



# School of Energy Materials

Mahatma Gandhi University

Priyadarshini Hills

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**Prof. Dr. SABU THOMAS PhD, FRSC**  
Director, School of Energy Materials

14<sup>th</sup> March 2022

**SEM/PF/Tender-9/2022**

## SHORT TENDER

*Tenders are invited from interested parties for the installation of a Rotary Evaporator with Vacuum pump & Chiller at School of Energy Materials, Mahatma Gandhi University Kottayam.*

**Tender Date: 14.03.2022**

The sealed envelope containing the tender shall be addressed to **Director, School of Energy Materials, Mahatma Gandhi University, Priyadarshini Hills-P. O, Kottayam- 686560**, and the tender shall reach the office of the undersigned not later than **11:00 am on 20/03/2022**. Tenders will be opened at **02:00 pm on 20/03/2022**.

### **Required Specifications**

Sl. No:	Items	Particulars	Specifications
1.	Rotary Evaporator with Vacuum pump & Chiller	Capacity	4 L heating bath with digital temperature display and carrying handles
		Heating Temperature	180°C
		Vacuum pump	1. Maintain an ultimate vacuum of 5 mbar or better 2. Maximum air displacement of 38LPM or above. 3. PTFE coated diaphragm pump 4. Supplied with solvent trap 5. Controlled by using a Manual controller

		Chiller	<ol style="list-style-type: none"> <li>1. Flow rate of 15LPM</li> <li>2. Inbuilt cooling reservoir of 4 Liter and above</li> <li>3. Resolution of 1 °C</li> <li>4. Cooling capacity of 750 W at 15 °C</li> <li>5. Temperature range: -10 °C to Ambient temperature</li> </ol>
		Other requirements	<ol style="list-style-type: none"> <li>1. Integrated safety lift-out function in case of power failure</li> <li>2. Locking button for fixing heating bath to avoid accidental changes of temperature settings</li> <li>3. Safety temperature circuit and dry run protection of heating bath</li> <li>4. Mechanical lift with end-point safety stop.</li> <li>5. Locking indicator to shows locked and unlocked position of the vapour tube.</li> <li>6. Device should have variable adjustable immersion angle and stroke of 120 mm.</li> <li>7. Single-handed manual lift handling, suitable for left and right-handed operators.</li> <li>8. Digital speed display with speed range of 5 - 300 rpm.</li> <li>9. Flask clamping mechanism with integrated push-off function for easy exchange of evaporation flasks</li> <li>10. High-efficiency condenser with 1500 cm<sup>2</sup> cooling surface - low space requirements.</li> <li>11. Low device voltage (24V) ensures user safety.</li> </ol>

		Warranty	3 years for Rotary Evaporator, Vacuum pump & Chiller
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Conditions

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1. The quoted price should be inclusive of all taxes/freight/Installation etc.
2. Custom/ Excise duty exempted price should be quoted.
3. The tenders should have at least three months validity period.
4. Brochure of different models quoted should be enclosed.
5. Warranty conditions, nearest service center details, user references, necessary supporting catalog, and demonstration should be provided.
6. The right to accept or reject the tender without assigning any reason rests entirely with the undersigned.
7. If the product has a valid DGS&D rate contract it may be quoted
8. If the rate of receipt and opening of the tender is declared a holiday the next working day shall be the last date for the purpose.



Prof. Dr. Sabu Thomas  
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