

**INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE 2A & B, RAJA
S.C.MULLICK ROAD JADAVPUR, KOLKATA -700032
TENDER NOTICE NO.: SSP/SG/P/15/04 dated 10.08.2015**

Sealed quotations in **two parts, separately comprising the Technical Part and the Financial Part** are invited from experienced and renowned companies for the purchase of **9 T cryogen-free magnet with variable temperature insert** under a project funded by DST, Government of India.

Part – I (Technical Bid) of the tender should contain technical details of the instrument and conditions (including details of installation, Warranty, Training, payment options etc.) and **Part-II (Price Bid)** should indicate CIF Kolkata price for the instrument mentioned in the Technical Bid. The Technical Bid and Price bid are to be submitted in two separately sealed envelopes distinctly marked accordingly and both to be put inside another envelope, which should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

The Complete tender bids should reach the office of the Registrar (Dispatch Section), Indian Association for the Cultivation of Science, 2A & B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032 on or before scheduled date & time specified below.

Tender Notice No.	SSP/SG/P/15/04 dated 10.08.2015
Last date and time of submitting tender	28/09/2015 and 5:30 PM
Date and time of opening tender	29/09/2015 and 12 PM
Place of opening tender	IACS, Jadavpur, Kolkata (J. C. Bose Meeting room)
Contact	Prof. Saurav Giri, sspsg2@iacs.res.in

The technical bids will be opened first to evaluate the technical specifications. Thereafter, the Price bids of only technically qualified bidders will be opened.

Technical Bid Evaluation: 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, required by the Technical Evaluation Team. Lack of proper clarification may lead to the disqualification of bid.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or expenses to any of the bidders for attending opening of technical bid.

- Quotations may be submitted to the Registrar (dispatch section).
- Quotations received incomplete or beyond the stipulated time will be summarily rejected.

- Bidders should submit their past experience for supplying and successful installation of same **9 T cryogen-free magnet with variable temperature insert** to other research Institutes/Universities/other organizations in India. Please provide documentary proofs of such successful installation and supportive documents that the instruments are running successfully.

TECHNICAL SPECIFICATIONS:

Computer controlled 9 T cryogen-free magnet with variable temperature insert with working temperature range (1.9 K-400 K) which can be upgraded for broad range of measurements such as AC-DC electrical transport, vibrating sample magnetometry, heat capacity, thermal transport etc at variable magnetic fields and temperatures for different kind of samples in polycrystalline, single crystal and thin film forms. The specifications are given below:

1. Specifications of the Superconducting Magnet:

- Longitudinal configuration with maximum field of ± 9 Tesla.
- It should have a highly stable bi-polar power supply with over voltage protection.
- The magnet should have both Persistent and Driven modes with No overshoot, linear and oscillating provisions with very good resolution of the magnetic field.

2. Temperature Control specifications:

- Temperature range 1.9-400 K in zero to full magnetic field.
- Very good temperature control with no overshoot, fast settle and sweep modes with rate 0.01-6 K/min or better.
- Temperature stability should be $\pm 0.2\%$ or better for $T < 10$ K and $\pm 0.02\%$ or better for $T > 10$ K.
- During magnetic field sweep, the sample temperature should remain stable within the accuracy range mentioned above for temperature.
- The system should come with a fully automated temperature control in the range 1.9 to 400 K with continuous low temperature control (No Needle valve / manual control).

3. Cryogen free system:

- The system should come with cryogen-free magnet and with air cooled variable speed compressor.
- The cold head speed should be variable for prolonged life.
- Initial cool down should be possible using He-gas (without using liquid He) only.
- Cool down time \ll 30 hrs. Cold head life: 20,000 hrs or better.

4. Measurement Probe:

- (i) A basic multifunction probe with a calibrated temperature sensor for AC and DC electrical transport measurement should be supplied. The probe should have sufficient number of connecting wires including at least two coaxial wires.
- (ii) An appropriate sample holder for calorimetry measurement which can be used for heat capacity measurement using additional instruments.

5. Data acquisition and analysis

Computer, licensed windows based operating software and state-of-the-art computer control system compatible with and optimized for the application software to run the various measurement options automatically.

Manual and documentation: All the manuals necessary for operating and servicing the equipment (including details of electronic circuits) will have to be provided along with the instrument.

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Warranty Declaration

The tender must be quoted on-site comprehensive Warranty/Guarantee commencing from the date of complete and satisfactory installation of the equipment against the defect of any manufacturing, workmanship and poor quality of the components preferably for three years.

BID SECURITY:

1. Validity of bids: It should be at least 90 days from the opening of tenders. If required, it may need to be extended further.

2. Bid Security (EMD): An Account Payee Demand Draft of Rs. 4,00,000/- (Rupees Four Lakhs) in the name of "Indian Association for the Cultivation of Science", payable at Kolkata is to be furnished by the bidders, as Bid Security money or Earnest Money Deposit (EMD).

3. The Demand Draft for the Bid-Security money should have at least 45 (forty five) days validity period after the opening of the Bids.

4. The earnest money of unsuccessful bidders will be returned. The earnest money of the successful bidder will be returned on receipt of the Performance Security.

5. Performance Security: Performance security = 5 % of the ordered value (in INR) in the form of a bank guarantee with a validity for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligation. Bid security money will be refunded to the successful bidder on receipt of the Performance Security.

Terms of Payment:

Payment will be made through irrecoverable Letter of Credit in two installments. 90 % of the money will be released on submission of shipping of documents. Remaining 10 % will be released after successful installation of the instrument.

General Instructions:

1. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof. “**9 T cryogen-free magnet with variable temperature insert**” should clearly be written on the envelope.

2. Installation/Demonstration /Application Training at site: Free of cost by the supplier.

3. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents. The amendment(s) will be notified on the Institute website. Prospective bidders are advised to occasionally visit the website (www.iacs.res.in/tender) for any amendment.

4. Service facility: Supplier should mention their details of service setup and manpower in Kolkata who are responsible for after sales support. Response time should be within 24 hours.

5. The tender submitted shall remain valid at least for three months from the date of opening the tender. Validity beyond three months from the date of opening of the tender shall be extended by mutual consent.

6. The tender should accompany a compliance chart. A technical compliance chart should also be provided following the given format:

Serial number	Required indent specifications	Remarks (Yes/No)

7. Taxes, if any, should be specified clearly.

8. The model number, make, and a printed literature of the product have to be submitted with the technical bid.
9. Proposed delivery schedule should be mentioned clearly.
10. Authorized Dealership Certificate is mandatory in case a principal manufacturing company is not quoting directly.
11. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
12. Incomplete tenders will be summarily rejected.
13. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of technical bids will be the following working day at the appointed time.
14. Acceptance of Tender: IACS authority does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders received without assigning any reason thereof.
15. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of technical bids will be the following working day at the appointed time.
16. Acceptance of Tender: IACS authority does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders received without assigning any reason thereof.

REGISTRAR