



MAHATMA GANDHI UNIVERSITY

MGU/IUIC/ Etender/2022-23/01

15/11/2022

NOTICE INVITING TENDER

The Registrar, Mahatma Gandhi University, Kottayam for and on behalf of The Hon. Director, Inter University Instrumentation Centre, Mahatma Gandhi University invites online bid (technical and financial bid) for supply and installation of the Scientific equipment Sputter Coater from reputed firms.

1	Name of the scientific equipment	<i>Sputter Coater</i>
2	Earnest money deposit (EMD)	Rs. 10,000/-
3	Tender submission fee	Rs. 1,500/-
4	Period of supply and installation	Within 90 days from the LC 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	25/11/2022, 4.00 pm
8	Last date and Time of submission of relevant documents by speed post	26/11/2022, 12.00 pm
9	Date and time of opening of technical bid	26/11/2022, 4.00 pm

General tender documents and tender schedule can be downloaded in A₄ plain size paper free of cost from the website www.etenders.kerala.gov.in. Duly filled up and signed tender schedule along with relevant documents should also be sent to “**The Hon. Director, Inter University Instrumentation Centre, 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

Sl.No	Through online	Through speed post
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 Gold Sputter Coater

FESEM applications need extremely thin, fine-grained, uniform coatings to eliminate charging and to improve contrast on low density materials.

Technical Specifications:

- 1) **Target : Gold (Au)**
- 2) **Sputter Head : Low voltage discharge technique with a magnetron electrode for high efficiency.**
- 3) **Chamber Size : It should have the hemispherical chamber size of 80-100 mm (d) * 100 mm(h) and transparent.**
- 4) **Fixed Gold Target Size : 20-40 mm (d)* 0.1 mm (t)**
- 5) **Specimen Stage Size : 50-80 mm (d) aluminium circular stage. The stage should have at least 12 pin holes on numbered positions to hold pin stubs of dimension 12.7 mm(d) with 3.2 mm(h) pin. The specimen stage height should be adjustable (10-50 mm)**
- 6) **Sputtering Time : 0.5 min/ 1 min/ 2min/3min**
- 7) **Vacuum pump : Compatible vacuum pump should be offered along with coater for smooth operation.**
- 8) **Precision Thickness Control : Thickness optimised for FESEM application with a manual or microprocessor thickness controller , which has a resolution of 0.1 nm or better.**
- 9) **Pressure : 4 Pa or better. Analogue metering should be provided to monitor pressure and current.**

- 10) Sputter supply : Microprocessor based, safety interlock, constant current control independent of vacuum and it should be capable of controlling current from 10 m A to 40 mA.**
- 11) Service support : Kindly ensure accessibility to service engineers for immediate attendance to periodic services and emergency breakdowns.**
- 12) Essential Spares: Please include the pricelist for the most essential spares for the uninterrupted operation of the coater.**

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/-

The Hon. Director