

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE
2A & 2B Raja S.C.Mullick Road, Jadavpur, Kolkata 700032

Tender Notice

NIT No. : IACS/SSP/AJP/2016-17/16

Dated: 21/07/2016

Sub: Closed Cycle Cryostat for Electrical and Optical Studies under Magnetic Field

Sealed tender in a two-bid system (**Technical Bid & Price bid**) is invited from bonafide, resourceful and eligible manufacturers/exclusive distributors of "**Closed Cycle Cryostat for Electrical and Optical Studies under Magnetic Field**".

Part I (Technical Bid) of the tender should contain technical details and commercial terms and conditions and Part II (Price Bid) should indicate group-wise price as mentioned in the Technical Bid where applicable. 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 super-scribed with tender notice number and due date. The bidders may submit bids duly signed in their own letterheads.

Complete tender bids should reach the office of the **Department of Solid State Physics, Indian Association for the Cultivation of Science, 2A & 2B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032** or on before the scheduled date & time specified below.

Tender Notice No.	IACS/SSP/AJP/2016-17/16 Dated: 21/07/2016
Last date and time of submitting tender	06/09/2016 at 3.00PM
Pre bid meeting to discuss technical specifications	24/08/2016 at 3.00 PM
Date and time of opening Technical bids	06/09/2016 at 4.00 PM
Place of Opening Tender	Office of SSP
Date and time of opening Financial Bids	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 e-mail addresses. The rest of the bids will be rejected.
Contact	ssppkr@iacs.res.in

The technical bids will be opened first to evaluate the technical specifications of the equipment. It 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 technical evaluation team. Thereafter, the Price bids

of only technically qualified bidders will be opened. The date of opening the Price Bids will be intimated to the short-listed bidders at their contact address. The rest of the bids will be rejected.

A) TECHNICAL BID: "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.

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 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.

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.

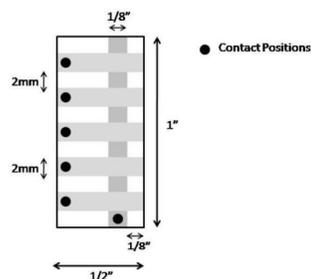
Two GaAlAs diode temperature sensors installed to measure temperature of the sample and the cold-head.

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 provided.

The sample holder should have enough area to fit samples having a size of 1 inch × 0.5 inch (height × width). The arrangement of the contacts should be as per the following image:



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: 3 years

Price: FOB and CIF prices to be quoted.

Payment: Letter of credit or after installation, as applicable

Compliance statement to be attached

B) PRICE BID:

The financial bid should be super scribed as "Price Bid" on the outer cover of the envelope.

1. **Price Bid:** The price 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 envelope as already detailed above. The price bids of only technically qualified bidders will be opened and they will be intimated the date and time of opening of price bids at their email IDs. Rest of the bids will stand rejected.

2. **Price:** Price to be quoted both on FOB/CIF basis for foreign currency or in Indian currency. Name of the particular port from where our authorized forwarder will lift the consignment must be mentioned clearly with FOB price.

3. **Bid Security (EMD):** An Account Payee Demand Draft of Rs. 50,000/- (Rupees fifty thousand only) in the name of "**Indian Association for the Cultivation of Science**" is to be furnished by the bidders, as Bid Security money or Earnest Money Deposit (EMD).

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

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

6. **Performance Security:** Performance security = 7.5 % of the ordered value (in INR) in the form of a bank guarantee with a validity for a period of 60 days beyond the expiry of the warranty period. Bid security money will be refunded to the successful bidder on receipt of the Performance Security.

(C) General Instructions:

1. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof. "Solar Simulator (Class AAA)" should clearly be written on the envelope.

2. 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.

3. Payment: Letter of credit or after installation, as applicable. For payment through Letter of Credit, 90 % to be released against shipment and balance 10 % against successful installation subject to submission of Performance Security. Payment will be released after receiving the Performance Security.

4. Installation/Demonstration /Application Training at site: Free of cost by the supplier
5. User list: The supplier should provide a list of current users (with contact number, Email address etc) for the quoted item in India.
6. 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.
7. 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 by mutual consent.
8. The tender should accompany a compliance chart. A technical compliance chart should also be provided following the given format:

Serial Number	Tender Specification	Specification of your offered instrument	Extent of compliance

9. Taxes, if any, should be specified clearly.
10. The model number, make, and a printed literature of the product have to be submitted with the technical bid.
11. Proposed delivery schedule should be mentioned clearly.
12. Manufacturers/exclusive distributors/vendors should have history of supplying this type of instrument to this or other Scientific Organizations.
13. Authorized Dealership Certificate is mandatory in case a principal manufacturing company is not quoting directly.
14. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
15. Incomplete tenders will be summarily rejected.
16. 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.
17. 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.
18. Please note that IACS will not provide any accommodation or expenses to any of the bidders for attending opening of technical bid/price bid.

Registrar (Acting)