

**Centre for Renewable Energy and Materials**  
**Department of Chemistry Building**  
**University of Kerala,**  
**Kariavattom, Thiruvananthapuram-695581**  
**Email:smashibli@yahoo.com**

**QUOTATION NOTICE**

Competitive quotations are invited from reputed firms / manufactures for the supply, installation and commissioning of the following instruments / equipments as detailed below.

Tender Notification Date	: 20/01/2020
Last Date of Issuing Tender Document	: 04/02/2020
Last Date of Receiving Tender/Bid Closing	: 04/02/2020
Date and Time of Opening Tender	: 04/02/2020, 3.00 pm

**Documents to be Submitted:** Data sheet of the items and Compliance statement, Details of warranty, Address and details of the firm, Financial bid and any other relevant information.

**Item No: 1**

**Ref. No. CREM/Eq/PUR/3/2020**

**Equipment Name: Dehydrator-Heating System with Oven & Heater for Biological Applications**

**Quantity: 1 No.**

**Technical Specifications**

MOC	: Full SS including trays and inside (Fully food grade)
No. of trays	: 12
Voltage	: 220 V-240 V, 50 Hz, Single phase
Height	: 39.5"
Length	: 26.5"
Width	: 25.5"
Tray size	: 32" × 16"
Total watts	: 1360 W
Power consumption	: 1.36 U/H
Weight	: 65 Kg

Power consumption : 2.7 U/H  
Adjustable flow and precision temperature control  
High and low alarm  
Timer

**Item No: 2**

**Ref. No. CREM/Eq/PUR/4/2020**

**Equipment Name: Machinery for sheet metal bending**

**Quantity: 1 No.**

**Technical Specifications**

Power : Electric  
Sheet Material : MS  
Max Bending Radius : 50-100 mm  
Phase : Single  
Weight : 1500 kg  
Voltage : 240 V  
Frequency : 50 Hz  
Material : Steel  
Automatic Grade : Automatic

**Item No: 3**

**Ref. No. CREM/Eq/PUR/5/2020**

**Equipment Name: Filtration, Pumping and Spray System for Electroplating, Etching and Developing (Three Channel)**

**Quantity: 1 No.**

**Technical Specifications**

Driven Type : Magnetic (vertical direct drive preferred)  
Flow Rate : As required  
Frequency : Regular  
Material : PP  
Filter : Cartridge type  
Features : Skid mounted compact design, Highly reliable, Forward and reverse flow design, Batch and continuous operation design

**Item No: 4**

**Ref. No. CREM/Eq/PUR/6/2020**

**Equipment Name: Coating Thickness Guage**

**Quantity: 1 No.**

**Technical Specifications**

Suitable for ferrous as well as non ferrous metals

Auto detection of substrates

Coating thickness from 0 to 1250 micro meter

1µm resolution

**Item No: 5**

**Ref. No. CREM/Eq/PUR/7/2020**

**Equipment Name: IR thermometer**

**Quantity: 1 No.**

**Technical Specifications**

Temperature : -50 °C to 800 °C

Repeatability : ±1 °C (± 2 °F)

Resolution : 0.5 °C / 1 °C / 1 °F

Response Time : 250 ms

Auto Power OFF : 10 sec

C/F SELECTABLE : Yes

High / Low Alarm : Yes

**Item No: 6**

**Ref. No. CREM/Eq/PUR/8/2020**

**Equipment Name: Tapping Machine**

**Quantity: 1 No.**

**Technical Specifications**

Size : From 3 mm to 12 mm

Type : Automatic

For Material : SS

Motor Speed : 1440 rpm

Motor Power : 75 HP

With accessories like motor drill chuck switch and wiring etc.

**Item No: 7**

**Ref. No. CREM/Eq/PUR/9/2020**

**Equipment Name: Hydrothermal Bomb Heating Unit**

**Quantity: 1 No.**

**Technical Specifications**

- **Type:** Vertical, externally rectangular in shape, with cylindrical inner chamber, low thermal mass model, electrically operated.
- **Outer Chamber:** Fabricated from mild steel sheet sections, with necessary reinforcement for mechanical rigidity. The structural work should be finished in heat resistant paint.
- **Inner Chamber:** Assembled from combination of high temperature resistant ceramic fibre board and blanket.
- **Mode of Heating:** By spirally wound A1 Grade Kanthal Heating Coils held in position by suitable refractory supports. Chromel/Alumel sensor should be provided.
- **Temperature Control:** By a Thyristor Power Control Unit coupled with a Digital indicating P.I.D Temperature Controller.
- **Control Cubicle:** A Compact Control Cubicle should be provided housing: P.I.D. Temperature Controller, Switches and Indicators, Safety Fuse, Input, Output, Earth and Connecting leads etc.
- **Working Chamber area:** 200 mm × 200 mm × 200 mm
- **Maximum Temperature:** 800 °C or higher, Voltage 230 V, 1 phase, 50 Hz, AC power Rating 2.5 kW

**Tender Inviting Authority:** Director, Centre for Renewable Energy and Materials, University of Kerala, Kariavattom Campus, Thriuvananthapuram, Kerala-695581.

**Terms and Conditions**

1. Incomplete & conditional quotations and quotations received after the due date will be summarily rejected without assigning any reasons thereof.
2. The Bidder shall quote the price in clear terms and the specification of products. The rates quoted must be inclusive of all taxes, cost of supply at the site, warranty and installation charges etc.

3. The price should be quoted only in Indian rupees. The bid shall be typed and signed by the bidder.
4. All the documents mentioned above shall be submitted without fail.
5. **Validity:** The Bid will be valid for 90 days from its date of opening. Further extension can be done by mutual consent.
6. **Delivery:** The item should be delivered at the Centre for Renewable Energy and Materials, University of Kerala, Kariavattom Campus.
7. **Installation and commissioning:** The items shall be installed and commissioned at the Centre for Renewable Energy and Materials, University of Kerala, Kariavattom Campus. All incidental expenses should be borne by the supplier.
8. **Payment:** The University will release the payment only after inspecting the equipment and satisfy that the supply is as per the requirements. The payment will be made after successful completion of the supply and producing invoice in duplicate.
9. **Warranty/Guarantee:** The supplier shall guarantee to repair/replace the items or its part – if found defective within the warranty period. The entire expenditure for repair/ replace the item in this regard shall be borne by the supplier.
10. **Service facility:** Supplier should mention their details of service setup and manpower in Trivandrum who are responsible for after sales service.
11. In case of the dispute arises, the decision of University authority shall be final and binding on bidders.
12. The undersigned reserves the right to reject or accept any or all the tenders received fully or partly without assigning any reason thereof.

13. General rules relating to the purchase of materials/equipment will also applicable to this tender.

14. Those who are interested should send their bid in a sealed cover superscribed with "Quotation for Ref. No: (.....) Equipment Name: (.....)" and addressed to The Director, Centre for Renewable Energy and Materials, Department of Chemistry Building, University of Kerala, Kariavattom Campus, 695581, Thiruvananthapuram, Kerala.

15. Those firms who are interested to quote more than one instrument should sent individual quotations for each item separately.

16. The bids shall be opened at the office of the Director, Centre for Renewable Energy and Materials, University of Kerala, Kariavattom Campus on Date mentioned above. If the above date of opening tender happens to be on a holiday or due to any other valid reason, the tender opening process will be done on the next working day or the day fixed by the undersigned.

  
20/04/2020  
**Hon. Director**  
Centre for Renewable Energy and Materials  
University of Kerala, Kariavattom Campus  
Thiruvananthapuram - 695 581

Centre for Renewable Energy  
and Materials  
University of Kerala

**S.M.A. SHIBLI**  
Professor  
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