

 IIT PALAKKAD	भारतीय प्रौद्योगिकी संस्थान पालक्काड Indian Institute of Technology Palakkad अहलिआ एकीकृत कैम्पस, कोज़िपारा Ahalia Integrated Campus, Kozhipara पालक्काड- 678557 Palakkad – 678 557	दूरभाषसंख्या/ Phone no: 04923 – 226300/ 590/ 586 ईमेल/ Email : purchase@iitpkd.ac.in
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Ref No : IITPKD/CHY/DJ/ 083 / 2017

Date: 15.12.2017

Due Date of the tender: 02.01.2018 @ 3 PM

TENDER FOR INVITING QUOTATIONS

Dear Sirs,

On Behalf of Indian Institute of Technology Palakkad quotations are invited for **“High Temperature Furnaces”** confirming to the specification in the Annexure.

- Preparation of Bids:** - The tenders should be submitted **under two-bid system** (i.e.) Technical bid and Financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. No prices should be included in technical bid. Financial Bid should indicate item – wise prices for the items mentioned in the technical bid. The technical and the financial bids should be put in separate cover and sealed. Both sealed covers should be put into a bigger cover.
- Compliance sheet for the specification & OEM Brochure has to be attached along with Technical bid. Vendor has to fill the compliance sheet and mention page number or reference number in OEM brochure. Unfilled / partial filled sheets lead to disqualification.**
- The Quotations duly sealed and superscribed on the envelope **with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above. Fax and Email quotation are not acceptable.**
- The price should be quoted per unit and packing and delivery charges should be indicated separately. The offer/bids should be exclusive of Taxes and Duties, which will be paid by the purchaser as applicable. However the percentage and of taxes and duties as on date should be clearly indicated.
- The Quotations should be valid for **sixty days** from the due date and the period of delivery required should also be clearly indicated.
- If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
- Local Firms:** Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
- Outside Palakkad:** Quotations should be for **F.O.R. at IIT Palakkad**. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
- Goods shall not be supplied without an official supply order.

10. **Custom Duty:** Custom Duty which will be paid at a concessional rate against duty exemption certificate.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later. No advance payment will be made. The Tenderer have to furnish the bank details along with tender like Account No, Account Name, IFSC Code, Bank address etc.
12. **Submission of Bids:** Quotation should be sent to the following address “**The Registrar, Indian Institute of Technology Palakkad, Ahalia Integrated Campus, Kozhipara, Palakkad -678 557, Kerala**”, Phone No: **04923 226 586/590**, Email: purchase@iitpkd.ac.in.
13. **Delivery Period:** 8-10 Weeks from the date of Purchase order, failing which PO may be cancelled.
14. **Delay in Supply or Liquidate damages:** If the supplier fails to deliver the stores within the time specified in the purchase order, the purchaser will recover from the supplier as liquidated damages a sum of one- half of one percent (0.5%) of the P.O value of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed five percent (5%) of the P.O price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.
15. **Late offer:** The quotation received after due date will not be considered. Please ensure that your offer is sent well in advance to reach the Institute by the due date.
16. **Loading and unloading charges will be borne by the supplier.**
17. **Warranty:** Warranty Clause should be indicated clearly.
18. **Acceptance and Rejection:** IIT Palakkad has the right to accept the whole or any parts of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

Yours faithfully,

Encl: Specifications

Registrar, IIT Palakkad

Tender specifications for High Temperature Furnaces

S.No	Item	Specifications
1	Equipment name	High temperature Chamber Furnace
2	Maximum operating temperature	1100°C with a maximum heat up time not exceeding 50 minutes. Maximum continuous operating temperature should be 1000 °C.
3	Chamber volume	5 Ltr
4	Dimensions: Internal H x W x D (mm)	135x140x250
5	Dimensions: External H x W x D (mm)	585x375x485
6	Dimensions: External with door open HxWxD (mm)	800x375x485
7	Max Power (W)	2400W
8	Holding power (W)	790W
9	Thermocouple type	R
10	Weight	Strictly not exceeding 30 Kg
11	Temperature controller	Digital PID programmable controller with 8 segments in program. Each segment consists of one ramp and dwell.
12	Safety features	<ul style="list-style-type: none"> • Digital over-temperature protection • The surface temperature of the furnace body during operation at 1000 °C must be mentioned.
13	Heating element	FeCrAl alloy
14	Furnace design	<ul style="list-style-type: none"> • Parallel action door keeps heated surface away from the user • Delayed start / process timer function as standard • Hard wearing alumina element carrier, furnace entrance and hearth • Energy efficient low thermal mass insulation • Free radiating wire wound elements for optimum uniformity • Easy access to elements and controls for maintenance and servicing
15	Accessory	One additional unit of digital PID programmable temperature controller with 8 segments in program.
16	Acceptance criteria	<ul style="list-style-type: none"> • A multi-segment temperature programme with different heating rates and holding times should be demonstrated. • The efficiency of the furnace at 1000 °C for an hour will be tested. During this operation, the surface temperature of the body of the furnace must not exceed the room temperature by more than 10 °C.