

## **MAHATMA GANDHI UNIVERSITY**

Tender No. School of Energy Materials/e-TENDER/GB/2020

## **NOTICE INVITING TENDER**

Dated: 20/11/2020

(Tender No School of Energy Studies/e-TENDER/Glovebox/2020)

The Registrar, Mahatma Gandhi University, Kottayam for and on behalf of Director, School of Energy Materials, Mahatma Gandhi University invites online bid (technical and financial bid) for supply and installation of the Scientific Equipment COMPACT VACUUM GLOVE BOX WITH HUMIDITY PURIFICATION SYSTEM from reputed firms. The period of the tender is 180 days from the date of tender.

| 1 | Name of the scientific equipment                     | COMPACT VACUUM GLOVE BOX WITH HUMIDITY PURIFICATION SYSTEM   |
|---|--|--|
| 2 | Earnest money deposit (EMD)                          | Rs. 9000/-   |
| 3 | Tender submission fee                                | Rs.1500 + GST (0.2% of the cost of tender rounded to the nearest multiple of 100, subject to a minimum of 400/- and a maximum of 1500/- + VAT as per store purchase rules) |
| 4 | Period of supply and installation                    | Within 15 days from the L/C opening date   |
| 5 | Mode of submission of Bid                            | Online   |
| 6 | Tender Documents                                     | Can be downloaded from the website www.etenders.kerala.gov.in  |
| 7 | Last date and Time of submission of tender by online | 04/12/2020 4 PM  |
| 8 | Date and time of opening of technical bid            | 07/12/2020 ,10AM   |

General tender documents and tender schedule can be downloaded in  $A_4$  plain size paper free of cost from the website www.etenders.kerala.gov.in.

Documents to be submitted along with bid through online:

| Sl. | Through online   |
|-----|--|
| No  |  |
| 1   | Scanned copy of duly filled e-payment form                                   |
| 2   | Scanned Copy of duly filled preliminary Agreement in stamp paper of Rs.200/- |
| 3   | BOQ  |

| 4 | Scanned copy of other certificates required, if any, for tender acceptance |  |  |
|---|--|--|--|
| 5 | Scanned copy of valid registration certificate/dealership certificate      |  |  |

## **Special Conditions**

- 1. Onsite training has to be arranged by the vendor. Training should include operation, software applications, analysis, handling and maintenance of system.
- 2. List of Indian and abroad users for quoted model.
- 3. Laboratory floor space, electrical power requirements, earthing, room temperature/ humidity requirements etc. should be mentioned appropriately.
- 4. Complete set of service and operation manuals for diagnosis, trouble shooting, maintenance and electronic circuitry (soft copies).
- 5. The Delivery Schedule, Payment Terms & Warranty/Guarantee etc must be clearly indicated in the technical bid.
- 6. Details AMC and calibration of the instrument.
- 7. All party are advice to quote their latest and higher version instrument with declaration of technical and spare and consumable backup more than 15 Years
- 8. Date of launching of quoted model.
- 9. The quoted price in BOQ should include all taxes/ GST, shipping, installation training charges, etc)

The bids shall be opened at the date and time specified. Further details can be had from the office of The Director, School of Energy Materials, Mahatma Gandhi University, Kottayam, Kerala-686560 on all working days during working hours. **Contact No.7907977308 email:** <a href="mailto:sabuthomas@mgu.ac.in">sabuthomas@mgu.ac.in</a>.

The bidders are advised to submit their bid well in advance to avoid any kind of network issues.

The undersigned reserves the right to reject any or all the tender without assigning any reason whatsoever.

Registrar

## Specifications

The glove box with auto-moisture-purification system, which can provide an oilless, dry gas environment with moisture level lower than 1 ppm for research in materials science, chemistry, semiconductor, Li-ion cells and related industries. The glove box's cabinet forms a closed working environment with the gas purification system. The tank is filled with an inert gas (Nitrogen/ Argon) and circulated to remove the active material, so that the system maintains a high clean and high purity inert gas environment.

| Sl. No |   | Particulars  |
|--------|---|--|
| 1      | Glove box chamber/cabinet                                       | <ul> <li>Dimensions: 780mm(L) x 700mm(W) x 650mm(H)</li> <li>Material: all stainless steel structure (Type 304), thickness: 3mm</li> <li>Window: safety toughened glass, wearresistant, anti-corrosion, good light transmittance, sealing ring adopts</li> <li>Max. Positive Pressure: 810 Torr (1.1 atm)</li> <li>Max. Vacuum Level: 0.5 Torr</li> <li>Leakage rate: ≤ 0.01vol% / h</li> <li>The multi hole power supply terminal block</li> <li>The cabinet is equipped with anti reflection lighting energy-saving lamp, with soft light</li> </ul> |
| 2      | Antilock chamber  | <ul> <li>Cylindrical shape</li> <li>240mm(ID) x 260mm(L)</li> <li>Sliding tray</li> <li>Shaft lock large transition door</li> </ul>  |
| 3      | Control system  | <ul> <li>Arrangements for automatic pressure control and monitoring inside the glove box shall be provided.</li> <li>Pressure control- Foot pedal</li> </ul>   |
| 4      | Circulation system<br>(Purification and<br>regeneration system) | The main engine system - control air circuit solenoid valve group, PLC control, circuit, circulating pump, purification and display, and purifier  |

|    |                                     | <ul> <li>Automatic moisture and oxygen remove to &lt;1 ppm</li> <li>Regulating device</li> <li>Working gas – N<sub>2</sub>/Ar</li> <li>Purification column</li> <li>Purification valve</li> <li>Regeneration unit</li> </ul> |
|----|-------------------------------------|--|
| 5  | Display system                      | PLC touch screen- English system   |
| 6  | Gloves                              | Butyl rubber gloves  |
| 7  | PLC oxygen analyzer                 | <ul> <li>Environment 0-1000ppm</li> <li>Error ± 1%ppm</li> <li>Temperature 0 °C -50°C</li> </ul>   |
| 8  | PLC water analyzer                  | <ul> <li>Environment 0-500ppm</li> <li>Error ± 1%ppm</li> <li>Temperature 0 °C -50°C</li> </ul>  |
| 9  | Automatic cabinet cleaning function | The box body should clean automatically  |
| 10 | Organic solvent adsorption system   | • Stainless steel 304  |
| 11 | Water probe and protection device   | • For long term detection  |
| 12 | Vacuum pump and fittings            |  |

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