

Department of Chemistry
University of Kerala, Kariavattom,
Thiruvananthapuram, Kerala, India – 695581, Ph: 91 471 2308682

TENDER NO- DC/SERB/003/2023

Dated: 26-09-2023

E-Tender Notice

Principal Investigator, SERB project SERB/2023/000179, Department of Chemistry, University of Kerala, Kariavattom, invites tenders for the purchase of a Rotary Evaporator with following specifications.

| | |
|--|---|
| Start Date and time for submission of tender online | 21.10.2023 : 5pm |
| Last date and time for submission of tender online | 13.11.2023 :3 pm |
| Last date and time for submission of tender offline | 15.11-2023 :3pm |
| Date and time of opening of tender (technical bid) | 15.11.2023 :4pm Financial bid will be opened after technical evaluation |
| Cost of tender document | Rs: 1062 |
| Validity of tender | 120 days |
| Hard copies of the sealed tenders to be submitted to the office of | PI-SERB project SPG/2023/000179, Department of Chemistry, University of Kerala, Kariavattom Campus, Thiruvananthapuram-695581 |

Technical Specifications for Rotary Evaporator, Vacuum Pump and Chiller

The rotary evaporator with following specifications should be delivered and installed at the Department of Chemistry.

| Parameters | Specifications |
|-------------------------------|--|
| Operating Voltage / Frequency | 220-240 V, 50 Hz |
| Heating Power Consumption | 1300 W |
| Display | Digital LCD display of rotation speed and bath temperature should be there and temperature should be enabled to be set and must be actual. Stand-by-mode with display of residual heat should be available |

| | |
|--|---|
| Hand lifting | Hand lift option should be made available |
| Rotation Speed | 10-280rpm (minimum), separate knobs should be provided for temperature and rotation setting. Locking facility for accident free operation should be available |
| RB sizes | 50-5000 mL RB should be accommodated with a single joint size. 1000 mL evaporation and 1000 mL receiving flasks should be provided. Necessary plastic clips (atleast 10) for hooking in 24/29 RB's should be provided |
| Vacuum seal material | PTFE |
| Panel | Should be detachable for using outside fume hoods safely |
| Heating bath temperature and accuracy and volume | Ambient -210 °C, accuracy +/-1 °C. Bath volume should be 4 Litres or more and bath should have metal base |
| Condensor | Vertical, 1400cm ² surface area with marking |
| <p>Grease-free caps should be provided to avoid stuck-up issues</p> <p>Clamping sleeve and gas washing bottle (solvent-trap) with necessary tubes should be provided</p> <p>The system should have necessary certifications</p> <p>Power Cable to meet protection class IP 67 to protect the bath from Short-circuits and corrosion.</p> | |

Technical Specifications for Vacuum pump

| Parameters | Specifications |
|--|--|
| Pump type | Two stage chemical resistance diaphragm pump |
| Operating Pressure | Ultimate vacuum 10+/-2mbar |
| Tubing material | High quality silicone |
| Power input | 80W |
| <p>The pump should have necessary certifications</p> <p>Required spares should be provided</p> | |

Technical Specifications for Chiller

| Parameters | Specifications |
|-----------------------|------------------|
| Operating Temperature | -10° C to 100 °C |
| Temperature Accuracy | +/- 0.2° C |
| Cooling capacity | 800 watts@ 20°C |
| Reservoir Capacity | 3-4Ltrs or more |

| | |
|---|---|
| Flow rate | 8L/Min or more |
| Display of Temperature and water level | Either LED display or audible indication of temperature and water level |
| Compressor | Should be of standard quality (R134a refrigerant preferred) |
| Power supply | 220V/50Hz |
| <p>The system should meet the standards</p> <p>Necessary tubing and accessories should be provided</p> <p>The chiller should have necessary certifications</p> <p>Immediate service should be available incase of trouble</p> | |

General Conditions:

1. The tender shall be submitted in the two bids viz. Technical Bid and Financial Bid. Only those qualified in technical bid will be eligible for participating in financial bid.
2. The bidder should be a manufacturer or their dealer specifically authorized by the manufacturer to quote on their behalf for this tender as per Manufacturer Authorization Form and Indian agents of foreign principals, if any, who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the “Technical Specification”.
3. The price should be inclusive of all taxes, duties, transportation, insurance, installation etc. Nothing extra will be paid in addition to the quoted rate.
4. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof.
5. The item should be supplied and installed within eight weeks after the release of purchase order.
6. Payment will only be made after satisfactory delivery, installation and demonstration of the equipment.
7. **Compliance Statement:** Along with the technical details provide a tabular column indicating whether the equipment quoted by you meets the specifications by indicating 'YES' or 'NO'. If 'YES', support the claim by providing original brochures.
8. **Reference:** Names of Institutes with contact person and telephone/email where similar equipment supplied by you in India [Preferably South India] shall be mentioned in the statement. Performance certificate (minimum 3) and users list should be provided.
9. **Validity of tender:** Tender submitted shall remain valid at least for 120 days from the date of opening the tender. Validity beyond 120 days, from the date of opening of the tender shall be by mutual consent.
10. **Delivery and installation:** Proposed delivery schedule should be mentioned clearly. Delivery and installation and training should be made for the Department of Chemistry, University of Kerala,

Kariavattom Campus, Thiruvananthapuram without extra cost. University of Kerala will provide customs duty exemption certificates if required.

11. **Service facility:** Supplier should mention their details of service setup and manpower in Thiruvananthapuram who are responsible for after sales support.
12. The quoted items should be under **comprehensive warranty for 3 years. This includes the rotary evaporator and vacuum pump and if possible, for chiller (if not possible atleast 1 year warranty should be promised).**
13. The undersigned reserves the right to reject any or all of the tenders received without assigning any reason thereof.

For any queries please contact, Dr. Ani Deepthi, PI-SERB (SPG/2-23/000179) and Assistant Professor, Department of Chemistry, University of Kerala, Thiruvananthapuram 695581, Ph. No. 9447151002, E-Mail: anideepthi@gmail.com

Documents to be Uploaded

1. Signed Compliance Matrix
2. Detailed Technical Brochure
3. Undertaking of support for warranty period.
4. BoQ

Dr Ani Deepthi

Principal Investigator

SERB/SPG/2023/000179