

**KSCSTE - Jawaharlal Nehru Tropical Botanic Garden & Research Institute**  
**(An Institute of Kerala State Council for Science, Technology and Environment, National**  
**Centre of Excellence, Govt of India) Palode**

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**e- tender notice**

**Tender No. JNTBGRI/2577/CKP/P05/PS/24**

**30-11-2024**

**E-tender Id: 2024\_KCSTE\_712631\_1**

e- tenders are invited from competent vendors for the supply of Rotavapor with chiller and diaphragm vacuum pump with the following specifications at JNTBGRI, Palode, Thiruvananthapuram.

<b>Sl. No.</b>	<b>Item with complete Description</b>	<b>Qty</b>
1	<p><b>Rotavapor with chiller and diaphragm vacuum pump.</b>            Rotation speed 20-300rpm or more;            Evaporating speed should be 22ml/min or better;            Water bath temperature range RT+5~180°C;            Water bath chamber seamless &amp; stainless-steel with PTFE coating;            Bath equips with dual heating mode for oil and water and overheat protection;            Automatic lifting mode with brushless DC motor. ;            Rotary flask capacity should be 2L or more. ;            Vertical condenser with condensate area 0.15m<sup>2</sup> or better.             PID controller with separate LCD displays for Speed and temperature control;             Vacuum seal should be PTFE dual seal.             Rotary evaporator independent temperature protection, safety meets DIN 12880 International standard.             Recirculating chiller with capacity minimum 8 Litre or more.             The temperature range should be -20°C ~ 80°C.             Temperature accuracy should be ±2°C or better.             Should have pump head 9 meter or better.            Circulation pump flow rate(flux) 6L/Min or better.            Cooling capacity at -20°C should be 0.12kw or better.            Should be PID temp. controller for accurate and reliable temperature control.            Large LCD backlit screen to display set and actual temperature, compressor working, timer, alarms &amp; warnings at the same time for user-friendly operation.            Easy to set Adjustable Timer from 1 minute to 5,999 minutes.            Independent circulating pump switch for easy starting/stopping the cycle.            Both heater and bath chamber are should made of corrosion-resistant stainless steel.            No angle in the bath chamber to avoid leakage or corrosion and easy to clean.            Liquid level display window, through which can be intuitively observe the liquid level in the tank.            Chiller should be equipped with PT100 temperature sensor.            Should have automatic restart function when power failure/return.            Maintenance-free operation with easy to clean surface.            Should have audible&amp; visible alarms for temperature deviation, over</p>	1 no.

<p>current, water level and over current protection.  Should be CFC free R404 refrigerant.  Option available for RS485/USB ports for data collection and validation.  Chiller Independent temperature protection, safety meets DIN 12880 standard.  Chiller should have castor wheels with lock for easy movement.  Diaphragm vacuum pump suitable for wide range of lab applications.  Ultimate vacuum 8 mbar or better.  Maximum flow 20L/min or better.  Pump head type : Two-stage pump.  Anticorrosion pump with composite diaphragm and pump head should be PTFE material.  Anticorrosion vacuum pump using electric direct drive power transmission, coupled with the diaphragm low stroke, low noise characteristics.  Pump valve material should be FFPM for long life.  Maximum operating pressure 1 bar.  Speed 1450 RPM or better.  Should have Clean/Dry valve.  Safety: Pump equipped with temperature protection switch.  Power consumption maximum 120W.Electrical requirement AC 220V 50HZ.Vacuum pump should be supplied with vacuum controller.  The equipments are should be CE certified.  Rotary evaporator, Chiller and Vacuum pump must be from the same manufacturer for efficient functioning, ease of operation and to reduce service risk.  The vendor should submit the detailed technical brochure with clear image of the quoted model Rotary evaporator, chiller &amp; vacuum pump.  Warranty One Year minimum</p>	
Tender Form fee : Rs.1300/-+ GST 12%	
EMD – Rs. 5000/-	
Place and date of issue of the tender form: Online( <a href="http://www.etenders.kerala.gov.in">www.etenders.kerala.gov.in</a> )	
Last date & time of receipt of filled tender bids: 13.12.2024 Upto 5.00PM	
Date & time of opening of tender bids : 16.12.2024 at 10.00 AM	
<b>Dr. V Arunachalam</b> <b>DIRECTOR JNTBGRI</b>	