

Tender Notification for the procurement of a 4K closed cycle cryostat (Last Date for submission of tenders: 21 November 2016)

REF: PPH/AB/428/2016-17

Kindly send your best quotation for the following item on C.I.P. Bangalore basis. Your quotation should clearly indicate the terms of delivery, delivery schedule, E.D., payment terms etc. The tender should be submitted in two separate sealed envelopes - one containing the technical bid and the other containing the commercial bid, both of which should reach us, duly signed on or before 1700 hours 21 November 2016.

Please enclose a compliance certificate along with the technical bid.

Yours Sincerely,

Chairman

Department of Physics

Specifications of the product - closed cycle cryostat system with the following components:

A. Two-stage 4K closed cycle cryostat with the following minimum specifications:

1. Operation over the temperature range 4K-325K with sample in vacuum.
2. Cooling power of the cold head @ 4.2K should be at least 0.12 Watts.
3. Appropriate water cooled helium compressor with full charge of high purity Helium gas.
4. Appropriate helium hoses/flex lines of minimum length 10 feet.
5. One temperature sensor mounted on the cold head calibrated over the entire temperature range of operation.
6. One 50 Ohm heater mounted on the cold head for temperature control.
7. Two sets of electrical feedthroughs with minimum 10 pins each.
8. One of the feedthroughs to be used for thermometry – the supplier must provide cables to connect the temperature controller to the cryostat.
9. Ten miniature resistive co-axial cables or five resistive twisted pairs connected to the second electrical feedthrough at one end. The other end of the cable/wire to be left free at the cold head for connection with user's sample holder.
10. Appropriate safety pressure release valve on the cryostat.
11. Appropriate blanking plates for the window ports for non-optical operation of the cryostat.
12. KF25 evacuation valve.

B. Dual channel cryogenic temperature controller with the following minimum specifications:

1. Compatible with RTDs and diodes.
2. Two independent auto-tuning control loops.
3. IEEE-488 interface and SCPI script compliant.

C. Optional items:

1. Appropriate water chiller for the water cooled compressor.
2. Appropriate air cooled helium compressor instead of water cooled with cooling air system.
3. Cooling power of the cold head @ 4.2K increased to 0.3 Watts.

Terms and conditions:

1. The vendor should have a track record of having previously supplied at least five similar equipment in India (please furnish the details).
2. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).
3. The payment will be through confirmed irrevocable Letter of Credit.
4. The lead time for the delivery of the equipment should not be more than four months from the date of receipt of our purchase order.
5. The instrument must carry a comprehensive warranty of 3 years from the date of installation.

Yours sincerely,

Dr. Aveek Bid
Assistant Professor
Department of Physics
Indian Institute of Science
Bangalore - 560012, India.