KAC-Chem-MRIP-001

OFFICE OF THE PRINCIPAL

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No. KAC/Chem/MRIP-001/2025 Date 08/08/2025

QUOTATION CALL NOTICE

Sealed quotations are invited from reputed companies/suppliers for the procurement of (1) rotary evaporator (vertical model) (2) diaphragm vacuum pump, (3) digital temperature controller, (4) low temperature water circulator (5) Laboratory refrigerator, (6) Ice flake machine (7) Nitrogen gas with cylinder with pressure regulator and (8) UV light lamp with UV Chamber.The quotations must reach the undersigned by 5.00 P.M. on 21st August 2025. Quotation in separate envelopes of technical and financial bids kept in one sealed outer envelope should be submitted to the undersigned as per the specifications given. The undersigned reserves the right to cancel/reject all or any one of the quotations without assigning any reasons thereof. For details please visit our website www.kac.edu.in

Girija Prasad Mishra

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"Principal Investigator (MRI)"
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Terms and Conditions

1. The technical and financial bids must be kept in separate sealed envelopes inside one sealed envelope.

2. The vendor should either be the original manufacturer or an authorised distributor/dealer.

3. The vendor should have proven ability for the supply of the listed equipment to reputed organisations, including government departments. Copies of the purchase order and supply order should be included as proof.

4. The bidder should have sufficient service back-up at Cuttack/ Bhubaneswar/Berhampur in related works, and documentary proof of the same may be submitted.

5. The vendor should have at least five years of experience and focus on related business, and documentary proof of the same must be submitted.

6. The vendor should have sound financial standing. Audited balance sheet of the last three financial years certified by a Chartered Accountant should be provided as proof of it.

7. The firm must submit an Undertaking on its letterhead that they have not been blacklisted by any State Government/Central Government/PSU Department in India.

8. Original printed brochures and original specification sheets (from equipment manuals) directly obtained from the manufacturer must be enclosed along with supporting data.

9. The brochures must indicate all the parts mentioned in the technical bids.

10. Only those quotations will be considered valid that submit a quote for the entire four components: (1) Rotary evaporator (vertical model), (2) Diaphragm vacuum pump, (3) digital temperature controller, and (4) Low temperature water circulator.

11. Each product must have a minimum of Two years warranty.

12. The Principal Investigator reserves the right to accept or reject any or all the quotations without assigning reasons thereof.

13. The manufacturing firm must have ISO 9001: 2008 certification and CE certification or better.

14. The hard copies of printed original catalogues must be submitted along with the quotation.

FINANCIAL BID MUST CONTAIN THE FOLLOWING:

- The final Prices must include all taxes, delivery and installation.
- Guarantee or warranty conditions must be clearly specified.
- Validity of quotation must be at least 120 days from the date of submission.
- Mode of payment must be specified.
- Cost of installation & training should all be included in the above quoted prices.
- Final payment will be made after installation, demo by the service personnel appointed by the supplier.

TECHNICAL SPECIFICATIONS FOR VERTICAL ROTARY VACUUM EVAPORATOR, VACUUM PUMP, CHILLER AND DEEP FREEZER

A. Rotary evaporator (Vertical model)

- Lift Type: Manual
- Condenser Type: Vertical
- Cooling Surface Area: 1500 cm^2
- Rotation Speed (RPM): 20-320
- Vapour Tube: Single piece with Sleeve for Easy Removal
- Integrated Combi-Clip: Yes
- Suitable flask size (ml): 50-5000 ml
- Rotation speed setting: LED Display
- Motor Power (W): 60
- Heating Capacity (W): 1300
- Temperature Range (°C): 20 – 210
- Temperature Accuracy (°C): 1
- Overheat Protection: Safety cut off over +5 (°C)
- Temperature Setting: Digital LED
- Temperature Control: Electronic PID Control
- Secondary Protection: Cut off 250°C
- Material Heating Bath: Ceramic Coated
- Volume Heating bath (L): 4.5L - Dia 255 mm, Suitable 50- 5000ml
- Bath Position: Flexible to extend, to suit flask size
- Sealing ring: Graphite filled PTFE
- Forward & Reverse Motion (Clockwise & Anti Clockwise) of Evaporation Flask
- Timer: 0 to 99 minutes
- Power Supply: 230 VAC, 50Hz
- Sample Flask : 1L, Pear Style
- Receiving flask: 1L, round style with ball joint.

B. VACUUM PUMP:

- Two-stage oil-free diaphragm vacuum pump made from chemically resistant material.
- Number of heads / stages: 2/2
- Max. Pumping speed at 50 Hz: min. 2 m^3/h or 1.2 cfm
- Ultimate vacuum (abs.): min. 9 mbar/ 7 torr
- Ultimate vac. (abs.) with gas ballast: min. 14 mbar/11 torr
- Ambient temperature range (operation): 10-40 °C
- Max. Back pressure (EX) (abs.): min. 1.1 bar
- Inlet connection (IN): 10 mm
- Outlet connection (EX): 10 mm
- Rated motor power: min. 0.18 kW
- Rated speed at 50/60 Hz: min. 1440 min^{-1}
- Noise level at 50 Hz, typ.: max. 45 dBA

C. DIGITAL VACUUM CONTROLLER

- Measurement Range: 0 to 1000 mbar
- Measurement Accuracy: +/- 1 mbar
- Vacuum Connection: 10 mm
- Ambient temp. range (operation) +10 °C to +40 °C
- Max. permissible temp. of gaseous media: + 80 °C
- Supply: 230 V AC, 50 Hz.

D. LOW TEMPERATURE WATER CIRCULATOR

- Working temperature range : -20°C to ambient
- Precise temperature control of ± 0.1°C
- Flow: at least12 L/min
- Pump pressure: 0.7 bar
- Cooling capacity up to 500 watts @0°C
- Bath capacity: at least 4.5 L
- Fluid level indicator.
- Low flow shut off and high/low temperature alarms.
- Digital display

E. LAB REFRIGERATOR

Model No.	RLR-200	RLR-300	RLR-400
Net Capacity (Litres)	200	300	400
Cooling Type	Frost Free		
Temperature Range	2° C – 8° C		
No. of Door (Glass)	1	1	1
Baskets / Shelves	4 (Adjustable)		
External Dimensions (mm)			
Width	533	584	610
Depth	533	584	584
Height	1575	1702	1981
Refrigerant Gas	134a (CFC Free)		

Supply: 220-240 Volts 50 Hz Single Phase.

F. ICE FLAKE MACHINE

Ice Flake output	25 to 196 kg / day or more
Temperature	-5°C to -8°C
Construction	Corrosion resistant stainless Steel
Insulation	PU foam
Refrigerant	R22A / R 404A
Cooling system	Water-cooling or Forced air cooling
Water connection	3 / 4" BSP
Collecting Bin Capacity	Up to 40 KG
Operation	Fully automatic
Flake ice thickness	1.8 to 2.5mm
Noise level	55dBA – 3m
Heat emission	2.6 kw
Safety features	Over loading protection / water shortage auto detection
Certification	CE marked
Power Supply	220 Volts

G. **NITROGEN GAS CYLINDER WITH PRESSURE REGULATOR**

- Body material = Aluminium/ Stainless steel/ mild steel (Grey colour
- Cylinder capacity = 25 -30 liters
- Working Pressure= low and high (as per application)
- Usage= storage gas (Laboratory)
- Adjustable working pressure gauge
- Material-Brass Usage-Laboratory
- Automation grade-Automatic
- Refilling details: connection number/card
- Warranty = 1 year or better
- Installation with regulator and pipe system needed.

H. **UV CHAMBER WITH UV LAMP**

(a) UV CABINET:

- Chamber capacity 20 lit for TLC
- Cabinet material stainless steel or mild steel
- Include a safety device to protect against accidental radiation exposure such as UV – Protection glass outside the chamber or magnetic door latch for a tight steel

(b) LAMP:

- typically Work with AC 220 V, 50 Hz
- Wattage ranging from 8W to 20 W
- Includes both 254 nm and 365 nm
- Average life span of the lamp should be 8,000 hrs. or more

Note: All parts must conform to the Supply Voltage (V/Hz) of 230/50.

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