



भारतीय प्रौद्योगिकी संस्थान इंदौर
सिमरोल, खंडवा रोड, इंदौर, पिन- 453552

Indian Institute of Technology Indore
Simrol, Khandwa Road, Indore- 453552

GeM Bidding Document
For
Supply, Installation and Commissioning of RF/DC
Sputtering Equipment



Document to be submitted online on GeM
for
(Technical & Financial Bid as per Schedule of requirement)

विशेष नियम एवं शर्तें / SPECIAL TERMS AND CONDITIONS

1. Any bidder from a country sharing 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) as per vide Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020 and its subsequent amendments.
2. Benefits to Micro and Small (MSEs)/Start-Up will be applicable under PP Policy 2012 and its subsequent amendments for MSEs as per guidelines issued by Ministry of MSME.
3. The Public Procurement (preference to Make in India) will be applicable under Order 2017, DIPP, MoCI Order no. P-45021/2/2017-B.E.II dated 15th June 2017 and its subsequent amendments.
4. **Payment: No advance payment will be made in any case.** Payment will be released through bank NEFT/RTGS transfer after supply, installation testing, inspection & commissioning of the item(s) and if found satisfactory with regard to quality, quantity and specifications ordered. The payment will be released after statutory deductions within 30 days. For the payment, the firm has to submit Supplier's Invoice indicating, inter alia description and specification of the goods, quantity, unit price, total value; challans(s), manufacturer's guarantee certificate; bank details/cancelled cheque, installation report, performance bank guarantee etc. to the Assistant Registrar, MM Section, IIT Indore.

The payment terms will be:-

- (i) 80% of the unit cost will be paid against delivery of the goods received in good conditions at IIT Indore and accepted by the user department.
 - (ii) 20% of the balance of each unit cost will be paid after Satisfactory Installation, Commissioning, Testing & Training (if required) of the IIT employees and submission of a performance bank guarantee.
5. **Performance Security:**
- a. Within fifteen days (or any other period mentioned in Tender Document or Contract) after the issue of Contract/Purchase Order by the Procuring Entity, the firm shall furnish to the IITI, performance security, valid up to **sixty days** after the date of completion of all contractual obligations by the contractor, including the warranty obligations.
 - b. The **5%** amount of the order value shall be stipulated in the Tender Document or Contract denominated in Indian Rupees or the currency of the contract and shall be in one of the following forms:
 - I. Unless otherwise stipulated in Tender Document or Contract, Account Payee Demand Draft or Fixed Deposit Receipt is drawn on any commercial bank in India, favoring the authority mentioned in therein (or FA&CAO of the Procuring Organization, if not mentioned).
 - II. Bank Guarantee issued by a commercial bank in India, in the prescribed form provided in Form X.
 - c. If the contractor, having been called upon by the Procuring Entity to furnish Performance Security, fails to do so within the specified period, it shall be lawful for the Procuring Entity at its discretion to annul the award and enforce Bid Securing Declaration (in lieu of forfeiture of the Bid Security), besides taking any other administrative punitive action like 'Removal from List of Registered Suppliers' etc.

6. BANK DETAILS:

Account Holder : Registrar IIT Indore

Account No. : 1476101027440

IFSC Code : CNRB0006223

Bank Name : Canara Bank

Branch Address : Simrol, Khandwa Road, Tehsil- Mhow, District- Indore (M.P.)

7. **Pre-dispatch Inspection (If required/asked)** - The firm should arrange the pre-dispatch inspection prior to packing & dispatching of the item if asked by the IIT Indore. The firm should share the entire details of the quoted items with original images, catalog and schematic diagrams before packing. Virtual/Online or physical inspection may be done by the IIT Indore technical committee.
8. Items should be delivered only on working days (Monday to Friday) during office hours only i.e. between 10:00 a.m. to 05:00 p.m.
9. **PRE- INSTALLATION:** Please also mention the pre-installation requirements for the equipment like ambient temperature, humidity, civil work, weather specifications, power specifications, etc. When items are provided full performance satisfaction should be demonstrated.
10. **Liquidated Damages:-** As time is the essence of an order, the date of delivery should be strictly adhered to, otherwise the delivery in full or in part may not be accepted and penalty for late delivery will be imposed @ 0.5% (Half Percent) per week subject to a maximum of 10% of the total value of supply order & beyond 10% subject to approval of IIT Indore. In case of delay in satisfactory Installation Commissioning, Testing, Inspection, Certification etc. also the same rate of penalty shall be liable. Non- Delivery of material/service may lead to forfeiture of PBG and debarment of the supplier.
11. **Delivery:** Free delivery at IIT Indore.
12. In case the equipment offered requires maintenance after the expiry of the warranty, please indicate the approximate cost of comprehensive and on-call basis maintenance and also the availability of local support or otherwise.
13. IIT Indore reserves the right to modify/alter/insertion or deletion on any part of the tender document to ensure fulfillment of its material & service requirement at any stage.
14. The instructions about bidding given in this advertisement and the tender documents should be read thoroughly before bidding. IIT Indore reserves the right to accept or reject any or all quotations at any stage without assigning any reason whatsoever it may be.
15. **Breach of Terms and Conditions:** IIT- Indore reserves the right to accept or reject or cancel any or all inquiries or quotations at any stage without assigning any reason thereof. In case of cancellation of order due to Non-compliance of with Terms and Conditions and Breach of the Contract, no compensation will be paid towards the progress of order/procurement.
16. **Governing Law:** The order placed will be a contract between the supplier and the buyer and shall be governed by the laws of India and under the contract shall be taken by the parties only in Indore, M.P India to competent jurisdiction. All Domestic and International disputes are subject to Indore, M.P. jurisdiction only.

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17. Please note clearly that the Bids sent through FAX, E-mail, by hand and/or by any post/courier shall not be accepted/ processed, in any case.
18. All other General Terms & Conditions will as per GeM GTC 4.0 v1.26.
19. All communications with respect to the tender shall be addressed only to:
Assistant Registrar (R&D),
Materials Management Section
6th Floor, Abhinandan Bhawan (West Wing),
Indian Institute of Technology, Indore
Khandwa Road Simrol, Indore- 453552
Tel.: 0731660- Ext. 5552/5327
Email: rndmms2@iiti.ac.in, rndmms1@iiti.ac.in, arrnd@iiti.ac.in
20. The Quantity mentioned above is also indicative and might change in the final order.
21. Format for Price Breakup (FORM-XI) must be uploaded at the time of Price bid submission. Non-Compliance of the above condition by the bidders will amount to non-eligibility for which tender has been floated and its bid shall be liable to be rejected summarily.
22. **General Instructions (From Packing at Supplier's factory to Installation at Purchaser's destination):**
- a) Site Preparation:** The supplier should inform the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier has to state in detail the floor Space, electrical power/UPS and air-condition requirements in the technical bid. The supplier should continuously monitor the pre-installation requirements and see that everything is ready before the equipment is transferred to the site for installation.
- b) Packing and Transportation:** The supplier should provide the Goods with high quality packing which can prevent their damage or deterioration during transport to their final destination. The packing should be able to withstand the rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. While transferring the Goods to final destination, their packing case size and weights should be taken into consideration. Further, at all transit points, the heavy handling facilities should be used for smooth handling purposes.
- c) Insurance:** The Goods supplied under the Contract should be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. The insurance shall be obtained by the suppliers in an amount equal to "the value of the goods + the value total tax" from "warehouse to warehouse" (final destinations) on "all risks" basis including war risks and strikes.
- d) Delivery and Unloading:** The equipment should be delivered to IIT Indore as per the delivery period mentioned in the Purchase/Contract Order. The supplier should ensure to unload all the materials (equipment and other related accessories etc.) to the installation site at IIT Indore. Unloading the goods at IIT Indore is the responsibility of the supplier. No manpower will be provided by IIT Indore.
- e) Installation and Demonstration:** Installation should be done by the supplier at free of cost within 04 weeks from the date of delivery of the item. Installation, complete interfacing of the system with its subsystems, and commissioning is to be carried out by the vendor's factory-

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trained engineers, followed by a demonstration of the system's performance fully to the user's satisfaction. Supplier should show the performance of the equipment as per specifications agreed based on claims made in their brochures or specification sheet.

f) Inspection: The inspection of the system will be done by an IIT INDORE technical expert in the presence of the supplier's representative. In case of receipt of the material in short supply or damaged condition, the supplier will have to arrange the supplies/replacement of goods free of cost pending the settlement of the insurance case, wherever applicable on FOR basis at IIT Indore .

g) Warranty: The warranty period should begin from the date of successful installation, commissioning and training at IIT INDORE. Main equipment and all accessories must have comprehensive warranty, and warranty should cover all parts & labour work involved. Supplier will have to undertake comprehensive maintenance of the entire hardware components, software, equipment, support and accessories supplied by the supplier at the place of installation of the equipment. The supplier warrants that all the Goods are new, unused, not substandard and of the most recent or current models, and that 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 will have no defect arising from design, materials or workmanship. The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. Collecting faulty Hardware from onsite and provisioning the replacement of hardware under warranty at onsite should be the responsibility of the supplier. If the supplied material is not used during the service period for replacing the faulty item, the supplier should extend the warranty period equal to the period during which material is not used.

h) Training (if required/asked): Onsite training should be provided by the supplier at free of cost to the users designated by IIT Indore on all specified capabilities of the instrument by the company person. At least 2 days of training should be provided each year during the warranty period. During training the hardware, software, operation, safety procedure, handling emergency situations and maintenance of the instruments should be explained.

ADVISORY ON FRAUD CALLS/MESSAGE MADE IN THE NAME OF IIT INDORE

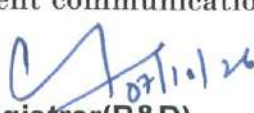
(a) This is to inform you that no officials from the IIT Indore make any telephone calls/messages/emails/whatsapp seeking personal or irrelevant information from the bidder. In case any additional documentation is required from bidder, it is sought only through the official email(s) originating from the institute domain name i.e. @iiti.ac.in.

(b) **No tender/application/documentation fee is applicable** for any type of the tenders being floated by this institute.

(c) The IIT Indore hereby advises all the bidders to refrain from entertaining any suspicious telephone calls /messages/emails/whatsapp made in the name of IIT Indore asking for money on behalf of the institute. **They are also advised not to reveal any personal information or transfer any money in response to such calls/messages/emails/whatsapp.**

(d) Moreover, they should bring such matters to the notice of the institute viz email to mms@iiti.ac.in.

(e) In case any bidder responds and becomes pray to any such fraudulent communication the responsibility shall not lie with this institute.


Assistant Registrar(R&D)
MM Section, IIT Indore

सहायक कुलसचिव
(अनुसंधान एवं विकास सामग्री प्रबंधन विभाग)
Assistant Registrar
(R&D-Materials Management Section)

अनुभाग-2 / SECTION- II**आवश्यक योग्यता मानदंड/ Essential- Qualification Criteria****भाग – 1 /PART - I****LIST OF DOCUMENTS TO BE UPLOADED WITH TECHNICAL BID**

Sl. No.	Details	Supporting Document Should be Submitted
1.	Bidder Information	As per enclosed FORM – V
2.	The Bidder should be OEM/ Authorized - Distributors/ Dealers/ Firms and should have the existence of firm for a minimum period of 5 years.	Valid certificate of Incorporation/ Registration of the firm.
3.	Bidder should submit a valid manufacturers authorization (in case bidder is not an OEM) and warranty support declaration from the OEM specific to this tender.	The same should be on the Letterhead of the concerned OEM. In case of Authorized- distributor/ dealer/ firm, a copy of the valid authorization certificate shall be enclosed. (As per FORM – I) Note- Offer submitted without proper authorization shall be liable to be rejected summarily.
4.	Udyam Certificate if bidder claim MSEs should be as per GeM_GTC Clause 04, Point no (xiii), m, (i) Note- Exemption for MSME's under this clause shall be given to only those bidders who are OEM and have a valid UDYAM certificate with major activity as "Manufacturing". <i>(Traders/Authorized dealers shall not be eligible for any exemption).</i>	Self-certified copies of documents.
5.	Startup Certificate if bidder claim as a startup to this tender item.	Self-certified copies of documents.
6.	WORK EXPERIENCE: The Vendors / Bidders should have work experience as per the following parameters. Three similar completed work costing not less than Rs. 10,80,000/- in last 3 (Three) financial years for any Govt./Semi Govt./Centrally Funded Technical Institutes (CFTI) which includes IITs, IISERs, IIMs, NITs, IIITs, IISc and IIST, CSIR Institutes, Central Universities and /or DAE Institutes (NISER, TIFR). OR	Work orders and satisfactory completion valid certificates issued by respective buyer organization of the above order in support of experience to be enclosed. Without submission of completion certificate the experience will not be considered. The valid certificate should be in Letter Head of the concerned government organization with

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	Two similar completed work costing not less than Rs.14,40,000/- in last 3 (Three) financial years for any Govt./Semi Govt./Centrally Funded Technical Institutes (CFTI) which includes IITs, IISERs, IIMs, NITs, IIITs, IISc and IEST, CSIR Institutes, Central Universities and /or DAE Institutes (NISER, TIFR). OR One similar completed work costing not less than Rs.25,20,000/- in last 3 (Three) financial years for any Govt./Semi Govt./Centrally Funded Technical Institutes (CFTI) which includes IITs, IISERs, IIMs, NITs, IIITs, IISc and IEST, CSIR Institutes, Central Universities and /or DAE Institutes (NISER, TIFR). Note: Similar work means Supply, Installation and Commissioning of RF/DC sputtering equipment.	authorized signatory.
7.	List of other Govt. Departments, Public Sector units and Central Autonomous Bodies for which the bidder is supplying material or having the similar type of contracts and a valid certificate regarding the satisfactory performance of the contract.	As per enclosed FORM VI
8.	Bidder Acceptance of Tender Document	As per enclosed FORM VII
9.	The bidder should not have been blacklisted by any Government / Semi Government / Board /Corporations /Autonomous Body/ PSU. An undertaking/declaration in this regard should be closed. If any such matter i.e. of blacklisting /suspension is subjudice, even then the concerned firm shall be technically disqualified. <i>"If any one or more Partner/ Directors of any debarred/blacklisted agency promotes or forms a new contracting firm or a sister-concern firm of the said debarred/blacklisted agency, then it shall also be considered as a debarred /blacklisted firm".</i>	As per enclosed FORM IV
10.	The quoted products should not be under end of sales or end of support in next 05 (five) years from the date of submission.	As per enclosed FORM XII
11.	Make In India*- Class-I or Class-II Local Supplier.	A Self-Declaration Certificate regarding "Class-I or Class-II Supplier" for the tendered item as per the Form-II - is to be submitted.
12.	FINANCIAL TURNOVER: The Bidder Annual Financial Turnover should more than Rs. 36,00,000/- during the last three financial years namely 2022-23, 2023-24 and 2024-25 .	As per enclosed FORM VIII and Attach a separate neatly typed sheet on the letterhead of Registered Chartered Accountant OR enclose

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	And In case of OEM, the Average Annual Turn Over should be Rs.1,44,00,000/- during the last three financial years namely 2022-23, 2023-24 and 24-25. The Vendors / Bidders should not have incurred any loss during the last 3 (Three) financial years up to 31 st March 2025. Profit after Tax should be positive for the above-mentioned period.	copies of audited Balance Sheet and Profit & Loss Statement for the previous 3 financial year as specified in bid document and further details if required may be asked from the contractor after opening of technical bids. There is no need to upload entire voluminous balance sheet.
13.	Price Reasonability Certificate (To be submitted on Firm/Company Letterhead)	As per enclosed FORM XIII
14.	Undertaking (To be submitted on Firm/Company Letterhead)	As per enclosed FORM XIV
15.	CATALOGUE: Firm should share the item wise catalogue of the offered product along with the technical bid.	Make and model no. of item must be mentioned along with detailed specification

Note:-

1. Non-Compliance with any of the above conditions/points by the bidder will amount to non-eligibility for which tender has been floated and its bid shall be liable to be rejected summarily.

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

अनुभाग-2 / SECTION- IIतकनीकी विशिष्टता / Technical Specificationभाग – 2 /PART - II

(Bidder should submit the compliance matrix along with the technical bid)

Item details and technical specifications as mentioned below: **Supply, Installation and Commissioning of Supply, Installation and Commissioning of RF/DC sputtering equipment., Quantity- 01**

1. Sputtering Chamber			
Item	Required specification	Compliance (Yes / No)	Any Deviation
Chamber	High-grade SS-304 vacuum chamber, box/cylindrical type of suitable size, designed for four magnetron sources in confocal or sputter-up geometry; rigid support frame.		
Chamber size	Approximately 500 × 500 × 450 mm ³ or larger, subject to vendor's optimized geometry.		
Internal finish	Electropolished/passivated internal surfaces to minimize outgassing, contamination, and particle generation.		
Ports/flanges	Dedicated UHV-compatible ports for TMP, backing line, gas manifold, gauges, substrate heater, substrate bias, four sputter guns, shutters, load lock, venting, thermal monitoring, and optional QCM/OES.		
View ports	At least two shuttered CF35 or equivalent viewports with protective blanks.		
Liners	Removable SS-304 chamber liners for cleaning and maintenance.		
Base pressure	≤ 2 × 10 ⁻⁸ Torr in a clean, cold chamber after defined conditioning (Need certificate from centrally funded institutes about system working at a vacuum of 2 × 10 ⁻⁸ torr or better)		
Mobility	Rigid support with wheels, adjustable jack bolts and vibration-damping pads.		

2. Substrate Holder, Heating and Rotation			
Substrate size	Holder compatible with at least 50 × 50 mm substrates; interchangeable fixtures are desirable for smaller samples and wafers.		
Rotation	Continuous programmable substrate rotation; preferably at least 5–30 rpm or wider.		
Heating	PID programmable resistive/radiative heater, RT to ≥ 800 °C.		
Temperature measurement	Thermocouple or equivalent sensor positioned to provide a representative substrate temperature; the actual substrate temperature, not merely the heater temperature, shall be reported.		
Temperature uniformity	Target uniformity of preferably ± 5 °C or better over a 50 × 50 mm substrate at representative temperatures.		
Bias during heating	The system shall permit simultaneous substrate heating and independently controlled substrate bias. (Certificate required from centrally funded institutes for substrate heater working at 800 °C with bias and rotation)		
Target-substrate distance	Adjustable target-to-substrate distance, preferably approximately 5–20 cm, with fine adjustment.		
Load-lock transfer	In-situ sample transfer through load lock without venting the main chamber; motorized transfer is preferred.		
3. Vacuum System			
Backing pump	Oil-free dry backing/roughing pump, minimum 10 - 12 m ³ /h, with suitable UHV-compatible isolation and bellows-sealed/magnetically coupled valves		
Turbo molecular pump	TMP ≥ 650 Lit/s, appropriately sized for the chamber and process gas load.		
TMP isolation	Motorized/pneumatic gate valve with interlocks preventing unsafe TMP operation.		
Pressure control	Closed-loop automatic process-pressure control using a throttle valve and		

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	appropriate pressure sensor/controller.		
Pressure range	Stable and programmable operation over at least 0.5–20 mTorr, with vendor to state guaranteed control range and accuracy.		
Gauges	Pirani/thermal conductivity gauge for rough vacuum and cold-cathode/Penning or equivalent high-vacuum gauge;		
Interlocks	Electrical/software interlocks for pump, valve, gas, RF/DC power, heater, and venting sequences.		
Vacuum hardware	SS tubing and UHV-rated fittings; all rotary feedthroughs bellows-sealed or magnetically coupled.		
Leak testing	All vacuum components and final assembly shall be helium leak tested; vendor shall provide leak-test report.		
4. Magnetron Sputter Guns			
Number of sources	Four independent magnetron sputtering guns.		
Gun type	Balanced or mildly/unbalanced magnetron suitable for low-damage TMD deposition; Confocal Unbalanced Magnetron sputtering (CFUBM) acceptable where the vendor demonstrates controllable bombardment.		
Power compatibility	Each gun shall support DC and RF operation as applicable; RF operation is mandatory for insulating/semiconducting TMD targets.		
Target size	2-inch (50 mm) targets mandatory; 1-inch compatibility desirable.		
Target mounting	Quick-change target cartridges; compatibility with bonded/unbonded ceramic or compound targets shall be stated.		
Target-substrate geometry	Confocal/sputter-up geometry with independent angular adjustment; $\pm 45^\circ$ tilt preferred.		
Shutters	Independent motorized/pneumatic shutters for each source for target pre-sputtering and precise deposition start/stop.		

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Cooling	Water cooling of target/gun bodies and target holders for extended operation.			
Low-power operation	Stable RF plasma ignition and sustained operation at ≤ 10 –20 W with a 2-inch target shall be demonstrated during FAT.			
Pre-sputtering	Programmable target pre-sputtering with substrate protected by shutter; pre-sputter time shall be recipe-controlled.			
Plasma stability	Stable operation over the guaranteed process-pressure range without abnormal arcing or reflected-power excursions.			
5. RF, DC, and Bias Power Supplies				
RF power	13.56 MHz RF generator, preferably 0–300 W, with stable operation from ≤ 10 W to maximum rated power.			
RF matching	Automatic impedance matching network with forward/reflected power display and arc protection.			
DC power	500 to 600W DC sputtering supply with voltage, current, and power control. The capability of interfacing			
Substrate bias	A manually adjustable DC substrate-bias supply with an output range of ± 500 V DC shall be provided. The supply shall have fine voltage adjustment, adjustable current limiting, and short-circuit/overload protection. The substrate-bias voltage shall be independently adjustable from the sputtering cathode power and shall not require recipe-based or computer-controlled programming			
Power distribution	Independent power routing/interlocks to prevent simultaneous connection of incompatible power supplies to the same gun.			
Data logging	RF forward/reflected power, DC voltage/current, and substrate bias shall be logged with the process recipe.			
6. Gas Delivery System				
Ar MFC	Digital MFC, 0–200 SCCM, suitable for high-purity Ar, accuracy preferably $\leq \pm 1\%$ full scale.			

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O ₂ MFC	Digital MFC, 0–100 SCCM, calibrated for O ₂ , for reactive oxide deposition.		
N ₂ MFC	Digital MFC, 0–100 SCCM, calibrated for N ₂ , for nitride deposition.		
Gas panel	SS gas manifold with isolation valves, filters, and appropriate safety provisions.		
Gas purity	System shall be compatible with high-purity gases (preferably 99.999% or better).		
Computer interface	MFCs shall support remote control, recipe integration and data logging.		
7. Water Chiller and Cooling			
Chiller	PID programmable recirculating water chiller, approximately 2 kW or suitably sized for the complete system.		
Distribution	SS-304 water manifold with flow monitoring and alarm.		
Safety	Flow switches/interlocks to disable sputtering power in case of inadequate cooling.		
Tubing	Suitable low-permeation braided tubing and leak-tested connections.		
8. Load Lock			
Load-lock chamber	SS-304 chamber sized for at least 50 × 50 mm substrates.		
Pumping	Dedicated dry/clean roughing pump, approximately 6 m ³ /h or suitably sized.		
Pressure	Target load-lock pressure of $\leq 5 \times 10^{-2}$ Torr		
Transfer	Magnetic transfer arm		
Isolation	Pneumatic/electric gate valve with interlock preventing accidental venting of the main chamber.		
Contamination control	The main chamber shall remain under vacuum during routine sample exchange.		
9. Deposition Rate and Thickness Monitoring			
QCM	Quartz crystal microbalance (QCM) thickness/deposition-rate monitor is strongly recommended and shall be quoted.		

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Rate control	Deposition rate should be displayed and preferably programmable with rate/thickness feedback.		
Thickness range	Suitable for ultrathin films through at least several hundred nanometres.		
Data logging	Deposition rate, thickness, pressure, power and substrate temperature shall be logged against process time.		
10. Optional Plasma Diagnostics			
Optional Plasma Diagnostics	Provision with CF 35 ports for OES, Plasma diagnostics		
11. Process Control and Software			
Controller	Integrated controller for pumping, valves, MFCs, power supplies, substrate rotation, heating, bias and programmable deposition recipes.		
Recipe control	Multi-step recipes with independent set points for power, pressure, gas flow, substrate temperature, bias, rotation and deposition time.		
Software	LabVIEW or equivalent PC-based control and data logging.		
Data export	Process data shall be exportable in standard formats such as CSV/Excel.		
Safety	Complete hardware/software interlocks for vacuum, cooling, gas, RF/DC power, heater, bias and load lock.		
12. Factory Acceptance Test (FAT)			
Vacuum FAT	Demonstrate clean-chamber base pressure $\leq 2 \times 10^{-8}$ Torr or the guaranteed value stated in the final offer.		
RF ignition FAT	Using a 2-inch (any insulating target), demonstrate stable RF ignition and operation at $\leq 30 - 50$ W.		
Stable deposition FAT	Demonstrate stable deposition for a continuous run of at least 30–60 min without abnormal arcing, overheating or uncontrolled power drift.		
Thickness FAT	Measure deposited film thickness by profilometry, ellipsometry, QCM correlation		

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	or equivalent.		
Uniformity FAT	Demonstrate thickness and uniformity over the agreed substrate area.		
Repeatability FAT	Repeat the deposition at least twice under identical conditions and report deposition-rate/thickness repeatability.		
Documentation	FAT results, raw data, and instrument settings shall be supplied to the purchaser.		
13. Documentation, Installation, and Training			
Documentation	Complete installation, operation, maintenance and service manuals for the system and all major subsystems.		
Drawings	Provide chamber layout, utilities, electrical requirements, gas requirements and foundation/space requirements.		
Spare parts	Provide a recommended two-year list of consumables and critical spares with prices.		
Installation	Complete installation and commissioning at site.		
Training	Hands-on training after commissioning, including vacuum operation, RF/DC sputtering, target conditioning, deposition, and troubleshooting.		
14. Warranty, AMC, and Service			
Warranty	Minimum 1 year from commissioning		
Service	Vendor shall provide response time and service support details for India.		
Spare availability	Vendor shall state availability and expected lead time for RF generators, matching networks, MFCs, gauges, valves, pumps, and magnetron components.		
OEM documentation	Original OEM warranty certificates and invoices for imported items shall be supplied.		
Service track record	Vendor shall provide details of at least five successful installations of comparable multi-source sputtering systems at IITs, IISc, NITs, or institutions of national/international standing, including contact/reference details where permissible.		

15. Pre-Dispatch Inspection and Vendor Qualification			
PDI	Pre-dispatch inspection may be conducted online/offline and shall include demonstration of vacuum, RF/DC operation, heating, rotation, gas flow, shutters, bias, and software functions.		
Imported components	For imported items, provide OEM name, model, country of origin, warranty, and original invoice/airway bill documentation as applicable.		
New equipment	All supplied components shall be new unless explicitly agreed otherwise.		

16. Technical Terms and Conditions	Compliance (Yes / No)	Any Deviation
1) For all imported parts, the AWB copy and original invoice will be submitted		
2) During the pre-dispatch inspection, the vendor has to demonstrate a vacuum of 2×10^{-8} Torr		
3) During pre-dispatch inspection, the vendor has to deposit any suitable metal film and insulating film on a 40 mm x 40 mm substrate and demonstrate the uniformity.		
4) Any components not mentioned in the specifications but required to achieve the specifications should be supplied by the vendor.		
5) Vendor should have prior experience of at least 5 years or more in supplying UHV deposition systems in India. Proof of the same should be provided in the technical documents.		
6) Vendor should demonstrate a good track record of after-sales service based in India, over the past years.		
7) The vendor shall have prior experience (proof to be provided) in establishing UHV sputtering systems with a base pressure of $\leq 2 \times 10^{-8}$ Torr, incorporating at least two sputtering sources and an integrated load-lock system, at		

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IITs, IISc, IISERs, NISER, or other recognized academic/research institutes in India.		
8) The vendor shall provide a signed and stamped certificate/declaration confirming the system's capability for substrate heating up to at least 800 °C, motorized substrate rotation, and programmable DC bias of 0 to -100 V. Relevant technical datasheets supporting these capabilities shall also be provided.		

Note:

- A. The bidder should submit his acceptance against each column as YES/NO and if No, the bidder should specify the deviation.
- B. Valid proof of the document in support of the claim to be enclosed with the technical bid.
- C. All communications with respect to the tender shall be addressed only to:

Assistant Registrar (R&D),
Materials Management Section
6th Floor, Abhinandan Bhawan (West Wing),
Indian Institute of Technology, Indore
Khandwa Road Simrol, Indore- 453552
Tel.: 0731660- Ext. 5552/3551
Email: rndmms1@iiti.ac.in, somms@iiti.ac.in, arnd@iiti.ac.in

(Signature of the Bidder, with Official Seal)

TENDER No.: IITI(MM)/MEMS/060/PRJ/EK/2026-2027

अनुभाग-2 / SECTION- II

अमूल्यंकित तकनीकी बोली / UNPRICED TECHNICAL BID

भाग – 3 /PART - III

(Bidder should provide the following details on Letter head)

TENDER NO.: IITI(MM)/MEMS/060/PRJ/EK/2026-2027

Date:

Name of the Bidder _____

Sr. No.	Item Description	Qty	Make	Model	HSN Code	GST %	Country of Origin
a)	RF/DC Sputtering Equipment	01 No.					

SI No.	Other Terms & Conditions		Compliance Yes/No
1.	Payment terms	Please refer Section-I Point-4	
2.	Delivery Period	Within 12 Weeks from the date of Purchase/GeM Contract Order and also refer Section-I Point-22 (d)	
3.	Installation	Please refer to Section-I Point-22 (e)	
4.	Warranty	On-site 01-year warranty from the date of successful Installation, commissioning, testing and training and also refer to Section-I Point-22 (g)	
5.	Charges	Freight, unloading, insurance, delivery and any other kind of charges will be borne by the vendor/firm/supplier.	
6.	Service Support	Bidder should provide onsite service support.	
7.	Training	5 Days of On-site training should be provided by the firm free of cost by the expert engineer	
8.	Photographs and catalogues related to material/items should be enclosed in the technical bid and Dimensions of material/item, weight and space requirements should also be submitted in the technical offer.		

निर्माता का अनुज्ञा और वारंटी समर्थन पत्र

MANUFACTURER'S AUTHORIZATION & WARRANTY SUPPORT DECLARATION
(ON OEMs Letter head)

Date: _____

Tender No / GeM bid no: IITI(MM)/MEMS/060/PRJ/EK/2026-2027

To,
The Registrar
Indian Institute of Technology Indore

We, _____ [name of Manufacturer], who are official manufacturers of [Insert type of goods manufactured] having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods, manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee, warranty, availability of spare parts and AMC support in accordance with the Terms and Conditions of Contract with respect to the Goods offered by the above firm.

Authorized representative of the Manufacturer Authorized representative Bidder

Signature:

Signature:

Name:

Name:

Address:

Address:

Mobile No:

Mobile No:

Email ID:

Email ID:

प्रपत्र -2 / FORM-II

स्थानीय सामग्री के लिए घोषणा

Declaration of Local content

(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 Crores)

Date: _____

To,
The Registrar
Indian Institute of Technology Indore

Sub: Declaration of Local content

Tender No: _____

Name _____ of _____ Goods _____ & _____ Services: _____

1. Country of Origin of Goods being offered: _____

2. We hereby declare that items offered has _____% local content **(Please provide exact %).**

3. Details of location at which local value addition will be made / made: (Complete address _____ to _____ be _____ mentioned)

“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.”

Yours Faithfully,

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

Declaration for DPIIT Registration (on OEM's Letter Head)

CERTIFICATE BY BIDDER- DPIIT REGISTRATION

"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 county, has been registered with the Competent Authority (copy of the Registration Certificate enclosed).

I hereby certify that his bidder fulfils all requirements in this regard and is eligible to be considered.

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

प्रपत्र -4 / FORM-IV

स्वच्छ छवि/कोई कानूनी कार्रवाई नहीं होने के संबंध में घोषणा पत्र

DECLARATION REGARDING CLEAN TRACK/NO LEGAL ACTION

(to be provided on letter head of the firm)

I hereby certify that the above firm namely _____ is neither blacklisted by any Central/State Government/Public Undertaking/Institute nor any criminal case registered / pending against the firm or its owner/ partners anywhere in India preceding three years from the date of publishing of tender.

I also certify that the above information is true and correct in any every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date:

Authorized Signatory

Place:

Name:

Designation:

Contact No.:

BIDDER INFORMATION FORM

SI	Details	
1	Company Name	
2	Registration Number	
3	Manufacturer /Distributor for the quoted product	
4	Registered Address	
5	Name of Partners /Director	
6	City /Postal Code	
7	Company's Establishment Year	
8	Company's Legal Status (tick on appropriate option)	1) Limited Company 2) Undertaking 3) Joint Venture 4) Partnership 5) Others (In case of Others please specify)
9	Company Category	1) Micro Unit as per MSME 2) Small Unit as per MSME 3) Medium Unit as per MSME 4) Ancillary Unit 5) SSI 6) Others (In case of Others please specify)
10	Contact Name Email Id MOBILE NO.	
11	BANK DETAILS	Name of Beneficiary : A/c. No. CC/CD/SB/OD: Name of Bank : IFSC NO. (Bank) : Branch Address and Branch Code:
12	Vendor's PAN No. (Should be attached)	
13	Vendor's GST No. (Should be attached)	

PREVIOUS SUPPLY ORDER LIST FORMAT

Order placed by {Full address of Purchaser}	Order No. and Date	Description and quantity of ordered equipment	Value of order	Contact Person along with Telephone no., Fax no. and e- mail address.

Note: The Evaluation Committee may seek additional information from the existing users at IIT Indore or from any other Institutes, these feedbacks will be considered for technical evaluation.

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

प्रपत्र -7 / FORM-VII

निविदा शर्तों की स्वीकृति हेतु

ACCEPTANCE OF TENDER TERMS

(To be given on Company Letter Head)

Date: _____

To,
The Registrar
Indian Institute of Technology Indore

Sub: Acceptance of Terms & Conditions of Tender. IITI(MM)/MEMS/060/PRJ/EK/2026-2027

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 and I have no objection for any of the content of the bid document. The rates quoted by me/us are valid and binding on me/us for acceptance till the validity of bid.
3. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s) / corrigendum(s) in its totality / entirety.
4. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.
5. I / We do hereby declare that we have quoted our firm rates inclusive of taxes if not mentioned extra.
6. I/We agree to hold this offer open until **180 days** and shall be bound to supply/commission/install/test the equipment and dispatch the same within the specified period.
7. **I/We agree that in case if we fail to deliver the goods/complete the work/supply within the stipulated time, then institute has full power to compound the liquidity damages or forfeit the Bid Security/Security Deposit or any necessary action as deemed fit can be taken by the IIT Indore.**
8. The articles shall be of the best quality and of the kind as per the requirement of the institution. The decision of the IIT Indore, India (herein after called the said officer) as regard to the quality and kind of article shall be final and binding on me. Should the said officer deem it necessary to change any article on being found of inferior quality, it shall be replaced by me/us free of cost in time to prevent inconvenience.
9. I/We declare that no legal/financial irregularities are pending against the proprietor/partner of the bidding firm or manufacturer.

TENDER No.: IIT(MM)/MEMS/060/PRJ/EK/2026-2027

10. I/We undertake that the items supplied are as per Demonstration/Catalogue/technical literature description.
11. I/We undertake that the quoted rates are not higher than that approved in any other Govt. institutions in India for the same items during the current Financial Year.
12. I/we do hereby confirm that the prices/rates quoted are fixed and are at par with the prices quoted by me/us to any other Govt. of State/Central//Institute/Department/PSUs. I/we also offer to supply the Equipment/stores at the prices and rates not exceeding those mentioned in the price bid.
13. I/We do hereby confirm that I/we aware about the provisions of "Make in India"/startup initiatives and directives regarding Price Preference Policy to Make in India Registered Bidders and I/We undertake for following the same as per directions of IIT Indore in respect of this E-Bid Enquiry.
14. I/we have necessary infrastructure for the maintenance of the equipment and will provide all accessories/spares as and when required.
15. I/we also declare that in case of change of Indian Agent or for any other change. Merger, dissolution solvency etc. in the organization of our foreign principles, we would take care of the Guarantee/Warranty/Maintenance of the machinery/equipment and have provided written confirmation for the same.
16. I/we undertake to get the equipment repaired/replace within 48 hours of the receiving of the complaint from the institute failing which a penalty of @ 1% of the cost may be recovered from the Bank Guarantee before releasing the same to us after completion period.
17. I/we undertake, If as a result of post payment audit any over payment is deducted in respect of any Supply/work done by our Agency or alleged to have been done by our Agency under this bid, it shall be recovered by the IIT Indore from our Agency.
18. I/we undertake, If any under payment is discovered, the amount shall be duly paid to our Agency by the IIT Indore.
19. I/we undertake that we shall liable to provide all the relevant records copies during the concurrency period of Contract or otherwise even after the Contract is over, whenever required by IIT Indore.

Yours Faithfully,

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

TENDER No.: IITI(MM)/MEMS/060/PRJ/EK/2026-2027

प्रपत्र -8 / FORM-VIII

वार्षिक कारोबार की घोषणा और

इनकम टैक्स रिटर्न

**DECLARATION OF ANNUAL TURNOVER AND
INCOME TAX RETURN**

(To be submitted on Firm/Company Letterhead)

To,
The Registrar
Indian Institute of Technology Indore

Date :

Sub: NIT No.- IITI(MM)/MEMS/060/PRJ/EK/2026-2027

Dear Sir,

I/we hereby declare that, our firm's Annual Turnover as follows, and I/we have also supported an Audited Accounts for your references:

F.Y. 2022-23	F.Y. 2023-24	F.Y. 2024-25

And, I/we hereby declare that, our firm had filed Income Tax Returns for last 3 years i.e. F.Y. 2022-23, 2023-24 and 2024-25. Supported by copy of ITR of three years.

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

प्रश्न प्रारूप/ QUERY FORMAT

Name of the Firm: _____

Contact Person: _____

Address: _____

Email ID: _____

Contact No.: _____

Sl. No	Reference of the Clause No. of the Tender Document	Query/Clarification/ Deviation sought	Clarification/Response from IIT Indore
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

परफॉरमेंस सिक्योरिटी प्रारूप

PERFORMANCE SECURITY FORMAT

To,

.....
WHEREAS (name and address of the supplier)
(hereinafter called "the supplier") has undertaken, in pursuance of contract no. Dated
.....to supply (description of goods and services) (hereinafter called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee:

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We further undertake to pay the Purchaser any money so demanded notwithstanding any dispute or disputes raised by the supplier(s)/vendor(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 supplier(s)/vendor(s) shall have no claim against us for making such payment.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the day of, 20.....

(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal:

Name & address of the Bank

Address of the Branch:

Phone No.:

E-mail ID:.

TENDER No.: IITI(MM)/MEMS/060/PRJ/EK/2026-2027

प्रपत्र -11 / FORM-XI

Format for Price Breakup/Financial Document

for

Supply, Installation and Commissioning of RF/DC Sputtering Equipment

Name of the Bidder/ Bidding Firm / Company: _____

Sl. No.	Item	Qty.	Unit Price in INR (₹)	GST in INR (₹)	Total Price in INR (₹)
a)	RF/DC Sputtering Equipment	01 No.			

Note:

1. All Terms & Conditions will be as per NIT Document uploaded on GeM.
2. *Format for Price Breakup (FORM-XI) must be uploaded at the time of Price bid submission.*

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

प्रपत्र -12 / FORM-XII

बिक्री और समर्थन के संबंध में घोषणा

DECLARATION REGARDING SALES AND SUPPORT

(to be provided on letter head of the firm)

To,
The Registrar
Indian Institute of Technology Indore

We, M/s. _____ hereby affirm that the engineers listed below are currently employed by our organization and have consistently provided service and support in their region. We attest to their professional competence, dedication, and commitment to delivering high-quality work.

Sl. No.	Name	E-mail Id	Contact No.
1	Mr.		
2	Mr.		
3	Mr.		

We, M/s. _____ declare that we as original equipment manufacturers (OEMs) shall not be subjected to end of sale or end of support within the next five years from the date of submission of this declaration. This commitment aims to ensure the continuity and reliability of products and services provided by us, fostering stability and trust

We also certify that the above information is true and correct in every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

PRICE REASONABILITY CERTIFICATE

(To be submitted on Firm/Company Letterhead)

1. I/We _____ hereby certify that the prices quoted by us in our offer letter No.....are not higher than prices to any Government Department/PSU/Institution.
2. I/We further certify that I/We have not supplied or quoted for any item in offer letter at prices lower than those quoted for the relevant items to any Government/Semi-Government/ Public/Institution within the period of 90 days preceding the last date of submission of the offer.
3. I/We hereby undertake that I/We will not supply or quote for any item in offer letter at prices lower than those quoted for the relevant items to any Government/Semi-Government/ Public/ Institution/ within the period of validity of the offer.
4. I/We also undertake to bring the attention of the Authorities, any incidence of breach of any of the above paras within 30 days from the occurrence of the breach and further undertake to refund/reimburse the difference which may arise due to breach of any of the above paras and I/We also understand that the decision of Authorities, regards to the determination of quantum payable shall be final.

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

(To be submitted on Firm/Company Letterhead)

UNDERTAKING

I/We hereby declared that all the Test Reports compliances as per Standard Specifications mentioned in the NIT Document No: _____ for "Supply & Installation of _____" will be submitted by us, if required/asked.

Further, we will provide all Statuary valid Certificates/Permissions/License/Hardware/Software as required for smooth running of the supplied EQUIPMENT including all essential requirements for installation etc..

Furthermore, I/We hereby declare that, our quoted prices against this E-Bid Enquiry are not higher than prices offered by us to any others Govt. Institutions/Other Institutions/Departments as per prevailing market prices and we are liable for passing of all the benefits of GST in terms of cost reduction on account of various tax factors to IIT Indore as per the provisions of GST Act 2017. If any time IIT Indore will get the information that we have supplied items on higher prices in comparison to other institutes on the basis of prevailing applicable prices, we are undertaking that, we are liable for refunding and depositing back such difference amount to IIT Indore from our side without any question.

I/We are also undertaken that the Department of Commerce or Ministry/any other Department has been not debarred/blacklisted our firm as per best of our knowledge, if any such debarment/blacklisting come to the notice of IIT Indore Authorities during execution of Supplies against this E-Bid Enquiry, Indore have right to reject our proposal and take appropriate action deemed fit against our firm as per prevailing applicable Rules & Regulations.

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

