



UNIVERSITY OF KERALA

DEPARTMENT OF PHYSICS

KARYAVATTOM, THIRUVANANTHAPURAM, INDIA – 695581.

e-mail: kuphysics76@gmail.com, Phone 0471 – 2308920

(Established as University of Travancore by the Travancore University Act in 1937 and reconstituted as University of Kerala by the Kerala University Act of 1957 and presently governed by the Kerala University Act 1974 passed by Kerala State Legislative Assembly)

(NAAC Reaccredited with 'A++' Grade)

PHY/146/24-25

15/07/2024

TENDER NOTICE

Sealed competitive tenders are invited from competent vendors/suppliers for the supply of water chiller to support RF sputtering system (Model No. AUTO500, HHV Advanced technologies).

Water chiller – 1 no.


1	Water chiller to support RF sputtering system	<ul style="list-style-type: none">• Cooling Capacity : 1 TR at 15°C• No. of Compressor Circuits: 1• Refrigerant: R407c• Outlet Cooling media Temperature from Chiller : 15° C• Maximum Operating Ambient temp. : 50° C• Process Flow rate & Pressure of cooling Media delivered from chiller: 10 lpm & 3 bar• No. of Process Pumps: 1• Type of Compressor: Reciprocating• Sealing: Hermetic• Motor insulation type : F class insulation Type of Controller : Microprocessor• Type of Condenser /material : Air cooled condenser / Copper internally grooved tubes with Aluminium Fins• Type of Expansion : Device Capillary• Type of Evaporator/ material : Brazed Plate Heat exchanger / SS 316 plates• Exhaust fan: Axial flow with CRCA powder coated wings.• Insulation class for motor: F• Electrical protection : IP 44• Reservoir Volume/ material: 25 ltrs / SS 304• Insulation: Nitrile rubber• Accessories: Level indicator, level switch, temp. sensor• Type of Pump / material: Centrifugal / Brass impeller and CI casing.• Motor : F class insulation, IP 55 protection Piping material: SS 304
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		<ul style="list-style-type: none"> • Flexible hose: Synthetic elastomer, Textile braiding, MS clamping • Material of Chiller Frame: CRCA • Pressure gauge: Analog type, glycerine filled • Type of Surface Coating: Powder coated • Power Supply 3 PH, 415 V, 50 Hz • Power Consumption 1.8 kW • Hydraulic End Connection Size & Type : 3/4" BSP • No. of Skids : 1 • Dimensions of Skid: 500mm W X 550mm D X 1300mm H • Controller: Microprocessor, Display LED, Accuracy +/- 1 deg C, with 2 NTC probes, Electrical protection: IP 41 • Electrical cabinet : Powder coated electrical cabinet with industrial lock. • Protection : IP 41
3	User manual	Has to be provided
4	Warranty	Minimum 3 years
5.	List of institutes inside Kerala where the chiller is supplied for high vacuum systems (sputtering, thermal evaporation etc)	Has to be provided.

For more details, please log on to www.keralauniversity.ac.in. Last date for the receipt of tenders is 0400 P.M. on 31.07.2024. Tender forms can be downloaded from the University web site www.keralauniversity.ac.in.

The cost of the tender form ₹472/- (Rupees four hundred and seventy two only) (i.e. Rs.400 + 18% GST) and the Earnest Money Deposit of Rs. 2000/- (Rupees two thousand only) should be remitted by way of Demand Draft issued from a nationalized/scheduled bank, drawn in favour of The Finance Officer, University of Kerala, payable at State Bank of India, Kerala University Office Campus Branch (SBIN0070292). The tender documents, along with separate DD towards the cost of the tender form and the EMD should be submitted/sent to the Head, Department of Physics, University of Kerala, Kariavattom, Thiruvananthapuram.

The rate quoted should be inclusive of all charges such as packing, forwarding, freight, loading/unloading/handling and Government duties leviable, if any. The University reserves the right to accept or reject any or all the tenders without assigning reasons whatsoever.


 Head
 Department of Physics
 University of Kerala
 Kariavattom - 695 581