

Punjab Engg. College (Deemed to be university) Chandigarh

Materials & Metallurgical Engg. Dept

Memo. No. Mett/

Date:

To

Subject: Quotations for purchase of Laboratory Equipment of Materials & Metallurgical Engineering Dept.

Dear Sir/Madam,

Quotations are hereby invited in respect of the item mentioned below. The quotations should be sent directly at the address mentioned below in the sealed cover with wax/transparent fixing tape duly signed in ink underneath by **speed post/courier** marked "**Quotation for purchase of (Name of the Equipment) and due date**" on the top of the envelope so as to reach this office **before 4:30 PM on October 31st, 2019.**

These will be opened on **November 1st, 2019 at 11:00 AM** by the committee members in the presence of the bidders or their representative who may like to be present during opening of quotations. The right of acceptance or rejection of any quotation without assigning any reason is reserved. Necessary literature of the equipment may please be sent. Please quote on F.O.R PEC, Chandigarh basis. The quotations by hand will not be accepted.

Note:- The complete quotation document may be downloaded from the Institute website i.e. www.pec.ac.in.

Prof. & Head
Materials & Metallurgical Engg. Deptt.

TERMS AND CONDITIONS

1. EMD/bid security amount as mentioned against respective items should be submitted along with the quotation in form of DD/Banker's cheque from any commercial bank in favour of **Director, Punjab Engineering College (Deemed to be university), Chandigarh**. Tender without earnest money shall be considered unresponsive and rejected.
2. A Performance security @5% of the total cost of the equipment will have to be deposited by the successful bidder awarded the supply order in form of A/c payee DD or Bank Guarantee from a commercial bank which should be valid for 60 days beyond all contractual obligations.
3. The rates may include all packing/forwarding, insurance, loading/unloading, transport charges. GST/Excise Duty be mentioned separately.
4. Time period for the delivery, installation/fixing and successful commissioning of each item shall be as mentioned against each item.
5. Catalogue should be sent along with supply.
6. Materials should conform to BIS/ASTM/AFS specifications where ever applicable.
7. Only best quality should be quoted.
8. All legal disputes will be subject to Chandigarh Jurisdiction.
9. The Director PEC, Chandigarh reserves the right to reject/accept any or all quotations without assigning any reasons.
10. The firm who has been blacklisted by center/state govt/UT/boards/corporations/any government authority/ PEC are not eligible for the quote.
11. No advance payment will be made. Full & final payment will be released only after satisfactory receipt of goods/material/installation/fixing/successful commissioning/training to department faculty and staff.
12. The penalty will be charged @ 0.5% of the total landed cost at PEC per week after the expiry of maximum time limit, mentioned in the purchase order.
13. All the rates will be FOR, PEC, Chandigarh.
14. The institute is a premier Education and Research Institute funded by Chandigarh Administration and therefore, discounts as applicable to Research Institute/Educational Institutes may please be offered liberally in the quotation.
15. The bidders shall not be allowed to change, alter or modify the bids after expiry of the deadlines.
16. The firm is entirely responsible for any damage or losses occurred to the material/equipment in transit. The firm will not lodge any complaints regarding the damage occurred in transit & shall itself bear all expenses/losses.

17. For any query, bidders may contact Prof. R. K. Mahajan at 9988480900/ 9530593982/ profkrmahajan@gmail.com.
18. In a quotation, either Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same quotation for the same item/ product.
19. If an agent bids on behalf of the Principal/OEM, the same agent shall not bid on behalf of another Principal/OEM in the same quotation for the same item/ product.
20. Bids received after the due date will not be considered.
21. The tenderer is required to bring their own testing and measurement instruments which are required for the installation, commissioning and testing. These can be taken back after completion of process.
22. Form D will not be issued.
23. The price shall be quoted in Indian Rupees only.
24. Generally the bid offer will be received /opened on the day as specified in the schedule. If the scheduled date is declared as a holiday, then the tender shall be received/opened on the next working day at the same time.
28. The agency shall arrange to impart training to the concerned faculty/lab staff regarding operation / maintenance of equipment free of cost.
29. The institute has been exempted from custom duty as per Government Notification No. 51/96- Customs Dated 23 July 1996 and Central Excise duty in terms of Government Notification No. 10/97- Customs Dated 01 March 1997 as amended from time to time.
30. The rates quoted should be valid for 90 days from the opening of tender.
31. The rates quoted should include comprehensive warranty of 1 year.
32. The tenderer should give a certificate stating that all the terms & condition of this tender documents are acceptable to me/us. It should be duly signed by the tenderer.

Prof. & Head
Dept. of Materials & Metallurgical Engineering

List of Equipments

Sr. No.	Equipment	Quantity (Nos)	EMD (Rs.)	Maximum Time Limits for delivery, installation & successful commissioning from the date of issue of purchase order (Weeks)
1.	Programmable horizontal tube Furnace for studying kinetics of roasting and calcination of ores	1	4,000	06

Programmable horizontal tube Furnace for studying kinetics of roasting and calcination of ores

Sr. No.	Specifications	
1.	Programmable horizontal tube furnace	Capable of achieving maximum 1500 °C
2.	Working Temperature	1400 °C reachable in 1 hr
3.	Constant and highest temperature heating zone at the center of the tube	Length of heating zone: 250 mm
4.	Best quality alumina tube capable of withstanding strong thermal shock (3 tubes to be supplied as extra)	Inner Diameter: 70 mm, Overall Length: 500-600 mm
5.	Heating element (4 nos extra)	SiC
6.	Temperature controller cum indicator	Automatic PID Controller (4 segments programming facility with accuracy of ± 1 °C with auto turning facility) Microprocessor based input sensor
7.	Display	LED display with dual indication of Set Value (SV) and Process Value (PV)
8.	Thermocouple	Pt/PtRh with recrystallized alumina sheath and connecting holder complete in all respects and capable of measuring temperature up to 1500 °C with the accuracy of ± 1 °C
9.	Thermal insulation	Super refractory and fibrous ceramics of best quality to have minimum temperature on the outer surface of the furnace (preferably below 80 °C at maximum furnace temp of 1400 °C)
11.	Safety	Over current and short circuit protection; Thermocouple break alarm; High Temperature alarm
12.	Data Logging	The programmable controller have RS-485 communications with software for data logging with PC. The software has historical data, bar chart, Excel data sheet with date and time.
13.	Data Storage	The real time data should be available in all standard formats for acquisition and compatible to be processed on standard format including Excel and Origin.
14.	Transformer	Air Cooled step down transformer with suitable thyristor drive

15.	Cooling fan	Provided inside the control units to protect the costly parts
16.	Power supply	220V AC, three phase preferably
17.	Gas inlet and outlet system facilities having plug along with quartz and rubber tubing at the lower end of the tube up to the gas cylinders (5 sets extra)	For connecting the alumina tube to the gas cylinder
18.	7 cubic meter (Cum) gas cylinders with arrangement of measuring cylinder pressure and gas flow rate.	One cylinder for oxygen, one cylinder for Ar+5% H ₂ and both cylinders connected with the help of T-joint having on-off knob on both sides.
19.	Complete in all respects with all required Electrical, Electronic, Mechanical, digital etc parts/systems for satisfactory and trouble-free long-lasting performance.	