTE:**

**\* The bidder should ensure to submit the following along with Technical Bid (Part I)**

1. The bidder should attach the point-by-point technical specification provided in the tender in a tabulation format and fill the technical compliance (with additional remarks if any) along with the Technical Bid.
2. Bid Security / EMD (Earnest Money Deposit) as per Tender.
3. Audited Annual Turnover Certified by CA - Attachment of Annexure - B
4. Supplier Purchase Order details with copy document along with the bid Attachment of Annexure - C.
5. Undertaking by the bidder as per Clause 12 of tender terms and conditions in letter head duly signed and stamped.
6. Undertaking for unconditional acceptance of tenders all terms and condition in letter head duly signed and stamped.

**\* Price Bid/Finance Bid (Part II) - As per Annexure – D.**

# **TATA INSTITUTE OF FUNDAMENTAL RESEARCH HYDERABAD**

**Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District.  
Hyderabad - 500 107, Telangana, India.**

## **(PURCHASE SECTION)**

1. **PART "A" (Technical Bid) consisting of Technical Bid with Commercial Terms and PART "B" (Financial Bid) consisting of only Price** shall be submitted in **separate** sealed envelopes duly superscribed with the tender enquiry number, and the due date in bold letters, addressed to the Administrative Officer, Tata Institute of Fundamental Research, Hyderabad, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India. The envelopes should be clearly marked on top as either PART "A" or PART "B".

The two sealed covers should be further put in a master cover superscribed with the Tender Enquiry No., Due Date in bold letters, addressed to the Purchase Officer, Tata Institute of Fundamental Research, Hyderabad, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India. The sealed master envelop has to be delivered by hand/courier at the security Gate Office of TIFR Hyderabad on or before 13.00 hrs. on the due date specified. The technical bid will be opened at 15.00 hrs. on the due date at Purchase Section, TIFR, Hyderabad. Tenders submitted after 13.00 hrs. on due date will not be considered.

2. **In case the PART "A" and Part "B" bids are not sealed in separate envelopes the tender will be rejected.**
3. The technical bid should not contain any indication of the price. The bidder should take special care not to mention anything related to pricing and costing aspect of whatsoever nature. The technical bid should include/contain only technical specifications, technical literature, drawing, quantity, manufacturing and delivery schedule, mode and terms of payment, mode of dispatch, the quantum and percentage of statutory levies payable by the purchaser as extra and all related commercial terms and conditions for the supply and for the services like erection and commissioning to be rendered by the tenderer. The details of the validity of the tender should also be indicated along with the commercial details.
4. After scrutiny of Technical Bids, Financial bids of only those bidders who are shortlisted on technical basis will be opened at on later date. The opening date, time and venue will be intimated to the technically successful bidder.
5. **All the bidders/contractors should provide Company Authorization Letter duly signed and stamped by Competent Authority to participate in the tender related meetings at TIFR Hyderabad.**
6. **Tender Document Fee:**

Tender fee for Rs. 00/- (USD 00)

7. **Bid Security / EMD (Earnest Money Deposit):**

Earnest Money Deposit (EMD) for **Rs. 22,00,000.00 (USD 26,506)** in the form of D.D. in favour of "Tata Institute of Fundamental Research", payable at Hyderabad to be enclosed

along with the technical Bid (Part - A).

The Bid Security may be accepted in the form of Bank Guarantee from any of the Commercial Banks (or) Fixed Deposit Receipt (FDR) (or) Banker's Cheque from any of the Commercial Banks (or) Insurance Surety Bonds.

The Bid security should remain valid for a period of 45 days beyond the final bid validity period.

EMD shall be interest free and it will be refunded to the unsuccessful bidder without any interest. EMD will be forfeited if the bidder withdraws or amend impairs or derogates from the tender in any respect.

8. The Micro and Small Enterprises/Startups suppliers / bidders whose firms are registered with Ministry of MSME /DPIIT and having a valid certificate for claiming exemption as per privilege rules of Government of India are exempted from paying Tender Fee and EMD (Earnest Money Deposit).

9.

9.1 The invitation for bids is open to Original Manufactures (OEM)/Authorized Dealers/Authorized Distributors/Subsidiary Indian Company of the OEM/Indian Agent on behalf of the Foreign Manufacturer or Principals of the tendered equipment. The bidder must be legal entity having a Permanent Account Number (PAN), Certificate of Incorporation and valid GST Registration Certificate is to be submitted.

9.2 When a firm sends quotation for an item manufactured by some different company, the firm is also required to attach its quotation, the manufacturer's authorization certificate.

9.3 Indian Agent cannot represent two different foreign principles for the same item in one tender.

9.4 Equipment's must be of the most recent series/models incorporating the latest improvements in design.

9.5 That the Bidder will assume total responsibility for fault free operation of equipment, application software, if any, and maintenance during the warranty period and provide necessary maintenance services after warranty period if required.

9.6 Bidders who meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure , etc.

9.7 Any additional bid participation criteria/eligibility conditions etc. mentioned in the Technical Specifications sheet will also form part of the Qualification Requirements along with those mentioned in this.

9.8 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser

to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this invitation of Bids.

10. Bidders who have not accepted the job/order awarded to them or withdrawn from the tender process OR whose EMD/Security deposit has been forfeited in the past, their bids will not be considered and treated as ineligible / disqualified.

11. Micro and Small Enterprises (MSEs):

Micro and Small Enterprises (MSE) must, along with their offer, provide proof of their being registered as MSE (indicating the terminal validity date of their registration) with any agency mentioned in the notification of the Ministry of Micro, Small and Medium Enterprises (Ministry of MSME).

The Micro and Small Enterprises (MSE) are exempted from payment of earnest money and tender fees subject to furnishing of relevant valid certificate for claiming exemption as per privilege rules of Government of India. Public Procurement Policy (PPP) for MSEs Order, 2012 is meant for procurement of only goods produced and services rendered by MSEs. However, Traders, Distributors, Sole agents, work contracts are excluded from the purview of the PPP for MSE Order 2012 as per Ministry of MSME.

The Micro and Small Enterprises (MSE) bidder should submit valid UDYAM Registration certificate by Ministry of Micro Small and Medium Enterprises (MSME). The Micro and Small Enterprises (MSE) bidders who fail to submit valid UDYAM Registration certificate shall not be able to avail the benefits available to MSEs as contained in Public Procurement Policy for MSEs Order 2012 issued by MSME and further applicable Notification / Rule amended from time to time.

12. Requirement from Bidders: Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority as per order issued by the Government of India (Order No. F.No.6/18/2019-PPD dated 23rd July, 2020 and further applicable Notification / Rule amended from time to time).

"Bidder" means any person or firm or company, including any member of 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 herein before, including any agency branch or office controlled by such person, participating in a procurement process.

Necessary certificate/undertaking to be submitted.

13. Quotations must be valid for a period of 180 days from the date of opening the bid prescribed by the Purchaser. A bid valid for a shorter period may be rejected by the Purchaser as non-responsive.

14. Tenders containing correction, overwriting will not be considered. Late or delayed/Unsolicited quotations/offers shall not be considered at all. These will be returned to the firms as it is. Post tender revisions/corrections shall also not be considered.
15. Tenderer should sign on all the pages of the technical bid and the price bid.
16. All future corrigendum will be published in TIFR Hyderabad website only / CPPP and no separate advertisement will be released for the same.

All prospective bidders are requested to visit our website regularly for any such updates / Corrigendum. The Purchaser reserves the right to reject the bids if the bids are submitted without taking into account these amendments/clarifications. In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids.

17. For Indigenous Items: Offer should be on FOR basis and mentioned separately using different table format showing all the applicable taxes/Duties like GST, Freight & Transportation charges and installation charges etc.
18. The price quoted for Import item must be on following basis:
  - a. Ex-Work/factory duly packed airworthy/seaworthy and of international standard
  - b. FOB/FCA
  - c. CIF Hyderabad, Airport Port (all-inclusive i.e. Cost of Goods, Packing, Insurance, Inland transportation, freight etc.)

For local item /supply, offer should be on FOR basis (i.e. total landed cost for delivery at TIFR Hyderabad).

The dimension of the item (viz. H, W, L, weight etc.) shall be specifically stated and also mention whether the mode of shipping the item is Airworthiness / Seaworthiness or both. Accordingly the mode of shipment will be decided by TIFR Hyderabad.

**Price must be quoted strictly in the Price Bid Format attached herewith as “Part -B” (Financial Bid).**

19. Packing:

19.1 The Supplier shall provide packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

19.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any and in any subsequent instructions ordered by the Purchaser.

19.3 Packing Instructions: Each package will be marked on three sides with proper paint/indelible ink, the following:

- (i) Item Nomenclature
- (ii) Order/Contract No.
- (iii) Country of Origin of Goods
- (iv) Supplier's Name and Address
- (v) Packing list reference number

20. Insurance:

20.1 The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.

20.2 For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from "Warehouse to warehouse" ( Final destinations) on " All Risks" The Insurance shall be valid for a period of not less three months after installation and commissioning. However, in case of orders placed on EX-Works/FOB/FCA basis, the purchaser shall arrange insurance.

21. Delivery and Documents:

21.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in the order within the period. The details of shipping and/or other documents to be furnished by the supplier are specified in 21.2.

21.2 Delivery period .

The delivery is to be strictly made as per the delivery schedule stated in the Purchase Order.

The following documents are to be forwarded earlier to TIFR Hyderabad through email to [purchasergroup@tifrh.res.in](mailto:purchasergroup@tifrh.res.in) prior to 48 hours before dispatch of material.

- i) Supplier Invoice showing Purchase Order Number, goods' description, quantity, unit price, Total amount.
- ii) Packing List
- iii) Airway Bill/ Acknowledgement of receipt of goods from the consignee(s) by the Transport with item wise weight, unit of measurement, No of package, package size/Dimension
- iv) Insurance Certificate if applicable.
- v) Manufacturer's / Supplier's warranty certificate.
- vi) Inspection Certificate issued by the nominated inspection agency, if any, and Certificate of Origin.
- vii) Country of Origin Certificate. (if applicable)
- viii) Product Catalogue/Brochure.

22. The Institute shall be under no obligation to accept the lowest or any other tender received in response to this tender notice and shall be entitled to reject any tender without assigning any reason whatsoever.
23. **Order Acceptance:** The successful bidder should submit acceptance of Purchase Order immediately (within 15 days) from the date of issue of the Purchase Order failing which it shall be presumed that the vendor is not interested.

The Bidder should submitted the order acknowledgement, (details for opening L/C and documents if applicable) and documents if any to purchase section within 15 days from the date of issue of purchase order.

For Letter of Credit (L/C) payment, the Letter of Credit (L/C) will be opened as per purchase order terms and conditions only. The supplier should ensure to deliver and complete the installation as per purchase order terms and conditions within Letter of Credit (L/C) validity period. In case of any delay in supply or installation or submission of required documents by the supplier for Letter of Credit (L/C) payment, any applicable charges to be borne by the supplier only. The Letter of Credit (L/C) amendment charges if any due to delay of the supplier to be borne by the supplier only.

The Supplier should submit the invoice and packing list before dispatch of the material for confirmation of TIFR Hyderabad.

Any discrepancy like delay in supply/ short supply/delay in installation etc., TIFR Hyderabad has right not to process the payment in case of any such discrepancy.

24. **Performance Security:** The Successful bidder should deposit @ 5% of Purchase Order value as Performance Security. The Performance Security should be in the form of Demand Draft in favour of "Tata Institute of Fundamental Research" payable at Hyderabad from any of the Commercial Banks (or) Bank Guarantee from any of the Commercial Banks (or) Fixed Deposit Receipt (FDR) (or) Insurance Surety Bonds. The Performance Security @ 5% should be valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. Vendor should clearly mention their acceptance to this effect in their quote.
25. **Payment Terms for Import Items:** 100% irrevocable Letter of Credit (L/C) will be opened. 80% payment shall be made through irrevocable Letter of Credit (L/C) against submission of clear shipping documents and balance 20% of the amount shall be released through irrevocable Letter of credit (L/C) after successful installation, acceptance of the equipment certified by TIFR Hyderabad and on submission of "Performance Security" for an amount equivalent to 5% of the Purchase Order Value.
26. **Payment Terms for Indigenous Items:** 100% payment shall be released after receipt of complete material as per purchase order in a single lot, successful installation and acceptance of the equipment certified by TIFR Hyderabad and on submission of "Performance Security" for an amount equivalent to 5% of the Purchase Order Value.

27. Partial shipment for foreign bids / Partial delivery of material for full INR bids will not be accepted by TIFR Hyderabad.

28. **Pre Inspection Report:** The successful bidder should submit the Pre Inspection Report / Manufacturer's Test Certificate with data sheet to TIFR Hyderabad before dispatch of the material at no extra cost to the purchaser. (If required by TIFR Hyderabad).

29. Repair / replacement if required any during the warranty period, necessary customs clearance charges / customs duty charges, freight charges for sending back the repair material to supplier and import freight charges of replacement should be borne by the supplier.

30. For Import cases: No Agency commission will be paid as per Govt. of India rules.

31. All bank charges outside India will be to supplier's account only.

32. Taxes: TIFR Hyderabad is a Public Funded Research Institute. The exemption of Customs Duty under the notification No. 51/96 dated 23.07.1996 and amended time to time will be applicable.

GST with effect from 01.07.2017 and amended time to time will be applicable. The applicable TDS / other charges if any as per GST rule will be deducted as per new GST regime.

TIFR Hyderabad GST NO: 36AAATT3951F2ZG.

Deduction of Indian Income Tax Deduction at Source: The Deduction of Indian Income Tax Deduction at source (TDS) will be deducted as per IT Act. The taxes at the time of actual utilization of service etc. will be deducted if applicable any.

Supplier shall be entirely responsible for all taxes, duties, license fees, road permits, etc., incurred until delivery of the contracted Goods to the purchaser. However, GST in respect of the transaction between the Purchaser and the Supplier shall be payable as agreed, if so stipulated in the order.

33. **Delivery Period:** Within 10 to 12 Months from the date of release of Purchase Order.

34. **Installation Period:** The Installation should be completed within 8 to 12 weeks from the date of receipt of the material at TIFR Hyderabad.

35. Conversion to Single Currency: To facilitate evaluation and comparison, the Purchaser will convert all bid prices are payable to Indian Rupees established by any bank in India as notified in the Newspapers/banks website on the date of Price/Finance Bid Opening.

36. Evaluation & Comparison of Bids:

36.1 For the bids qualifying for the technical evaluation which have been found to be responsive the evaluation & comparison shall be made as under:

(i) Indigenous Offers: The final landed cost of purchase after all discounts, freight, forwarding, insurance (warehouse to warehouse), custom clearing charges taxes etc. shall be the basis of evaluation.



(ii) Imported Offers:

The CIP/CIF price shall be the basis of evaluation (warehouse to warehouse basis)

(iii) Imported Vs. Indigenous Offers:

The final landed cost (warehouse to warehouse) of purchase taking into account, freight, forwarding, insurance, taxes etc. (CIF/CIP with custom duty, customs clearance charges, Bank/LC charges, transportation, delivery up to the site of installation at TIFR Hyderabad as per available records with TIFR Hyderabad for imported goods) shall be the basis of evaluation.

36.2 Conditional tenders/discounts etc. shall not be accepted. Rates quoted without attached conditions (viz. Discount shaving linkages to quantity, payment terms etc.) will only be considered for evaluation purpose. Thus conditional discounted rates linked to quantities and prompt/advance payment etc., will be ignored for determining inter-se position. The Purchaser however reserves the right to use the discounted rate/rates considered workable and appropriate for counter offer to the successful tenderers.

37. Contacting the Purchaser: Any attempt by any Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the bid.

38. Purchaser's Right to Vary Quantities at Time of Award: The Purchaser reserves the right at the time of contract award to increase or decrease the quantity of goods and services originally specified in the schedule of Requirements without any change in unit price or other terms and conditions.

39. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids.

39.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to 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 of the grounds for the Purchaser's action.

39.2 Evidence regarding credibility of stable performance and maintenance service capability must be provided. The purchaser reserves the right to make judgment on this and reject bids that, in the purchaser's view, do not carry sufficient credibility for performance and/or service.

40. Training:

40.1 The Supplier is required to train designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment.

40.2 The training shall be initially carried out during installation & commissioning for operating and maintaining the system. The specific training on application shall also to

be imparted by the supplier. The duration of such training need to be finalized with the end user of the equipment. The supplier has to provide complete training at site for operation (including trouble shooting) of the instrument.

40.3 In case any supplier is not willing to impart such training, the bid shall be treated as non- responsive.

41. Bidders, please provide the PAN No., Bank Details, email ID, Contact person details, GSTNo etc.

42. The Supplier shall arrange to ship the ordered materials within the mutually agreed delivery period mentioned in the order unless extended with/without penalty. Please mention the Delivery Period Clearly in the Bid, however effort to be taken to deliver the materials at the earliest.

In case of delay in supply on part of the supplier, a penalty @0.5% per week of order value will be charged for delayed period subject to a maximum of 10% order value.

If the delay in the shipment of the ordered materials attributable to the supplier exceeds agreed time period from the date of original agreed upon date of shipment and extended with/without penalty, the TIFR Hyderabad shall have the right to cancel the contract / purchase order and recover the liquidated damages from other dues of the party or by legal means. It will also affect the other/future business dealings with such suppliers.

The same rate of penalty shall be applicable for late installation of the equipment / instrument also.

43. Warranty :

The supplier warrants that the Goods supplied under this contract are new, unused, of the most recent or current models and those they incorporate all recent improvements in design and materials, unless provided otherwise in the contract. The supplier further warrants that all Goods supplied under this contract shall have no defect arising from manufacturing, design, materials or workmanship (except when the design and /or materials is required by the Purchaser's Specification) or from any act or omission of the supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

This warranty shall remain valid (As stated in technical specifications/standard warranty) after the Goods or any portion thereof as the case maybe, have been delivered, installed & commissioned and accepted at the final destination indicated in the contract.

Warranty period shall be (As stated in technical specifications/standard warranty) from date of successful installation of equipment. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier's discretion shall apply making such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the contract at supplier own cost and expense and to carry out further performance tests.

If during the period of warranty any component or spare part is needed to be imported, all associated cost for replacement shall be borne by the supplier including the cost of customs duty, customs clearance charges etc.

44. **COMMENCEMENT OF WARRANTY PERIOD:** The warranty period of an item shall commence from the date of receipt of the item in good working condition and satisfactory installation /demonstration at the project site.
45. Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet / literature of the quoted model of the item by the quoting party/manufacturer.
46. **Supplier Integrity:** The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.
47. **Force Majeure :**

The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

For purposes of this Clause, "Force Majeure" means an event beyond the control of Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, act of God and freight embargoes.

48. **Termination for Default**

48.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

- (i) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser.
- (ii) If the Supplier fails to perform any other obligation(s) under the Contract.
- (iii) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

48.2 For the purpose of this Clause:

- (i) "Corrupt practice" means the offering, giving, receiving or soliciting of gratification to influence the action of a public official(s) in the procurement process or in contract execution.
- (ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the purchaser, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the purchaser of the benefits of free and open competition;"

#### 49. Resolution of Disputes:

The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the contract.

If, after thirty (30) days from commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a contractual dispute, either party may require that the dispute be referred for resolution to the formal mechanisms. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication in an agreed national (or) international forum, and national or international arbitration.

In case of Dispute or difference arising between the Purchaser and domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director TIFR Hyderabad and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of arbitrator so appointed shall be final, conclusive and binding on all parties to this order.

In the case of dispute between the purchaser and Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub clause above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

50. TIFR Hyderabad reserves the right to ask for or to provide any clarification, changes after the release of this tender. Any changes or clarifications provided by TIFR, Hyderabad may be checked at TIFR Hyderabad website: <https://www.tifrh.res.in/index.php/commercial-tenders>

**ADMINISTRATIVE OFFICER  
(PURCHASE SECTION)  
TIFR, HYDERABAD**

**Annexure - B**

**Audited Annual Turnover**

S.No.	Financial/ Accounting Year	Profit (Currency)	Loss (Currency)	Annual Turnover (Currency)
1.				
2.				
3.				

Authorized Signatory with Seal

**Note:**

**This Audited Annual Turnover (Annexure - B) for the last 3 years should be certified by Chartered Accountant (CA) as per the format given above duly signed and stamped by the CA on their letterhead.**

**Annexure – C**

**Supply Order details of High Resolution Transmission Electron Microscope to other firms.**

<b>S.No.</b>	<b>Name of the company with full address</b>	<b>Name of the Project</b>	<b>Purchase Order No. &amp; Date</b>	<b>Brief Item Description with Model No.</b>	<b>Item Value in Currency</b>
<b>Signature</b>					
<b>Name</b>					
<b>Designation</b>					
<b>Name of the Company</b>					
<b>Date</b>					
<b>Seal of the Company</b>					

**NOTE: Please attach the copy documents / purchase order copy for the above mentioned details.**

# Financial Bid for Supply, Installation and Commissioning of High Resolution Transmission Electron Microscope for TIFR Hyderabad.

(Part - B)

## Annexure - D

TIFR Hyderabad Enquiry No & Date: \_\_\_\_\_

Due date: \_\_\_\_\_

Bidder's Quotation Ref No. & Date: \_\_\_\_\_

Financial Bid (Bidders must quote their rates using this Format)

S.No.	Item Description as per tender	Make/Brand/ Type	Qty.	Rate per unit (Currency)	Basic Cost of main item (In Currency)
A.	Supply, Installation and Commissioning of High Resolution Transmission Electron Microscope for TIFR Hyderabad.  (Technical Specification as mentioned at Annexure A)				
B.	Ex-Works cost (Duly packed Airworthy/Seaworthy of international standard)				
C.	FOB /FCA Cost (Name of Airport_____)				
D.	CIP/CIF Cost (Up to Hyderabad Airport)(all inclusive i.e. Cost of Goods, Packing, Insurance warehouse to warehouse, Inland transportation, freight etc.)				

**Note:**

1. All the column should be appropriately filled and not left blank.
2. Do not include any other charges, taxes, duties etc. in the Basic Cost of the item. The other charges, taxes, duties etc. to be shown separately.
3. Any accessories, optional items should be shown separately using above format.
4. Use separate sheet for detail description, specification of the item, Price breakup for the item(s) mentioned in technical specification but prices should be quoted in the same format.
5. Prices quoted in Indian Currency for indigenous items should be on F.O.R. basis and mention separately using different table format showing all the applicable taxes/Duties like GST, Freight & Transportation charges and installation charges etc.  
Use separate sheet for detail description, specification of the item, Price breakup for the item(s) mentioned in technical specification but prices should be quoted in the same format.
6. TIFR Hyderabad being educational & research institute, discounted price shall be offered.

**Signature of the Bidder**

Name, Address contact no \_\_\_\_\_

& email id of the bidder/ \_\_\_\_\_

Company with company's Stamp or Seal \_\_\_\_\_ **Date:** \_\_\_\_\_



**Annexure - E**

**PERFORMANCE BANK GUARANTEE FORMAT**

*In consideration of the TATA INSTITUTE OF FUNDAMNETAL RESEARCH HYDERABAD (hereinafter called "THE TIFR") having agreed under the terms and conditions of Purchase Order No.....*

*dated.....made between. TIFR...and M/s \_\_\_\_\_ (hereinafter called "the said Contractor{s}"). For the Purchase Order..... (hereinafter called "the said Purchase Order") having agreed to production of an irrevocable bank Guarantee for Rs. .... From the contractor(S) for compliance of his obligations in accordance with the terms and conditions in the said Purchase Order , we ..... (indicate the name of the Bank) (hereinafter referred to as "the Bank") hereby undertake to pay to the TIFR an amount not exceeding Rs.(Rs..... only) on demand by the TIFR.*

2. *We..... (indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the TIFR stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor(s). Any such demand made on the bank shall be However, our liability under this guarantee shall be restricted to an amount not exceeding Rs ..... (Rupees..... only).*

3. *We, the said bank, further undertake to pay to the TIFR any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.*

4. *We..... (indicate the name of Bank) further agree that the guarantee herein contained shall remain in full force and effect during period that would taken for the performance of the said Purchase Order and that it shall continue to be enforced till all the dues of the TIFR under or by virtue of the Purchase Order have been fully paid and its claims satisfied or discharged or Purchase Officer ion behalf of the TIFR certified that the terms and conditions of the said Purchase Order have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.*

5. We..... (indicate the name of Bank) further agree with the TIFR that the TIFR shall have fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Purchase Order or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time to time any of the powers exercisable by the TIFR against the said Contractor(s) and to forbear or enforce any of the terms and condition s relating to the said Purchase Order and we shall not be relieved from or liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance , act of mission on the part of the TIFR or any indulgence by the TIFR to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6 .This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. We,..... (Indicate the name of Bank) lastly undertake not to revoke this guarantee except with the previous consent to the TIFR in writing.

8. This guarantee shall be valid up to ..... unless extended on demand by TIFR. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees..... only) and unless a claim in writing is lodged with us within six months of the date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

**Signed and sealed**

Dated the ..... day of ..... for..... (indicate the name of Bank)