



## MAHATMA GANDHI UNIVERSITY

MGU/IUCOFSA/ Etender/2023-24/01

13/10/2023

### **NOTICE INVITING TENDER**

The Registrar, Mahatma Gandhi University, Kottayam for and on behalf of Hon. Director, Interuniversity Centre for Organic Farming and Sustainable Agriculture (IUCOFSA), Mahatma Gandhi University invites online bid (technical and financial bid) for supply and installation of the Scientific equipment “**Double beam Atomic absorption spectrophotometer and accessories**” from reputed firms.

1	Name of the scientific equipment	<b>Double beam Atomic absorption spectrophotometer and accessories</b>
2	Earnest money deposit (EMD)	Rs...11,000/-
3	Tender submission fee	Rs. 1,700./-
4	Period of supply and installation	Within 90 days from the PO given
5	Mode of submission of Bid	Online
6	Tender Documents	Can be downloaded from the website <a href="http://www.etenders.kerala.gov.in">www.etenders.kerala.gov.in</a>
7	Last date and Time of submission of tender by online	13/11/2023, 12.00 pm
8	Last date and Time of submission of relevant documents by speed post	13/11/2023, 12.00 pm
9	Date and time of opening of technical bid	15/11/2023, 12.00 pm

General tender documents and tender schedule can be downloaded in A<sub>4</sub> plain size paper free of cost from the website [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in). Duly filled up and signed tender schedule along with relevant documents should also be sent to “**Dr. Mahesh Mohan, Hon. Director, Interuniversity Centre for Organic Farming and Sustainable Agriculture (IUCOFSA), Convergence Academia Complex, Mahatma Gandhi University, Kottayam, Kerala Pin-686560**”, by speed post so as to reach before the date and time specified. The cover containing the documents should super scribe the name of the scientific equipment, tender number, and last date of submission of tender.

**Documents to be submitted along with bid through online/speed post**

<b>Sl.No</b>	<b>Through online</b>	<b>Through speed post</b>
1	Scanned copy of valid registration certificate/dealership certificate	Copy of valid registration certificate attested by a gazette officer/ dealership certificate
2	Scanned copy of duly filled e-payment form	Duly filled e-payment requisition.
3	Scanned copy of other certificates required, if any, for tender acceptance	Copy of other certificates required, if any, for tender acceptance.
4	Scanned Copy of duly filled preliminary Agreement in stamp paper of Rs.200/-	Preliminary Agreement in original
5	BOQ	Not Required

**Specification for Instrument**

**Double beam Atomic absorption spectrophotometer and accessories**

**\*Specifications:-**

- Optical system: Double beam
- Wavelength range: 180-900 nm
- Grating Holographic diffraction with 1800 lines/mm
- Mono chromator : Czerny-Turner type with 2 focal lengths at 355.8 and 345.6 mm .
- Wavelength repeatability:  $\pm 0.1$  nm
- Sensitivity (Cu) : approx. 0.9A at 5 ppm, RSD $\leq$ 0.5%
- Wavelength accuracy:  $\pm 0.3$  nm
- Bandwidth :0.1; 0.2; 0.4; 0.7; 1.4; 2.0 nm
- Detector: Wide range UV sensitive photomultiplier tube
- Lamp Turret: Automated 8-lamp with independent lamp power supply for each lamp,
- Element: Copper, Zinc, Cadmium ,Led & Copper.
- Background Correction: Deuterium (D2) Background Correction and Self-absorption Background Correction.
- Burner-Nebulizer-System: 100mm burner for air/acetylene
- Spray Chamber : PPS (Polyphenylene Sulfide) spray chamber
- Gas Controls: Programmable gas control features software-controlled gas flows with automatic setting of gas flows for each element.
- Safety features: Gas leak sensor, Flame monitor sensor, Auto gas cut off, Auto ignition
- Operating Software & Suitable Compressor should be included with the instrument.

- The firms should have a service center in Kerala.
- Manufacturer's authorization & User list with address of similar products should be attached with tender .

#### Future Upgradable Options (At extra cost)

- Auto Sampler - Corrosion resistant sample tray is consist of 85 positions
- Hydride system for the determination of As, Se,Sb, Sn, Te, Bi and Hg at low microgram per liter
- 50mm burner for both air/ acetylene or nitrous oxide /acetylene operation
- Additional lamp's for other elements

\* PC, Acetylene cylinder with regulator and SS fume hood available at the Lab.

#### Warranty

- There must be 2years' warranty for the whole instrument.

#### Necessary documents: -

1. The quoted model should be of latest technique
2. Please declare the year of launch with proof.
3. Please submit the list of minimum 5 users of the quoted model or at least 5 performance certificates of quoted model in India.
4. Please submit point wise compliance statement with the offer with documentary proof.
5. Committee may ask the vendors to arrange for full demonstration of the equipment nearby customer place in and around Kerala region and based on the performance of the equipment, the committee will take a decision.

#### Special Conditions

1. Instrument should be supplied with necessary manuals or Quotation should include the detailed description of each module with circuit diagram.
2. Complete set of service and operation manuals for diagnosis, trouble shooting, maintenance and electronic circuitry (hard and soft copies).
4. The Delivery Schedule, Payment Terms & Warranty/Guarantee etc must be clearly indicated in the technical bid. The bids shall be opened at the date and time specified. Further details can be had from the office on the undersigned on all working days during working hours. The bidders are advised to submit their bid well in advance to avoid any kind of network issues. If relevant documents through speed post are not submitted with in time, the tenders will not be considered. The undersigned reserves the right to reject any or all the tender without assigning any reason whatsoever.

*Sd/-*

*Hon. Director, IUCOFSA*