यूजीसी-डीएई कॉन्सॉर्टियम फॉर साइंटिफिक रिसर्च

UGC-DAE CONSORTIUM FOR SCIENTIFIC RESEARCH

(विश्वविद्यालय अनुदान आयोग के अंतर्गत स्वायत्त संस्थान,शिक्षा मंत्रालय,भारत सरकार)

(An Autonomous Institution under University Grants Commission, Ministry of Education, Government of India)

कोलकाता केंद्र/**Kolkata Centre**

एलबी-८, बिधाननगर, सेक्टर-**III,** कोलकाता-७०० १०६/**LB-8, Bidhannagar, Sector-III, Kolkata-700106**

NOTICE INVITING TENDER

NIT No. : UGCDAECSR/KC/PURCHASE/NIT/GTE/2025-26/02 **Date: 19/12/2025**

Sealed tender in two bids system (Technical bid and Financial bid) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/Bidders for the Supply, Installation, Testing Commisioning (SITC) of 400 MHZ Nuclear Magnetic Resonance Spectrometer with accessories at UGC-DAE Consortium for Scientific Research, Kolkata Centre.

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 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** on or before the scheduled date and time specified below:

Events	Particulars
Last date and time of submitting tender	19.01.2026, within 14:00 Hrs.
Pre-bid meeting Intimation	Bidders interested to attend Pre-Bid Meeting are requested to affirm willingness at souravs@csr.res.in/sourav14sarkar@ by 29.12.2025
Date and time of opening of Bids	19.01.2026, 16:00 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 Adminisrtative Officer-I Email: souravs@csr.res.in 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.

Technical Bid Evaluation: If required, the Technical Bids will be evaluated in the presence of the representatives of intending bidders, who will be able to clarify technical aspects of their bids, if any, to the Technical Evaluation Team.

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.

Bidders should submit their past experience for supplying and successful installation of similar units to other research Institutes/Universities/other organizations globally. Please provide documentary proofs of such successful installation and supportive documents that the instruments are running successfully.

TECHNICAL SPECIFICATION FOR 400 MHZ NUCLEAR MAGNETIC RESONANCE SPECTROMETER WITH ACCESSORIES

Supply, Installation, and commissioning of 400 MHz FT-NMR Spectrometer. (Vendor should quote their latest model)
Magnet:
• The latest technology shielded magnet 9.4 Tesla with 54 mm bore superconducting magnet for 400MHz for 1H.
• Magnet dimension: Minimum Ceiling height required: 2.84m.
• Shortest possible 5G [radial from the centre of the magnet (< 0.5 m) and axial from the centre of the magnet (< 1.0 m)] fringe field with advanced shielding technology.
• Helium hold time should be 365 days with a refill volume of 120 lts or less and Nitrogen hold time should be 14 days with a refill volume of 90lts or less with auto-level monitoring and recording. Meters to show the liquid helium and nitrogen levels with alarm functions for low levels.
• Drift rate of the magnetic field should be ≤4 Hz/hour or better.
• Cryogen cooled shim system in addition to room-temperature shims for optimal line shape. Automated gradient shimming capability with associated accessories (software/hardware). (please mention the number of cryogen-cooled and room-temperature shim coils).
• Deuterium lock channel should be compatible with gradients and automated shimming hardware (Software/Hardware).
• Pneumatic sample load/spin/eject system. The spinner housing supplies air from an air source and performs the following two tasks when a probe for liquid-state NMR is used. a) Supports the Load/Eject operations for the sample. b) Supplies air for sample spinning to the probe and detects the sample spinning rate.
• Anti-vibration feet pad for dampening the floor vibrations. This unit is a vibration-proof table for the superconducting magnet (SCM). Vertical direction: Effective for 7.6 Hz or more vibration. Horizontal direction: Effective for 3.8 Hz or more vibration.
• All supportive equipment's for cryostat should be provided.
Spectrometer
• Radiofrequency (RF) Generator: High-power linear broadband amplifiers for X channel and for 1H (and 19F channel). Three independent channels to handle nuclei such as 1H, 13C, 15N, 19F, 31P, etc., capable of performing multidimensional NMR experiments. RF amplifier should be controlled by software. Frequency range from 10MHz to 430MHz. Frequency resolution: 0.005Hz, Phase resolution: ≤0.006 Degree and Linear transmitters. Frequency, phase and amplitude shaping capability with individual/simultaneous switching of the parameters in 12.5 ns. Please specify all relevant parameters including power (Wattage), frequency range, duty cycle, maximum pulse duration etc.
• Preamplifiers: 1H preamplifier; Multinuclear preamplifier; 2H preamplifier for lock and 2H experiments. Built in tune/match display. Add on filters for noise reduction. Preamplifier with proper filters for detecting a broad • range of nuclei 31P to 109Ag.
• RF Amplifier: High-performance power transmitters with a high band 1H and 19F amplifier (500 watts) and a low (or Broad) band (X) amplifier (1000 watts).
• Equipped with three independent broadband RF channels with highest frequency and phase resolution; fast switching time for all parameters without any hidden delays (please specify the frequency range of operation with best frequency and phase resolution) in addition to lock channel with provisions for deuterium observation. Please specify the configuration and bandwidth of all the channels. It should include wave form generators for all channels for pulse shaping, amplitude, phase and composite pulse decoupling generator, preamplifiers digital receiver control with oversampling, and Quadrature

detection with digitizer's facility for complete elimination of quadrature spikes. Quadrature-artifact-free phase sensitive detection. (Please specify bits and total memory of the shape card).
• High bandwidth Receiver System with digital quadrature detection (DQD): Receiver control unit for signal acquisition with real-time digital filtering along with oversampling technology – Simultaneous acquisition on multiple channels. Multi Receiver technology and capabilities for simultaneous detection is essential.
• Lock system with high precision phase and field corrections. Provisions for setting frequencies and fields to lock and Digital-Auto Lock provide higher stability. The system should achieve the locking of the sample with different combinations of solvents in a short duration without manual interference.
• Auto shimming feature for solution-state and MAGIC Shimming for Solid state required.
• A spectrometer must be able to do Pulsed Field Gradient experiments with higher gradient strength, and faster shimming should be the capability of the machine. Gradient unit for Auto shimming ($^{1}H/^{2}H$) to achieve good line shape of sample and to perform all-new gradient pulse program-based experiment with the capability to run DOSY and other gradient experiments having capacity of 50 G/cm or better. Pulse field gradients (PFG) of any desired shape. Gradient shimming capabilities, for diffusion based experiment. Software for analysis of diffusion, relaxation, kinetics, and protein dynamics should be included in the offer.
• Nitrogen cooling system range: Variable temperature experiments to be done in the range +150°C to -100 °C with $\pm$ 0.1°C variations or a more comprehensive range should be provided. Accessories and consumables if any required for the variable temperature control should be quoted appropriately. Accessories for running experiments below ambient temperature (VT Gas Refrigerator with spectrometer-interfaced variable temperature unit). The low-temperature unit is complete in all respects. All functions are controlled by the host computer. Variable Temp Unit (Low and high temperature accessories): Computer controlled temperature and air with safety alert facility.
• There should be VT gas refrigeration system for working in the region of -30ºC or less to +60ºC without using liquid nitrogen.
• 16 Bit 100MHz Analog to Digital Converter or better for high dynamic range and over sampling to be quoted. Please specify the resolution of the ADC (in bits) and the maximum sample rate.
• The maximum spectral width: ~10 MHz or more
• Real time calculation of parameters of pulse sequences.
• Broad-banded frequency generation for all the channels.
• Fast Ethernet based communication system between all the channels.
• Built-in tune/match display.
• Add-on filters for noise reduction with minimum 85dB attenuation in stop band (particularly for 2H rejection in 1H/19F and BB filters)
• One-column cabinet for the console.

Probes

- **Probes for liquid state NMR:** Triple Resonance Broad Band Probe (HFX) for liquid state NMR: One latest high resolution, 5mm multinuclear Broad Band observe Z-gradient Probe optimized for observation of the nuclei 1H, 19F, any nucleus in the range from 31P to 109Ag and decoupling of 1H. Outer coil tuned for 1H decoupling or observation. Separate 19F channel. Full automation for any experiments with X, F and H nuclei. The two high frequency channel that should allow simultaneous tuning to 1H and 19F frequencies. The probe should be able to cover nuclei range 1H, 2H, 11B, 13C, 15N, 19F, 29Si, 31P, 39K, 75As, 77Se, 109Ag, 111Cd, 119Sn, 199Hg etc. with computer-controlled fast automatic tuning and matching (ATM). The probe should be compatible for both double (H/X) and triple resonance mode of operation (H/X/Y). Sensitivity: 1H: 550 or more, 19F: 550 or more, 13C: 220 and more, 13C sensitivity (1H dec): 250 or more 31P: 100 or more, and 15N: 25 or more. Please provide the technical printed specifications for the probe-heads e. g. Sensitivity, resolution, and line-shape etc. Variable temperature ranges from –100 °C to +150 °C. Integrated VT Adapter. It should be equipped with single axis Z Gradient coil for execution of gradient spectroscopy; gradient shimming generation of pulsed field gradient (PFG) of desired shape. High quality PFG based multiple solvent suppression, coherence selection, DOSY experiment etc. Gradient recovery times (not more than 100 µs). Ability to perform 2D 1H/19F experiments. Please specify line width, pulse width, sensitivity, RF duty cycle, frequency range, temperature range etc. for each probe and each nucleus. Standard test samples for probe should be provided. Standard sample temperature range -100°C (or lower) to 150°C (or higher). Necessary accessories for variable temperature set-up should be provided.
- **Probes for Solid state NMR:** A broad brand double resonance probe for double usage HR-MAS and CP-MAS. The probe should be optimized for 1H observation with X-nuclei decoupling, the probe supports HR-MAS and solid state NMR experiments. 1H &19F high power decoupling for up to 50 ms. Probe equipped with Automatic Tuning and Matching Accessor (ATMA) including automated magic angle (MA) adjustment. The probe should be able to carry out both CPMAS as well as HR-NMR experiments at least cover the following nuclei 1H, 6Li, 7Li, 11B, 13C, 15N, 17O, 19F, 23Na, 27Al, 29Si, 31P, 39K, 67Zn, 75As, 77Se, 79Br, 109Ag, 111Cd, 119Sn, 199Hg, 207Pb etc. Top loading facility for solid state Probe must be available in automation mode using auto sampler/manual mode. There can be a single advanced probe for CPMAS and HRMAS NMR experiments or two separate probes may be quoted. The probe should be built with high power circuitry, Magic Angle Spinning (MAS), should be fitted with a lock channel, pulse field gradients, and is fully susceptibility matched probe. This probe must cover all HR-MAS aspects without compromising power handling to permit the full range of solution-, gel- and solid-state experiments available today. The probe should be compatible for double (H/X) resonance mode of operation. The required circuit inserts for changing the probe mode should be provided. Best Signal to noise (S/N) ratio values for each nucleus of the probe measured using standard samples (Please provide data and mention the sample used). The probe should be able to perform Variable temperature NMR ranging from –100 °C (or lower) to +150 °C (or higher). Necessary accessories for variable temperature set-up should be provided.
- Solid-state NMR systems for *in situ* research on energy storage materials such as batteries and supercapacitors. Double-resonance probe is equipped with current collector ports to enable charging and discharging of electrochemical cells while being inside the NMR magnet. The probes should be equipped with integrated flow channels for gas or liquid to enable experiments on redox-flow, metal-air batteries, and similar systems. Accessories, such as an electrochemical system with operating system for battery research, electrochemical cycler, necessary adaptor, connection with the electrochemical system, accessories for gas flow, automatic tuning & matching equipment, suitable software and other required and recommended accessories for running the experiment and analysis etc. should be supplied.
- Previously mentioned “Probes for Solid state NMR” should have following features: The solid-state probe should be equipped with a spinner module sample tube (minimum spinning frequency of 35 kHz) that includes a dual resonant circuit tuned to High Frequency (HF) and Low Frequency (LF). This probe can rapidly rotate the sample tube at the magic angle with respect to a static magnetic field (MAS: Magic Angle Spinning). This probe includes additional attachments as well Rotors with minimum spinning frequency 35 kHz plus caps along with accessories such as cap removal, Rotor packer, sample filling assembly, MAS rotor transfer system, MAS heat exchanger for low temperatures etc. At least 20 pieces of compatible rotor sets (rotors and end caps) suitable for HRMAS

and CPMAS together with 3 sets of packing and opening tool kits should be quoted. 3 pieces of high temperature rotor should be supplied. • · MAS controller • · Appropriate solid sampling kit. • · Appropriate zirconia rotors
Autosampler:
• **Autosampler:** A fully functional autosampler with a capacity to handle at least 24 samples should be included along with the 5 rotor carrier (Spinners) for solid state, which should be able to automatically change the sample tube containing the sample for measurement according to the commands from the host computer. The spinners for solution state NMR tubes and solid state Rotors to be used in common Auto sampler.
Hardware and Software Requirements
• State-of-the-art software interface for NMR acquisition and processing. Most comprehensive latest NMR software to run up-to-date hetero-nuclear multi-dimensional NMR experiments including latest experiments for the reconstruction of multi-dimensional NMR study, for control, data acquisition and processing, and automatic recording of multiple experiments. The package should include all the latest pulse sequences for multi-dimensional NMR experiments available with the vendor. Please provide the list of pulse sequences available for ready use. The licensed software modules should include tools for Structure Analysis, Integration and Deconvolution of 1D, 2D (HSQC, TOCSY, COSY, HETCOR, NOESY, HMBC, DOSY etc.) and 3D spectra, NMR simulation, Multiplet analysis, Relaxation and Diffusion data analysis, Kinetics Processing etc. Automatic setup with acquisition, analysis and quantification of the NMR samples. High-end graphic tools for plotting one- and multiple-dimension spectra, for drawing structure and for making presentations on NMR experiment. Structure elucidation software. Auto pulse calibrate software. Complete set of all manuals (service and operational) should be provided. • Any software upgrade (pulse sequence and processing) or new software (pulse sequence and processing) that are released should be given to the user free of cost throughout lifetime of the instrument.
• 2 - Windows-based operating system for NMR Data acquisition and processing of multidimensional experiments. A high-end workstation: with the latest configuration - 64 GB RAM DDR4, minimum hard disk capacity 5 TB, 1TB SSD, 22” or bigger LCD Monitor, latest available processor, and other necessary accessories.
• **1 Additional Workstation for Data Processing:** A high-performance workstation (Windows operating system) for data processing with 64 GB RAM and 2 TB hard disk capacity with a 22" LED monitor should be provided.
• **<u>Suppliers should offer NMR operating and 5 offline processing software licenses or more. Both the software should be automatically updated with the updated window version free of cost for perpetuity/ lifetime of the NMR instrument. In case of computer crash the NMR operating and offline processing software should be provided throughout the lifetime of the NMR machine free of cost.</u>**
• One compatible high-end multi-functional (duplex colour printing laser jet printer)
Accessories and Misc. Items
• The Low Frequency Unit to extend the LF tuning range of the MAS NMR probes to low gamma nuclei.
• 500 high quality 5 mm NMR tubes with caps • 20 high quality 5 mm quartz NMR Tubes with caps • 10 high quality 5mm NMR tubes with screw caps for kinetic experiments. • 10 Low pressure/vacuum NMR tubes

• 5 suitable Salt-tolerant NMR tubes and 2 suitable spinners (shuttle) should be provided. • 5 suitable Coaxial NMR tube should be provided.
• A flow tube with pump and dedicated software, enable online monitoring of chemical reactions in real-time under real process conditions. Temperature controlled transfer lines with a range of -20 to 120 °C. Can withstand pressures over 10 bar and interchangeable glass tube and compatible with 5-mm probes. Integrated acquisition control and integrated data processing.
• An ISO-9001 certified imported 5 HP oil-free scroll air-compressor complete with dryer with suitable connectors fittings, filters and capable of catering all the needs. It should have a big buffer tank of at least 90 L capacity. This compressor should be able to operate uninterrupted on 24X7 basis. The air compressors should have auto drain feature. Two membrane moisture-free air dryers to control any humidity in the air and so to avoid any spike formation in the FID due to electric discharge caused by the sample spinning. Suitable air-filters for dust and moisture free pneumatic operations.
• Provide 60 suitable 5 mm spinners for liquid state NMR measurements ranging from –100 °C to +150 °C. If variable temperature experiments require different types of spinners, an additional 5 low-temperature and 5 high-temperature spinners should also be supplied.
• 4 units of 50 litre or more liquid nitrogen container and have trolley along with each container. 1 Helium and 2 nitrogen transfer lines, O rings, coupling attachments, spares etc. should be provided for smooth transfer of liquid (Provide complete list).
• 4 set of cryogenic gloves for filling.
• Ladder for changing samples
• One set of standard calibration samples for the probes should be provided for full operational quantification and instrument performance verification (viz. line-shape, sensitivity, resolution, pulse calibration, water suppression etc.) NMR spectrometer performance monitoring using 5 mm probe auto-calibration set.
• The following Sure seal Deuterated Solvents must be supplied along with the equipment. $CDCl_3$ (300 mL), D_2O (300 mL), CD_3CN (200 mL), CD_3OD (200 mL), DMSO-D_6 (200 mL) D_5-Pyridine (20 mL), D_6-Benzene (50 mL), and D_4-Acetic Acid (50 mL) should be supplied.
• The price for the supply of required volume of liquid Helium and refilling of the FT-NMR Instrument for 3 years from the date of installation should be included.
• **UPS System -** A branded ISO-9001 certified online UPS (at least 10 KVA or rating compatible with the NMR system) with isolation transformer, 15 KVA voltage stabilizer and appropriate battery bank that is capable of minimum backup of 1 hour.
• **Power Supply** - Should meet Indian Power standards preferably without use of external converters. The minimum power required for the operation of the spectrometer with all the accessories must be specified in the quote.
• **Warranty:** System should be covered for comprehensive warranty for (1+4) years from the manufacturer and should cover overall hardware/software. All parts including UPS, batteries, compressors and spares should be covered under the warranty and this fact should be clearly and explicitly specified in the tender document. The comprehensive Warranty should cover: All parts including accessories, spares and labour on site. Free maintenance and service on site or at factory with no cost.
• **Training:** The supplier shall submit training proposal for at least 2 personnel for the operation and maintenance to the personnel of UGC-DAE CSR, Kolkata Centre on the offered system, including analysis software. Wherever needed, our technical persons should be trained by the supplier at the project site free of cost.

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 globally should be provided for similar quoted measurement options in support of the functionality of the equipment. The tender should

accompany a compliance Chart. It will be obligatory on the part of the tenderer to sign on each page of the offer.

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 system.fCRY 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. An extensive user list with the similar 400 Mhz Nuclear Magnetic Resonance Spectrometer to be provided with the Techno-Commercial bid document in support of the functionality of the equipment.

16. ***Rate*****:** The rate quoted should be submitted in the Financial Bid only. Justification or Price break up of quoted Rate quoted must be enclosed in the Financial Bid. GST must be quoted separately, if applicable.

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.17,00,000/- (Rupees Seventeen Lakhs 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. ***Customs Duty:*** The custom duty exemption certificate is issued by Department of Scientific & Industrial Research (DSIR), Govt. of India, New Delhi. Customs duty exemption is in terms of Government Notifications No. 51/96-Customs dated 23.07.1996; No. 24/2007-Customs dated 01.03.2007; No. 43/2017-Customs dated 30.06.2017; No. 42/2022- Customs dated 13.07.2022; No. 07/2024- Customs dated 29.01.2024; No. 38/2024 – Customs dated 23.07.2024 applicable.

22. ***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.

23. ***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.

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

25. ***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).

26. ***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** on or before the scheduled date and time specified below:

    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.

27. ***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.

28. ***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.

29. ***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.

30. ***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.

31. ***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.

32. ***"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.

33. ***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.

34. ***Global Participation***:The bidder should fully comply with the OM no. F.No. 6/18/2019-PPD dated 23-07-2020 inserting rule 144 (xi) in GFR 2017 by the Ministry of Finance, Department of Expenditure, Public Procurement Division.

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

36. ***Other terms & Consitions:***

(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. Quotations received incomplete or beyond the stipulated time will be summarily rejected.

(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)