

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

2A & 2B , Raja S.C. Mullick Road, Jadavpur, Kolkata-700032

NIT No. : IACS/SSP/AJP/ 2017-18 /18 Date: 07/06/ 2017

Sealed tender in two bids system (technical bid and price bid) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for '**Closed-Cycle Cryostat for Electrical and Optical Studies under Magnetic Field**'

Part-I (Technical Bid) of the tender should contain technical specifications in detail as well as commercial terms and conditions. Part-II (Price Bid) should clearly indicate group-wise price, if needed, as mentioned in the technical bid. The Technical Bid and Price Bid are to be submitted in separately sealed envelopes, distinctly marked accordingly and both to be put inside another envelop, that should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

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

Tender Notice No.	NIT No. IACS/SSP/AJP/2017-18/18 Date: 07-06-17
Last date and time of submitting tender	13.07.2017, up to 3-00 p.m.
Pre-bid meeting(date, time & place) to discuss technical specification	07.07.2017, 4-00 p.m. at Dept. of SSP office
Date and time of opening tender	14.07.2017 at 4-00 p.m.
Place of opening tender	Dept. Of SSP office, IACS
Date and time of opening of Price Bid	The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.
Contact	Email: ssppkr@iacs.res.in Tel.+91 33 2473 4971 [Ext..1322 /25]

The technical bids will be opened first to judge/evaluate the technical specifications of the said instrument and 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.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

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

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

Bidders should submit their 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. TECHNICAL BID

The technical bid should contain technical specifications and should be kept in a separate sealed envelope duly superscribed as 'TECHNICAL BID' on the outer cover of the envelop as already detailed above. **It should be clearly mentioned on the envelope as "Technical Specification for Closed-cycle Cryostat for Electrical and Optical Studies under Magnetic Field"**.

Technical Specification for 'Closed-cycle Cryostat for Electrical and Optical Studies under Magnetic Field' :

Compatible Cold heads (pneumatic drive) and compressor.

Water cooled helium compressor with full charge of high purity helium gas.

Interconnecting hoses and cold-head cable.

Temperature Range: Operating temperature at sample using temperature controller should be 10-500 K with adjustable graduation.

Cooling power: Above 8 W at 10 K; Above 16 W at liquid nitrogen temperature.

Cryostat System:

High purity copper cold finger extension in a vacuum shroud having an outer diameter suitable to fit between the magnetic pole gap of 2 inches of an electromagnet.

Additional vacuum shroud with two optical quartz windows (1 inch diameter or 1 inch square).

50 ohm control heater to control temperature (a Lake Shore 335 temperature controller, already in possession of the buyer, is to be connected to the cryostat).

All clamps and gaskets to ensure a fixed orientation of the vacuum shroud.

Interface for mounting sample holder and radiation shields to be bolted.

Turbo pumping system with 250 l/s or better capacity (for nitrogen) backed by an oil-free rotary pump along with related accessories, such as flanges, gauges, tubing etc.

Sample Holder and Temperature Sensor:

Sub-compact gold-plated OFHC copper 8-pin resistivity sample holder along with 8 wires to the sample, connections for temperature sensors, and the heater.

Additional sample holder with a hole (5 mm diameter) for illumination from the back side. The optical window on the vacuum shroud should be parallel to the plane of the sample holder.

The probe contacts with gold-pins should be pressure-loaded operable at low temperature. The probes will be used for measuring current up to mA DC.

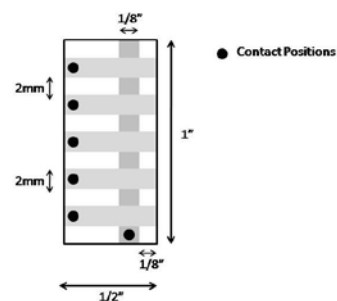
Two GaAlAs diode temperature sensors installed to measure temperature of the sample and the cold-head.

Feedthroughs and Connections:

Instrumentation skirt must have at least four numbers of electrical feedthrough ports for heater and temperature sensor wires, 10-pin electrical connections to carry out electrical/dielectrical experiments along with two additional blank feedthroughs.

Additional 2 male-female feedthrough-connectors to be

The sample holder should have enough area to fit samples having a $\times 0.5$ inch (height $\times$ width). The arrangement of the contacts should image:



provided.

size of 1 inch
be as per the

Optional item: Electromagnet providing a magnetic field of 500 mT or more at a pole-separation of 2 inches. The poles should have a diameter of 3 inches or more. At least one of the poles should have a hole having a diameter of 5 mm for illuminating the sample through the pole.

Vendor should have a well-established office in eastern India with suitable technical manpower for after-sales support of the quoted system.

Warranty: Minimum 1 year while 3 years extendable warranty is preferred.

Servicing facility within India is a must while service engineer stationed at Kolkata will be preferred.

A list of other places where the instrument has been installed should also be provided.

A compliance table (see below) must be prepared and submitted along with the technical bid.

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Sr. No	Tender specification	Your offered instrument specification	Extent of compliance

2. PRICE BID

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope duly super scribed as 'PRICE BID' on the outer cover of the envelop as already detailed above. Price bids of only technically qualified bidders will be opened and they will be intimated the date and time of the opening of price bid at their e-mail ids. Rest of the bidders will stand rejected.

PRICE: Price to be quoted on CIF Kolkata and also FOB basis.

3. BID SECURITY:

a. An Account payee Demand Draft/Pay Order of Nationalized Bank for Rs. 88,000/- (Rupees eighty-eight thousand only) drawn in favour of "Indian Association for the Cultivation of Science (State Bank of India, Jadavpur University Branch, A/C No. 11079699211, IFSC: SBIN000093, MICR Code: 700002048)" is to be furnished by the bidders except those who are registered with the Central Purchase Organizations, National Small Industries Corporation or the concerned Ministry or Department, as Bid Security money or Earnest Money Deposit (EMD). Alternatively, the Bidder shall have the option to furnish the EMD in the format of Bank Guarantee (BG).

b. The Demand Draft for the Bid-Security should have at least about 90 (ninety) days validity period of opening of the bids.

c. In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

4. PERFORMANCE SECURITY:

An Account Payee Demand Draft on any nationalized bank of India of 10% of the order value in the name of "Indian Association for the Cultivation of Science" is to be furnished by the successful bidder as Performance security. Performance security money should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Bid security money or EMD will be refunded to successful bidder on receipt of the Performance security money.

5. 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.

6. GENERAL INSTRUCTIONS :

1. Validity of tender: Tender submitted should remain valid for at least six months from the date of opening the tender. Validity beyond six months from the date of opening of the tender shall be lapsed by mutual consent.
2. The tender should accompany a compliance chart.
3. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof.
4. 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 during pre-bid meeting, 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.
5. Installation/Demonstration/Application training at site: Installation & user training at IACS, free of cost by the supplier.
6. Service facility: In India, preferably Kolkata, supplier should mention their details of service setup and man powers who are responsible for after sales support. Response time should be within 24 hrs.
7. The model number, make and a printed literature of the product should be submitted positively.
8. Proposed delivery schedule should be mentioned clearly.
9. 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.
10. Authorized dealership certificate should be provided in case of 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. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of the technical bids will be the following working day at the appointed time.
13. In case of any dispute, the decision of IACS authority shall be final and bidding on the bidders.
14. For any clarification regarding technical specifications, information etc., please send your queries to Prof. Dr. A. J. Pal. (sspajp@iacs.res.in).
15. The authority of IACS reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Acting Registrar