INDIAN INSTITUTE OF TECHNOLOGY KANPUR Department of Earth Sciences

Enquiry No: ES/IS/Init/2015-2016/03 Date: 20.05.15

Subject: Quotation for supply of Box Furnace with Moldatherm insulation (Quantity 01) as mentioned below.

With reference to the subject mentioned above, you are invited to submit the quotation in a sealed cover in order to reach us by June 1, 2015 in the form of a hard copy to the address mentioned below. If you have any questions please call Dr. I. S. Sen at 2596440, email: isen@iitk.ac.in.

The prospective suppliers are required to send quotation in two parts in sealed envelopes, as "Technical Bid" and "Financial Bid". The Technical Bid should contain detailed technical specification of the product being offered and should not mention any prices. The Financial Bid should include the detailed price quotation clearly including the cost of the equipment, taxes, service charges if any, shipping and handling charges. The two separate and sealed envelopes should be clearly marked appropriately as "Technical Bid" and "Financial Bid". Kindly write the inquiry no on the top of envelop.

Technical Specifications for Furnace:

- Internal Chamber size: 8-9" H x 13-14" B x 8-9" W.
- Exterior Dimension of the furnace: 25-26" H x 25-26" B x 20-21" W.
- The temperature range should be min 100°C and max 1100°C.
- The furnace should have the energy efficient Moldatherm insulation with embedded heating elements.
- The weight of the furnace should not be more than 60 kg.
- Accuracy of controller should vary $\sim +/-0.1\%$ to +/-0.3%.
- It should have a PID which prevents overshoot.
- The sensor should be (Type K) thermocouple.
- Availability of the electrical volts and Hz should be 210-240 V and 50-60 Hz respectively.
- The furnace should have the controlled heat-up rate that eliminates thermal shock to materials.
- Interior of the furnace must be designed in order to have a double-wall construction which actually minimizes the exterior surface temperatures for operator safety and energy efficiency.
- It should have the digital single segment, single set point, one ramp to set point.
- It should have a simultaneous LED display of actual temperature vs. set point.
- It should also include adjustable over-temperature protection (OTP), which sounds an alarm when the furnace heats beyond a specified limit.
- Adjustable over-temperature cut-out with audio signal to ensure overall safety.
- It should have RS485 digital communications port available as an option (which provides two-way communications between furnace and remote computer).
- The instrument should be compliant with international certification.
- One year warranty for the parts of the instrument.

Terms and Conditions:-

- 1. Maximum education discount, if any should be offered
- 2. Validity of quotation should be at least for 60 days
- 3. Prices should be on CIF and FOB separately (if imported)
- 4. Prices should include the installation and training cost

- 5. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/inspection).
- 6. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc. 7. Delivery should be made within 3 months.

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Indra Sekhar sen