UNIVERSITY OF KERALA

DEPARTMENT OF CHEMISTRY

Tender Document

Tender Document for the supply of a Vacuum Furnace for the Department of Chemistry, University of Kerala, Kariavattom, Thiruvananthapuram-695581

Tenderer Details

Registered Name and Address of Tenderer	
Address for communication	
Other contact information **1. Telephone number Office :** **2. Mobile** **3. E mail** **4. FAX**	
Signature	

FORM OF TENDER

From

.....

.....

.....

To

.....

.....

.....

Sir,

I/We hereby tender to supply, under the annexed general conditions of contract, the whole of the articles referred to and described in the attached specification and schedule, or any portion there of, as may be decided by the University of Kerala,Thiruvananthapuram at the rates quoted against each item. The articles will be delivered within the time and at the places specified in the schedule.

*I/We am/are remitting/have separately remitted the required amount of Rs.....as earnest money.

Yours faithfully (Signature)

.....

...

(Address) .....

Date: .....

*To be scored in cases where no earnest money deposit is furnished.

Important: This tender form may be printed on A4 size paper. Editing of the pre- printed text in the tender form in any way other than as indicated(like ticking, filling in with ink/typing, scoring off inapplicable material etc.) will render the tender form invalid and liable for rejection.

GENERAL CONDITIONS

Sealed tenders are invited for the supply of the materials as specified in schedule attached below.

1. The tenders should be addressed to the Assistant Professor and Head, Department of Chemistry, University of Kerala, Kariavattom campus, Thiruvananthapuram in a sealed cover with the tender number and name– "**Tender for the supply of "Vacuum Furnace"** duly superscribed on the cover on or before **21.01.2026 ,3.30 PM.**

Tenders which are not in the prescribed form are liable to be rejected and the cost of tender forms once paid will not be refunded.

2. Intending tenderers should send their tenders so as to reach the officer mentioned in the tender notification, on or before the due date and time noted therein. No tender received after the specified date and time will be accepted on any account.The rates will be considered firm for acceptance till the date mentioned therein.Tenders not stipulating period of firmness and tenders with price variation clause and/or'subject to prior sale'condition are liable to be rejected.

a. Every tenderer who has not registered his name with the State Government (Stores Purchase Department), should send along with his tender, an earnest money of Rs. 5000/-. and tender form fee (Rs.1180/-)The amount may be paid in the form of Demand Draft (Separate DD for EMD and Tender form Fee) drawn in favour of the Assistant Professor & Head, Department of Chemistry, University of Kerala, Thiruvananthapuram. **Cheques will not be accepted.** The earnest money of unsuccessful tenderers will be returned as soon as possible after the tenders are settled.

b.Tenderers whose names are registered with Government (Stores Purchase Department) are generally exempted from furnishing earnest money for such articles for which they have registered their names. If they tender for stores other than those for which they have registered their names, they will have to furnish earnest money as in the case of unregistered firms. Registered firms will have to quote invariably in every tender they submit,the registration number assigned to them by the Stores Purchase Department. Attested copy of registration certificate may be enclosed with the tender for reference.

c. Small Scale Industries and Cottage Industries within the Kerala state, which are certified as such by the Director of Industries and Commerce or

by the Regional Joint Director of Industries and Commerce will be exempted from furnishing earned money against tenders for supply of stores manufactured by them.

3. If any tenderer withdraws from his tender before the expiry of the period fixed for keeping the rates firm for acceptance,the earnest money, if any deposited by him will be forfeited to University of Kerala or such action taken against him as the University think fit.

4. The final acceptance of the tender rests entirely with the University who do not bind themselves to accept the lowest or any tender. But the tenderers should be prepared to carry out such portion of the supplies included in their tender as may be allotted to them.

5. In cases where a successful tenderer,after having made partial supplies, fails to fulfil the contracts in full, all or any of the materials not supplied may at the discretion of the Registrar, be purchased by means of another tender/quotation or by negotiation or from the next higher tenderer who had offered to supply already and the loss,if any,caused to the University shall hereby,together with such sums as may be fixed by the University towards damages, be recovered from the defaulting tenderer.

6. Payment will be made only after the supplies are actually verified and taken to stock.

7. The tenderer shall undertake to supply materials according to the standard sample and/or specifications

8. No representations for enhancement of rates once accepted will be considered.

9. Any attempt on the part of the tenderers or their agents to influence the University in their favour by personal canvassing with the officers concerned will disqualify the tenderer.

10.Schedule of Materials

	Item	Quantity	Rate	GST Rate%	GST amount	Total Amount (Total Amount + GST amount)	Remarks
	Vacuum Furnace						

Rate quoted should be inclusive of all charges such as packing, forwarding, freight, loading/unloading/handling or installation charges and Government duties leviable, if any.

Other special conditions: Defective items,if any,supplied should be rectified/replaced to the satisfaction of the University by the suppliers at their own cost.

Technical Specification and Compliance Statement

Sl No.	Description	Specification	Compliance (Yes/No)	Remarks
1	Type	High-temperature vacuum furnace		
2	Maximum operating temperature	1200 °C		
3	Working temperature range	Ambient to 1000 °C		
4	Application	Heat treatment, annealing, sintering, degassing, and material research		
5	Effective chamber size	Minimum 4-inch usable dimension		
6	Chamber material	High-purity recrystalised alumina		
7	Inner surface finish	Smooth, vacuum-compatible		
8	Thermal insulation	Multi-layer ceramic fiber insulation		
9	Hot zone length	Minimum 150 mm or better		
10	Heating elements	Silicon carbide/Molybdenum disilicide/ graphite/suitable high temperature alloy		
11		Uniform heating from all sides		

	Heating configuration			
12	Temperature uniformity	±5 °C at operating temperature		
13	Heating rate	Programmable up to 10 °C/min		
14	Temperature controller	Eurotherm Controller		
15	Temperature sensor	Type K or Type S thermocouple		
16	Control accuracy	±1 °C		
17	Programmability	Multi-step ramp and soak profiles		
18	Ultimate vacuum level	≤ 1×10^{-3} mbar		
19	Vacuum pump	Rotary vacuum pump		
20	Vacuum valve	Manual or pneumatic high-vacuum isolation valves		
21	Cooling method	Natural cooling / forced air cooling / water-cooled jacket with mandatory water circulation		
22	External surface temperature	Not exceeding 60 °C during operation		
23	Input power	230 V / 415 V AC, 50 Hz		
24	Over-temperature protection	Automatic shutdown		
25	Vacuum interlock	Should be provided		
26	Door safety interlock	Should be provided		
27	Emergency stop	Emergency stop switch		
28	Control panel	Microprocessor-based control panel		
29	Display	Digital display for temperature and vacuum		

30	Sample holders and trays	Should be provided		
31	Crucible	Suitable high-temperature crucibles (alumina /Zirconium) for sample holding [one from each]		
32	Gas inlet	Inert gas inlet (Ar / N_2)		
33	Compliance	Conforms to applicable ISO / IEC standards		
34	Performance	The flawless performance of the equipment has to be demonstrated and certified in accordance with operation qualification, installation qualification and performance qualification.		
35	Warranty of the equipment and software	A comprehensive warranty of minimum of three years from the date of installation should be provided. During the warranty period, there should be two mandatory service visits per year. On-site service with required spares/consumables shall be ensured during the warranty period.		

General Terms and Conditions:

1. Quotes should be inclusive of cost, freight, taxes etc. and should be delivered at the Department of Chemistry, University of Kerala, Kariavattom.
2. Incomplete & conditional quotations and quotations received after the due date will be summarily rejected without assigning any reasons thereof.
3. The undersigned reserves the right to reject or accept the quotation without assigning any reason.
4. **Installation and Commissioning**: The items shall be installed and commissioned at the Department of Chemistry, University of Kerala, Kariavattom Campus. The supplier should bear all incidental expenses.
5. **Payment:** The University will release the payment only after inspecting the equipment and satisfy that the supply is as per the requirements. The payment will be made after successful completion of the supply and producing invoice in duplicate.
6. **Validity of tender**: Tender submitted shall remain valid at least for 90 days from the date of opening the tender. Validity beyond three months from the date of opening of the tender shall be by mutual consent.
7. The model number, make, and a printed literature of the product shall submit positively.
8. A signed compliance matrix (on specifications and conditions) should be submitted along with the quote.
9. In case of the dispute arises; the decision of University authority shall be final and binding on bidders.
10. General rules relating to the purchase of materials/equipment will also applicable to this quotation.
11. **Tender Notice with duly filled Tender document with sign and seal of the firm in each page should be attached to the tender**

Sd/-

The Assistant Professor & Head

Department of Chemistry

University of Kerala