यूजीसी-डीएई कॉन्सॉर्टियम फॉर साइंटटफफक टरसर्ि
UGC-DAE CONSORTIUM FOR SCIENTIFIC RESEARCH
(विश्वविद्यालय अनुदान आयोग के अंतगित स्ि◌ायत्त संस्थान,विक्षा मंत्रालय,भारत सरकार)
(An Autonomous Institution under University Grants Commission, Ministry of Education, Government of India)
कोलकाता कें ✐**Kolkata Centre**
एलबी-८, वबधाननगर, सेक्टर-**III,** कोलकाता-७००१०६/**LB-8, Bidhannagar, Sector-III, Kolkata-700106**

NOTICE INVITING TENDER

NIT No. : UGCDAECSR/KC/GTE/2025-26/01 **Date: 04.11.2025**

Sealed tender in two bids system (Technical bid and Financial bid) is invited from eligible manufacturer/exclusive distributor/Bidders for the Supply, Installation, Testing Commissioning (SITC) of Low Temperature Superconducting Magnet-based Measurement System with DC Magnetization, Heat Capacity, and Multifunctional probe for user interfaced measurement options at UGC-DAE Consortium for Scientific Research, Kolkata Centre.

Part-I (Techno-Commercial Bid) of the tender should contain detailed technical specifications as well as commercial terms and conditions. Part-II (Financial Bid) should clearly indicate group-wise price, if needed, as mentioned in the Commercial Bid. The Techno-Commercial Bid and Financial Bid are to be submitted in separate sealed envelopes, distinctly marked and superscribed with Part-I (Techno-Commercial Bid) and Part-II (Financial Bid). Both the envelopes to be put inside another envelope that should be sealed and super scribed with tender notice no. and due date. The bidders may submit bids duly signed on letterhead with seal.

Completed Tender in a sealed envelope (inclusive of Techno Commercial Bid and Financial Bid) should be submitted and addressed to **Administrative Officer–I (Purchase & Stores), UGC-DAE CSR, Kolkata Centre, LB-8, LB Block, Sector III, Bidhannagar, Kolkata, West Bengal-700106, India** on or before the scheduled date and time specified below:

Events	Particulars
Last date and time of submitting tender	12.12.2025, by 17.00 Hrs.
Pre-bid meeting Intimation	Bidders interested to attend Pre-Bid Meeting are requested to affirm willingness at souravs@csr.res.in/sourav14sarkar@gmail.com by 17.11.2025
Date and time of opening of Bids	15.12.2025, 11:00 Hrs.
Place of Opening Techno-Commercial Bids	LB-8, Bidhannagar, Sector-III, Kolkata-700106
Date and Time of Opening of Financial Bid	The Financial Bid of the Techno-Commercially qualified bidders shall only be opened and date for the same shall be intimated to the eligible bidders by email.
Contact Details	Mr. Sourav Sarkar, Administrative Officer-I, Email: souravs@csr.res.in / sourav14sarkar@gmail.com Tel:+91-33-23358035/23351866 [Extn.411]

The technical bids will be opened first to evaluate the techno-commercial specifications of the tender and thereafter the financial bids of only Techno-Commercially qualified bidders will be opened.

Opening of Technical Bid: The Technical Bids will be opened in the presence of the representatives of intending bidders, who will be able to clarify technical aspects of their bids, if required.

Please note that UGC-DAE CSR, Kolkata Centre shall not provide any accommodation or reimburse any expenses to any of the bidders for attending the opening of Techno-Commercial and/or Financial bids.

Quotations received incomplete or beyond the stipulated time will be summarily rejected. Bidders should submit past experience for supplying and successful installation of similar units to other research Institutes/Universities/other organizations in India and abroad. Please provide documentary proofs of such successful installation and supportive documents that the instruments are running successfully.

1. Techno-Commercial Bid:

The bid should contain Techno-Commercial specifications and should be kept in a separate sealed envelope duly super scribed as "Techno-Commercial Bid" on the outer cover of the envelope as already detailed above. It should be clearly mentioned on the envelope as "Techno-Commercial Specification for low temperature superconducting magnet-based measurement system with DC magnetization, heat capacity, and Multifunctional probe for user interfaced measurement options".

Technical Specification for Low Temperature Superconducting Magnet-Based Measurement System

Supply and installation of fully automated computer controlled and user-friendly cryogen free Low temperature superconducting magnet-based measurement system for measurement of various physical properties as a function of temperature (2 K to 400 K) and magnetic field up to 14 T.

The vendors should give a buy-back offer for the existing non-functional SQUID magnetometer (model: MPMS XL 7, make: Quantum Design).

A. Base System and Cryogenic Specifications

1. Base system should be computer controlled fully cryogen-free, *i.e.*, there is no requirement of liquid Helium and/or liquid Nitrogen at any point of time. Cryogen-free low temperature and high magnetic field superconducting magnet-based measurement system with working temperature range of 2-400 K needs to be capable of measuring dc magnetization and heat capacity at variable magnetic fields (up to ±14 Tesla) and temperatures for different kind of samples such as single-crystalline, polycrystalline, thin film, and nano-crystalline materials.

2. The base system must accomplish the initial cool-down directly from Helium gas (without any cryogen) within 48 hours (maximum). The vendor must provide the supporting data and cool-down log files with the offer. Demonstration of the same may be asked during technical evaluation. The vendors must also specify the consumption of Helium gas for regular usage.

3. Single two-stage Pulsed tube cryocooler is needed to cool both the superconducting magnet and the sample chamber providing a low vibration environment for the sample measurements. Consumption of small amount of bottled Helium gas for the fully automated startup and operation of the system must be ensured.

4. Cool-down must be fully automated without the requirement of any kind of manual intervention. All low temperature control must be fully automated, integrated, and user-friendly. The necessary pumping system must be embedded with the base system. Vendor must also mention about the temperature control mechanism of the base system. Inefficient mechanism of temperature control through mechanical needle valve (automated or manual) is not accepted.

5. The sample measurement chamber of the system should have the thermal uniformity at both low and high temperature while holding different measurement probes.

6. There must be options for the upgradation in the base system so that the various measurement option can be extended to lower/higher temperature.

7. The system should be fully automated and computer controlled with the latest technology for instrument interfacing and control. All communications on the system must either use a Universal Serial Bus (USB), Controller Area Network (CAN) or similar high speed and high-fidelity communications protocols. GPIB based communications is not preferred. If a GPIB based communication protocol is employed, the tenderer must provide supporting documentation demonstrating that the bit-rates and error-rates in GPIB do not in any way compromise the speed and reliability of data acquisition.

8. The performance of the system and specifications should be supported with valid and certified documents and published works (more than 50) along with list of installations in Govt. of India funded research institutes (such as IIT/NIT/IISER/IISc/TIFR/IACS/NISER/JNCASR/Govt. Universities) and/or worldwide research centers including the full contact details (address, phone numbers and emails ids) of the customers and the installation reports.

B. Magnet Control Specifications:

1. Superconducting magnet with longitudinal magnetic field in the range of ± 14 Tesla or higher.

2. Magnetic field should be well stable and the homogeneity should be ± 0.1 % over at least 5 cm on axis or better.

3. Magnet sweep rate should be greater than 0.3 Tesla/min.

4. Time required to charge full magnetic field of 14 Tesla should be less than 50 minutes. Vendors must provide supporting log data files with the offer. Demonstration may be asked during technical evaluation.

5. Superconducting magnet must be cooled via solid conduction without the necessity of any liquid helium or liquid nitrogen.

6. Ramping of magnetic field during the measurements should not affect the temperature stability of the system.

7. An in-built magnetic shield should be present with the superconducting magnet. Such shield is required to maintain the stray fields 0.0005Tesla (or less) at a distance of 300 cm from the Centre of the Cryostat when the magnet is fully charged to 14 Tesla, facilitating the other sensitive instruments to be installed closer for better lab space utilization (vendors must provide data for the same).

8. Magnet must be well protected from accidental quenches.

C. Temperature Control Specifications:

1. Temperature range for all the measurements should be available from ≤ 2 K to ≥ 400 K for all the measurements.

2. The sample temperature in the system should reach from 300 K to stable 2 K within 50 minutes during cooling. The vendors are required to provide supporting data along with data files for the same with the offer. Demonstration of the same may be asked during the technical evaluation.

3. The base System must be comprised with a finely tuned flow impedance along with a sophisticated temperature controlling software to facilitate continuous system operation at 2 K as well as smooth temperature control through the boiling point of liquid Helium at 4.2 K. Various modes of temperature control like settle mode and ramp mode must be provided in the temperature control software. The sample temperature should not overshoot during temperature stabilization for some specific measurements. Demonstration for the same may be asked during the technical evaluation.

4. To achieve the low temperature and controlled cooling, the base system is required to utilize efficient technique and the vendors must specify the technique used for the system in the offer. All the temperature control must be fully automated without any manual intervention. Inefficient mechanism of temperature control through mechanical needle valve (automated or manual) is not accepted. Demonstration of the same may be asked during the technical bid.

5. At least three temperature sensors must be available in the sample chamber of the base system to ensure sample temperature accuracy and stability.

6. The temperature stability of the base system should be ±0.5% or better. Vendors must provide the temperature stability data at 2 K for minimum 48 hours with supporting data files. Demonstrations of the same may be asked during technical evaluation.

7. The base system must enable cooling of samples from the highest temperature to the lowest at the highest specified cooling rate at any given magnetic field of up to ±14 Tesla without affecting the system performance including heating of the magnet. The same procedures should hold good for heating of the samples as well. Demonstrations of the same may be asked during technical evaluation.

D. Vacuum Pumping System in the base system:

1. The Vacuum pumping System necessary for the uninterrupted operation of the base system and its various measurements options must be included in the offer.

2. All the pumps to be used in the system must be dry pumps. No oil-based pumps should be used in the system.

3. The base system should include an integrated cryopump and all the necessary vacuum gauges for controlling sample environment. This fully automated and computer-controlled options should permit changing the chamber environment which can be put in the script sequence of the computer program. The cryopump included in system must be able to pump out the sample chamber and provide vacuum to better than 10^{-4}Torr in a time less than 10 minutes. Achieving high vacuum using a Turbo Molecular pumping station in the base system is not acceptable. Vendors must specify the information on the high vacuum pumping system in the offer.

E. Data Acquisition and Data Analysis:

1. A Licensed version of windows based operating software and the State-of-the-art computer control system compatible with the measurement options is required for the data acquisition. Data acquisition software of the system must include the latest version. Vendors must specify the data acquisition system in the offer. The data acquisition software should be able to run the various measurement options fully automatically. There should be scopes to control the external instruments by using different programs for the experiments designed by users as per the requirement as and when it is required.

2. The system must facilitate completely automated measurements options (except changing the samples). The control of the temperature, magnetic field and the various modes of sample measurements option should be completely automated. The included software must be able to control and check every aspect of the system's electronics, hardware, gas handling, data acquisition and data analysis. The system controlling software must also include a comprehensive sequence editor for setting up various unattended measurement runs. The users must be able to perform and record various measurements by setting their own measurement sequences and saving data files of the measurements and to ensure that the data are safe on a multi-user based system.

3. The system should be accessed remotely by the users via Internet. The system software must also allow the users to remotely control and monitor their experiments via internet as and when required.

4. The temperature and magnetic field controls from external third-party software/program must be enabled in the system. Demonstration of the controlling software may be asked during the technical evaluation.

F. Measurement Options:

(a) DC magnetization:

1. The system should offer the DC magnetization measurement option using vibrating sample magnetometer (VSM) in the temperature range from ≤ 2K to ≥ 400K and in magnetic fields of ±14 Tesla or higher. Vendors must specify and provide supporting data files indicating the DC magnetization measurements in complete temperature range. Demonstration for the same may be asked during the technical evaluation.

2. The linear motor must be utilized in the VSM to vibrate the sample. Vendors should specify the details of the sample vibration technique in the offer.

3. The DC magnetization measurements using VSM option in the system must be able to be performed in rapid, fully automated sample centering operations. There should not be any requirement to perform manual adjustments to center the sample position. Vendors must specify the sample centering procedure in detail and travel range of the motor in the offer.

4. Coil-set bore diameter needs to be < 10 mm. A thermal sensor must be mounted on the VSM coil to measure the accurate temperature during the measurements.

5. Options to carry out DC magnetization measurements in magnetic Field: ± 14 Tesla with ramp rate ≥ 0.3 Tesla/min.

6. The VSM oscillation frequency range should be 15-50 Hz or wider.

7. The maximum VSM amplitude should be 4 - 5 mm.

8. The RMS sensitivity of VSM should be of$<10^{-6}$ emu or better and the accuracy must be of 0.5 percent using the standard calibration sample.

9. The sensitivity of the DC magnetization measurements should be such that a magnetic moment as low as $\leq 5 \times 10^{-5}$ emu for the entire magnetic field range. Use of external battery powered preamplifier will not be accepted. Vendors must provide supporting data with log data files with the offer.

10. The DC magnetization data files for the measurements during cooling and heating in the temperature range of 2K to 400K with 1 second averaging must be provided with the offer by the vendors. The measurements of 1 second integration is important to resolve a magnetic phase transition quickly and hysteretic behavior, if any. Vendors must provide supportive data files. Demonstration may be asked during the technical evaluation.

11. Suitable sample holders and sample mounting station to mount the powders, polycrystalline pellets, single crystals and thin films must be included in the offer.

12. Standard (NIST based) samples must be provided for the calibration of the magnetic moment at low and high magnetic fields and temperatures.

13. Vendors must provide the DC magnetization measurements data files of a material having superconducting transition with the offer following the protocols as given below.

    - DC magnetic moment vs. temperature: 300 → 2 K in a 0.01Tesla magnetic field measured at a cooling rate of 5 K/min
    - DC magnetic moment vs. temperature: 2→ 400 K in a 1 Tesla magnetic field measured at a heating rate of 5 K/min
    - DC magnetic moment vs. temperature: 400 → 2 K in a 14 Tesla magnetic field measured at a cooling rate of 5 K/min

Demonstration for the same may be asked during technical evaluation.

(b) Heat Capacity:

1. The system should offer the heat capacity measurements options in the temperature range 2 K – 400 K or above. Vendors must provide supporting information to validate the complete temperature range.

2. Heat capacity measurements in magnetic fields of ±14 Tesla.

3. Using relaxation technique, two-tau model fit analyses, corrections of backgrounds from sample platform, adhesives through sophisticated software routines that are fully integrated to the main system software (claim need to be supported by references of the papers published and patents).

4. Sample quantity needed for the measurements should be as minimal as possible without compromising the quality and precise measurements (up to 2 mg).

5. Measurement Accuracy: 5 % or better over 2 K – 300 K

6. Heat Capacity resolution: Less than 10 nJ/mole-K at 2 K temperature (Vendor must specify the same in the offer and the claim of the same needs to be supported by the references of the published papers and patents).

7. Thermometers on the sample platform should be provided to measure the accurate temperature of the sample.

8. Fully automated software for data acquisition with advanced data fitting algorithm and alternate slope-fitting analysis mode should be provided.

9. Suitable sample holders (2 Nos.) and suitable low temperature grease adhesive, sample mounting station, vacuum pump assembly to mount the polycrystalline pellets, single crystals and thin films must be included in the offer.

(c) Multifunctional probe

1. A General-Purpose probe for custom experiments should be able to use the magnetic field and temperature control from the System.

2. Must include wired socket and must have an integrated thermometer. The general-purpose probe should be compatible with the base system.

3. The probe must have the flexibility to move the socket at various heights in the bottom fixture and also should be able to manually rotate.

4. The temperature and magnetic field controls from external third-party software/program must be enabled in the system. Demonstration of the controlling software may be asked during the technical evaluation.

G. Accessories, tools and documentation

- Complete set of spare fuses: - at least 10 sets
- Entire maintenance accessories (tip seals, O-rings, etc.) for various pumps:- 5 sets
- Helium gas regulators
- Tools needed for user tasks
- O-rings, Hoses for chiller unit
- Apiezon M Grease, Apiezon N Grease, Apiezon H Grease
- Complete set of manuals / documentation exhibiting compliance must be provided.
- A service manual with complete circuit diagram and PCB layout for all equipment to be provided with the instruments

H. Other Components

A suitable split water chiller unit for the system having Indoor unit (water tank, pump and control electronics etc.,) and Outdoor unit (compressor, condensing unit and heat exchanger) should be included in the quotation.

I. Warranty

3-years on-site warranty from the date of successful installation. The vendors may also optionally quote for the extended warranty up to 5 years.

J. Future Upgradation:

The base system must be upgradable to add various measurement options including Electrical Transport, Thermal Transport, AC susceptibility, Thermal expansion measurements like Dilatometer, etc. from 2K to 400K and/or at temperature down to 50 mK using Dilution Refrigerator.

Additional terms and conditions:

- The supporting data and log data files as asked in the technical specifications must be sent to the given email id within the due date of this bid application.
- Comprehensive compliance statement in line with each and every technical specification in the bid document must be provided. All the claims made by the vendors in their bid compliance documents must be duly supported by the original equipment manufacturer's literature or existing verifiable documents. Any other claim will not be accepted and may lead to rejection of the bid.

- Minimum three previous installations of the similar equipment in India in the last five years should be provided for similar quoted measurement options [Vibrating Sample Magnetometer and Heat Capacity options] in support of the functionality of the equipment.
- Vendor must complete the installation and provide hands-on training for at least two users. The hands-on training will be given at UGC-DAE Consortium for Scientific Research, Kolkata Centre.
- Demonstration may be asked for all the quoted specifications in similar Cryogen-free system installed in India within two weeks of such request from the buyer.
- Vendor must provide the details of the standard samples for testing the equipment with different measurement options at the time of installation at site for the demonstration of the performance of equipment.
- An extensive user list with the similar vibrating sample magnetometer and heat capacity measurement options attached to a cryogen-free low temperature superconducting magnet-based systems to be provided with the bid document in support of the functionality of the equipment.
- The service facility in India from the principal company is desired. At least two factory-trained service engineers/technicians from the principal company must be available in India.
- All the essential and recommended spares parts of the equipment should be informed and quoted separately. The spare parts of the system must be available for at least next 10 years.
- Attach at least 10 publications in reputed international peer-reviewed journals where the quoted system with the quoted measurement options such as vibrating sample magnetometer (5 publications) and heat capacity (5 publications) options are primarily used for data collection to support the functionality of the equipment.
- Minimum three-years on-site warranty from the date of successful installation of the system must be provided. The warranty will be valid from the date of satisfactory installation and the equipment in good working condition/demonstration at the project site. No conditional warranty will be accepted.
- Lifetime license fee with free upgrades of software beyond the warranty period must be provided by the company and should be clearly mentioned in the technical bid.
- Proper installation and onsite training should be provided free of cost by the supplier. Onsite after sales service, within 48 hours of reporting any problem, is mandatory. It is preferable to have technical person stationed at Kolkata. A list of other places where the instrument has been installed should also be provided.
- 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.

BUYER SPECIFIC TERMS AND CONDITIONS

1. ***Bidder Qualification Criteria:*** **(a)** The invitation for bids is open to Original Manufacturer (OEM)/ Authorized Dealers / Authorized Distributors / Subsidiary Indian Company of the OEM / Authorized Indian Representative on behalf of the Foreign Manufacturer or Principals of the tendered equipment. **(b)** OEM / authorized representative should confirm his capability and acceptance to provide support for spares, maintenance, and after sales service of the complete system at least for a period of ten years after the warranty period. **(c)** The bidder must be a single manufacturer of the entire instrument & shall be responsible for the entire instrument and all the accessories supplied with the system. **(d)** OEM / authorized representative must have installed and commissioned at least one system of the similar model in last two years in India. **(e)** The bidder having legal entity in India having a Permanent Account Number (PAN), Certificate of Incorporation and valid GST Registration Certificate is to be submitted. **(f)** 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. **(g)** Indian Agent cannot represent two different foreign principles for the same item. **(h)**Manufacturers / Exclusive distributors / Bidders should have history of supplying this type of instruments to Scientific Organizations. Availability of a list in this regard shall be submitted **(i)** Authorized dealership certificate should be provided in case of principal manufacturing company is not quoting directly.

2. ***Item/Instrument Specifications*:** Specifications are basic essence of the product. It must be ensured that the offer must be strictly as per the requisite specifications. At the same time it must be ensured that merely copying the tender stipulated specifications in the quotation shall not make the bidder eligible for consideration of the quotation. A quotation must be supported with the printed technical leaflet/Product Literature of the specific quoted model of the item by the bidder and the specifications mentioned in the quotation must be reflected/supported by the printed technical leaflet/literature. Therefore, the model quoted invariably be highlighted in the leaflet/literature enclosed with the quotation. Non- compliance of the above shall be treated

As incomplete/ambiguous and the offer can be ignored without giving an opportunity for clarification/negotiation etc. to the bidder. The quoted specifications should be validated by means of authenticated documentary evidence in the tender document being submitted.

3. ***Make, Model Number and Product Literature:*** All relevant technical literature pertaining to items quoted with full and complete specifications (Drawing, if any), information about the products quoted, including brochures if any should accompany the quotation. All documents should be enclosed along with the Techno Commercial Bid. The model number, make and a printed literature of the product should be submitted in the techno-commercial Bid.

4. ***Validation of Offered Documents:*** Supporting documents wherever required and original catalogue should be provided to validate specifications. All the quoted technical parameters must be corroborated by product catalogue product data sheet /letter from the PRINCIPAL then only it will be considered as validated. All features must be supported with literature available on the web along with original manuals. All documentation shall be in English language. In addition to the hard copies, soft copies of the System Operational Manual and Maintenance Manual should be provided.

5. ***Compliance Statement:*** Equipment's point-by-point comparison & compliance statement in respect of Techno-Commercial specifications should be enclosed along with quotation as well as any other additional features of the equipment must be shown separately and the same should be enclosed along with the Techno-Commercial Bid. The supporting data and log data files as asked in the Techno-Commercial specifications must be sent by email at souravs@csr.res.in within the due date for bid submission. Comprehensive Compliance statement in line with each and every technical specification in the bid document must be provided. All the claims made by the bidders in Compliance documents must be duly supported by the original equipment manufacturer's Product Literature or Existing Verifiable documents. Any other claim will not be accepted and may lead to rejection of the bid. Minimum 3(Three) previous installations of the similar equipment in India in the last 5(Five) years should be provided for similar quoted measurement options [Vibrating Sample Magnetometer and Heat Capacity options] in support of the functionality of the equipment. The tender should accompany a compliance Chart.

6. ***Pre-Inspection Report/Manufacturers Test Certificate:*** The successful bidder should submit the Pre-Inspection Report / Manufacturer's Test Certificate with data sheet to UGC-DAE CSR Kolkata Centre before dispatch of the material at no extra cost to the purchaser. (If required by UGC-DAE CSR Kolkata Centre).

7. ***Availability of Spares Parts and Components:*** The most recent series/models incorporating the latest improvements in design of the equipment must be quoted. The vendor should issue an undertaking for the availability of spare parts for at least 10 (TEN) YEARS from the date of successful installation. All the essential and recommended spares parts of the equipment should be mentioned and quoted separately. Lifetime License Fee with free upgrades of Software beyond the Warranty period must be provided by the bidder and should be clearly mentioned in the Techno-Commercial bid.

8. ***Validation of Offer:*** The quoted specifications in Techno-Commercial bid should be validated by means of Authenticated Documentary evidence in the tender document being submitted.

9. ***Place of Delivery & Installation:*** The facility shall be installed at UGC-DAE Consortium for Scientific Research, Kolkata Centre, Plot No.IIIB/4, Action Area III, New Town, Rajarhat, Kolkata- 700156, 24 Parganas (North), West Bengal, India.

10. ***Delivery Period:*** Delivery Period after placement of Formal Purchase Order and Opening of Letter of Credit (if applicable) should be clearly mentioned in the offer and must be submitted in Techno-Commercial Bid. Proposed delivery schedule should be mentioned clearly.

11. ***Installation/Demonstration/Application training at site:*** Successful Bidder shall provide adequate training to the nominated persons of buyer at supplier's risk and cost. UGC-DAE CSR Kolkata Centre shall nowhere be associated with the risk and cost pertaining to training. The bidder, at the bidder's own responsibility and risk, may visit at their own cost and examine the site of installation and its surroundings and obtain all necessary information for supply and installation. Vendor must complete the installation and provide hands-on training for at least 2(Two) users. The hands-on training will be given at UGC-DAE Consortium for Scientific Research,

Kolkata Centre. Demonstration may be asked for all the quoted specifications in similar Cryogen-free system installed in India within 2(Two) weeks of such request from the buyer. Successful bidder must provide the details of the standard samples for testing the equipment with different measurement options at the time of installation at site for the demonstration of the performance of equipment. Proper installation and onsite training should be provided free of cost by the supplier. Onsite after sales service, within 48 hours of reporting any problem, is mandatory. It is preferable to have technical person stationed at Kolkata. A list of other places where the instrument has been installed should also be provided. Guarantee Certificate, Users' Manuals etc. are to be handed over to the user after successful Commissioning of the instrument. The successful bidder should submit the Pre-Inspection Report / Manufacturer's Test Certificate with data sheet to UGC-DAE CSR Kolkata Centre before dispatch of the material at no extra cost to the purchaser (if required by UGC-DAE CSR Kolkata Centre).

12. ***Terms of Payment:*** Payment will be made through irrevocable Letter of Credit in two instalments. 90% of the money will be released on submission of shipping of documents. Remaining 10% will be released after successful installation of the instrument.

13. ***Warranty:*** System should be covered for 3-years on-site Comprehensive warranty from the date of successful installation. The vendors may also optionally quote for the extended warranty up to 5 years. The Comprehensive Warranty should Cover all parts including accessories, spares, all Hardware, Software and labour on site. Warranty must cover all parts including Compressors, Spares and Free maintenance and service on site or at factory with no cost. This fact should be clearly and explicitly stated in the offer. Lifetime license fee with free upgrades of software beyond the warranty period must be provided by the company and should be clearly mentioned in the technical bid. Warranty shall commence from the date of Successful installation and acceptance of the complete equipment supplied under the Purchase Order / Contract. The Post-warranty support should be indicated and explicitly mentioned in the Offer. If the whole material / equipment is found defective during the Warranty period the same shall be replaced / repaired free of cost to UGC-DAE CSR Kolkata Centre. All the Cost involved shall be borne by the supplier. Repair / Replacement, if required pertaining to Warranty Clause, all costs including necessary Customs Clearance Charges / Customs duty charges, Freight charges, Packaging charges and any other charges for sending back of repair item to supplier and import freight charges of replacement should be borne by the supplier. The entire replacement/repair shall be made on no cost basis to UGC-DAE CSR Kolkata Centre. The warranty shall only be valid from the date of satisfactory installation of the equipment in good working condition/demonstration at the designated site. No conditional warranty shall be accepted.

14. ***Service Facility:*** The service support should be available at the City of Kolkata, West Bengal, India Supplier should mention their details of service setup and manpower responsible for after sales support. Response time should be within 24 hrs and the service facility preferably Kolkata, India from the principal (OEM) is desired. At least 2(Two) factory-trained service engineers/technicians from the OEM must be available in India.

15. ***Client List:*** The list of users specifically for the same model/make of the quoted item (not the list of general users) along with the complete name, address & contact numbers of the User Organizations/Persons may be submitted with the quotation along with the Performance Certificates from all/some of them. If you have supplied identical or similar equipment to other IISERs/IITs/CSIR Labs/Institutes., the details of such supplies for the preceding 3(three) years shall be given together with the prices finally paid. An extensive user list with the similar vibrating sample magnetometer and heat capacity measurement options attached to a cryogen-free low temperature superconducting magnet-based systems to be provided with the Techno-Commercial bid document in support of the functionality of the equipment. Attach at least 10 publications in reputed international peer-reviewed journals where the quoted system with the quoted measurement options such as vibrating sample magnetometer (5 publications) and heat capacity (5 publications) options are primarily used for data collection to support the functionality of the equipment

16. ***Rate*****:** The rate quoted **s**hould be submitted in the Financial Bid only. Justification or Price break up of quoted Rate quoted must be enclosed in the Financial Bid.
17. ***Validity of Offer:*** Bid submitted should remain valid for 6(Six) Months from the date of opening tender. Validity beyond 6(Six) months from the date of Opening of tender may be extended by mutual Consent.

18. ***Performance Security:*** A Performance Bond in the Form of Bank Guarantee(As per Specimen Annexure-A)

for an amount equal to 3 % (Three Percent) of total Contract Value valid till expiration of the warranty Period and additional 2 (two)months as Claim Period as a Security for Satisfactory performance of the supplied plant/machinery/equipment/instrument under this Contract to be provided by the successful bidder.

19. ***Bid Security/Earnest Money Deposit(EMD):*** An amount of Rs.1120000/- (Rupees Eleven Lakhs Twenty Thousand only) shall be submitted along with Techno-Commercial Bid for Bid Security/EMD in the form of Account Payee Demand Draft/Banker's cheque/Bank Guarantee Favouriung " UGC-DAE Consortium For Scientific Research" Payable at Kolkata,India. The bid security is to remain valid for a period of 45(Forty-Five days) beyond the final bid validity period.

20. ***Price Variation:*** Quoted rate should be firm and Fixed in nature. Variations due to any reasons including Exchange Rate variations shall not accepted and considered under any circumstances.

21. ***Amendments/Corrigendum/Addendum:*** At any time prior to the bid due date, UGC-DAE CSR, Kolkata Centre may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the CPP portal and/or Centre's website. Prospective bidders are advised to visit the Centre's website (https://www.csr.res.in) or www.eprocure.gov.in.

22. ***Manufacturer's Authorization:*** Manufacturers / exclusive distributors / vendors should have history of supplying this type of instruments to this or other scientific organizations. Availability of a list in this regard would be preferred. Authorized dealership certificate should be provided in case of principal manufacturing company is not quoting directly.

23. ***Certificate of Guarantee:*** Guarantee Certificate, users' manuals etc. are to be handed over to the user after successful commissioning of the system.

24. ***Pre-Dispatch Inspection:*** The successful bidder should submit the Pre-Inspection Report / Manufacturer's Test Certificate with data sheet to UGC-DAE CSR Kolkata Centre before dispatch of the material at no extra cost to the purchaser (if required by UGC-DAE CSR Kolkata Centre).

25. ***Submission of Bid:*** Part-I (Techno-Commercial Bid) of the tender should contain technical specifications in detail as well as commercial terms and conditions. Part-II (Financial Bid) should clearly indicate group-wise price, if needed, as mentioned in the Commercial Bid. The Techno-Commercial Bid and Financial Bid are to be submitted in separate sealed envelopes, distinctly marked and superscribed with Part-I (Techno-Commercial Bid) and Financial Bid. Both the envelopes to be put inside another envelope, that should be sealed and super scribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads and seal.Completed Tender in a sealed envelope (inclusive of Techno Commercial Bid and Financial Bid) should be submitted and addressed to **Administrative Officer–I (Purchase & Stores), UGC-DAE CSR, Kolkata Centre, LB-8, LB Block, Sector III, Bidhannagar, Kolkata, West Bengal-700106, India.**Documents submitted by emails, messages or any other means apart from the above shall not be accepted and considered. Any clarifications regarding tender shall only be communicated through email-souravs@csr.res.in and no other means of communications shall be accepted and considered. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof. Quotations received incomplete or beyond the stipulated time will be summarily rejected.

26. ***Canvassing:*** Any attempt to negotiate directly or indirectly on the part of the Bidder with the authority Competent to finally accept the Tender or influence the acceptance of the tender by any means will result his tender excluded from consideration. Conditional tender, illegible and ambiguous tender, partially filled tender, incomplete tender and tender without enclosing required documents will be summarily rejected.

27. ***Debarment and Disqualification:*** Bidder(s) declared as debarred and/or blacklisted by the any Government Organizations, Autonomous Institutions, Govt. of India funded Research Institutes (such as IIT/NIT/IISER/ IISc/TIFR/IACS/NISER/JNCASR/Central & State Government Universities) and/or worldwide research centers are not eligible to participate in the tendering process. If the same has been found at a later stage, Bid submitted by the bidder(s) shall be treated as cancelled and action may be taken by authority as deemed fit.

28. ***Frustration of Contract:*** After placement of the contract, there may be an unforeseen situation compelling the Procuring Entity to terminate the contract, in whole or in part, for its (the Procuring Entity's) convenience by serving a written 'Notice for Determination of Contract' on the contractor at any time during the currency of the contract. The notice shall indicate inter-alia that the Termination ois for the convenience of the Procuring Entity or the Frustration of the Contract.

29. ***Liquidated Damages (LD):*** In case your quotation is accepted, and order is placed on you, the supply against the order should be made within the period stipulated in the order. The Government of India reserves the right to recover any loss sustained due to delayed delivery by way of penalty. Failure to supply the material within the stipulated period shall entitle Procuring Entity for the imposition Liquidated Damages without assigning any reasons @ 1/2% (half per cent) of the value of the delayed item, per week (or part thereof) of the delay, subject to a maximum of 5% (Five per cent) of the total contract value, unless extension is obtained in writing from the office on valid ground before expiry of delivery period.

30. ***Risk Purchase (RP):*** If the deliveries are not maintained and due to that account Procuring Entity is forced to buy the material at your risk and cost from elsewhere, the loss or damage that may be sustained there by will be recovered from the defaulting supplier.

31. ***"Res Prit Domine":-***Risk and Cost associated with delivery, installation & commissioning of the ordered item(s) shall be the sole responsibility and liability of the supplier. UGC-DAE CSR Kolkata Centre shall nowhere be responsible for the same.

32. ***Indian Agent of Foreign Suppliers:*** The Bidder(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details, as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers," shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines, all the payments made to the Indian agent/representative must be in Indian Rupees only.

33. ***Disputes and Jurisdiction:*** Any dispute relating to the enquiry shall be subject to the jurisdiction of the court at City of Kolkata, India only.

(I) Even after qualifying in the technical bid, the financial bid may be rejected if not found in order. Merely qualifying in the technical bid does not ensure acceptance of financial bid. UGC-DAE CSR, shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest tender or any other tender. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof.

(II) UGC-DAE CSR reserves the right to accept or reject any or all the tenders in part or whole or may cancel the tender at any stage of the tendering process at its sole discretion without assigning any reason whatsoever and decision of UGC-DAE CSR in this regard shall be final and binding on all the tenderers. No further correspondence in this regard shall be entertained.

(III) In case of any dispute, the decision of UGC-DAE Consortium for Scientific Research, Kolkata Centre authority shall be final.

(IV) The competent authority of UGC-DAE Consortium for Scientific Research, Kolkata Centre reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Administrative Officer – I

UGC-DAE CSR, Kolkata Centre

APPENDIX- A

To,

Centre Director,
UGC-DAE Consortium for Scientific Research,
Kolkata Centre
LB-8, Bidhannagar, Sector- III, Kolkata-700106,

WHEREAS M/s. having its registered office at (hereinafter called the contractor), entered into an agreement (No. dated)with the Centre Director, UGC-DAE Consortium for Scientific Research, c/o-Administrative Officer, Kolkata Centre, LB-8,Bidhannagar, Sector-III, Kolkata-106, India (hereinafter called "The Purchaser") for manufacture and supply of as per Purchase Order No. (hereinafter called / the Contract) to the purchaser.
AND WHEREAS under the terms and conditions of the contract final payment amounting to
Under this contract is to be made against supply of the aforesaid system and a Performance Bond in the form of Bank Guarantee furnished by the contractor/supplier.-

i) For payment of equivalent to 5% (Five percent) of the contract towards satisfactory performance of the etc. Under the aforesaid contract (hereinafter called the Equipment) in case the said equipment does not give satisfactory performance for the period of 12 months from the date of installation and commissioning of the item.

ii) In case the equipment starts malfunctioning during the period of 12 months from the date of installation and commissioning of the item the contractor will have to take liability for correcting the defect immediately or supply another equipment or repayment of the entire cost of the equipment along with interest @18%.NOW WE the (Bank) in consideration of the promises and payment of the final amount of INR under the contract to the contractor hereby agree and undertake to pay on demand and without any demur to the Centre Director UGC DAE Consortium for Scientific Research , Kolkata(W.B) India on behalf of the contractor.

iii) For compensatory any other loss or damage that may be suffered by the reasons of any unsatisfactory performance of the said equipment. AND WE hereby also agree that the decision of the said Director of the UGC-DAE Consortium for Scientific Research Kolkata India as to whether the said equipment is giving satisfactory performance or not and as to the amount of loss or damage suffered by the Purchaser on account of unsatisfactory performance of the said equipment shall be final and binding on us. AND WE (Bank) hereby further agree that our liability hereunder shall not be discharged by virtue of any agreement between the Purchaser and the Contractor whether with or without knowledge and/or consent or by reason on the Purchaser showing any indulgence or forbearance to the contractor whether as to payment time performance or any other matter what so ever relating to the contract which but for this provision would amount to discharge of the surety under the Law. OUR guarantee shall in force until and unless a claim under the guarantee is lodged with us within reasonable time after 12 months from the date of installation and commissioning of the said item all right of the Purchaser under the guarantee shall be forfeited and we shall relieved and discharged for all our liabilities hereunder. OUR liability under this guarantee shall not be affected by any change in our consortium or the constitution of the contractor.

(Stamp & Signature)