

भारतीय प्रौद्योगिकी संस्थान पालक्काड Indian Institute of Technology Palakkad अहलिआ एकीकृत कैम्पस, कोज़्हिपारा Ahalia Integrated Campus, Kozhipara पालक्काड- 678557 Palakkad – 678 557

दूरभाषसंख्या/ Phone no: 04923 — 226300/ 590/ 586

ईमेल/ Email : purchase@iitpkd.ac.in

Ref No: IITPKD/CHY/DJ/048/2017 Date: 25.10.2017

Due Date of the tender: 09.11.2017 @ 3 PM

TENDER FOR INVITING QUOTATIONS

Dear Sirs,

On Behalf of Indian Institute of Technology Palakkad quotations are invited for "Multi Work Station" 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. The Quotations should be valid for **sixty days** from the due date and the period of delivery required should also be clearly indicated.
- 6. 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.
- 7. **Local Firms**: Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.

- 8. **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.
- 9. 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: 3-4 Weeks from the date of purchase order, failing which P.o 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

TECHNICAL SPECIFICATION FOR MULT WORK STATION

S.No	Description	Specifications
1	Item	Multi-position Work Station for Chemical Reactions
2	Targeted Function	A workstation consisting of Hot plate, stirrer capable of carrying out multiple numbers of chemical reactions under identical conditions. The chemical reactions will employ heating, stirring, refluxing in vacuum or inert atmosphere of 5 round bottom flasks simultaneously.
3	Technical specifications	
3.1	Material of construction	Stirrer should have KERA Disc top plate made of Silumin with Ceramic coating with a fire-resistant aluminium die-cast housing.
3.2	Heating capacity	Heating capacity should be of 800W with hot plate temperature 20 - 300°C and accuracy \pm 1.0°C. Separate ON/OFF buttons for heating to prevent unintentional heat up. Safety cut off 10 to 25°C over set temperature should be included.
3.3	Stirring capacity	Speed range of 30 - 1400 rpm with accuracy of ±1% up to 20 L capacity
3.4	Display	Suitable display and control systems for heating and stirring must be attached.
3.5	Physical dimensions	Top hot Plate diameter should be 145 mm
3.6	Temperature sensor	Pt1000 temperature sensor for precise temperature control and reproducible results with accuracy ±0.2°C.
3.7	Base plate and heating block	 In addition to the hot plate with stirrer, a base plate should be included made of material with high thermal conductivity. ID should be 146 – 148 mm ensuring its firm positioning above the hot plate. Heating blocks with following heating volume options must be provided. One Number of 5 X 250 mL (RBF) as a single heating block Three numbers of 100 mL reducing insert to be used with 250 mL block as mentioned above. Three numbers of 50 mL (RBF) reducing insert to be used with 250mL block as mentioned above. One number of pie shaped block containing 9 provisions for heating vials of 12 mm dia and 25 mm depth. Two numbers of pie shaped block each containing 3 provisions for heating vials of 25 mm dia and 27 mm depth. It must be possible to assemble different units simultaneously and carry out the reactions under same conditions. The base plate and heating block should have provision for attaching a central supporting rod.

3.8	Accessories	 A. Two numbers of 5-way clamp and strap with handle should be provided to secure the condensors. B. Two numbers of water manifold with inlets and outlets to be provided C. Gas/Vacuum manifold for inert gas or vacuum to system should also be provided. D. A central supporting rod to hold water and gas manifolds and clamps to fasten the glasswares must be included.
4	Warranty	E. 3 years
5	Delivery	F. 3 – 4 weeks
6	Installation base	G. The vendor must provide the details of users of similar equipment in India where they have supplied.