



Mahatma Gandhi University, Kerala

No: MGU/BIOSCIENCE/2/2018/P&D1

Dated:11/7/18

**NOTICE INVITING TENDER**

(Tender No: MGU/BIOSCIENCE/2/2018/P&D1)

**The Registrar, Mahatma Gandhi University, Kottayam** invites online bid (technical and financial bid) for Supply and Installation of **ACCESORIES for PREPARATIVE cum ANALYTICAL HIGH PERFORMANCE LIQUID CHROMATOGRAPHY SYSTEM** of the University from reputed firms.

1	Name of the equipment	Supply and Installation of <b>ACCESORIES for PREPARATIVE cum ANALYTICAL HIGH PERFORMANCE LIQUID CHROMATOGRAPHY SYSTEM</b>
2	Earnest money deposit (EMD)	<b>Rs. 13000/-</b>
3	Tender submission fee	<b>Rs. 2000 +GST</b> <u>Rule as per SPM</u> [ Above `10.00 lakh :- 0.15% of the cost of tender rounded to the nearest multiple of 100, subject to a maximum of ` 25000/- + VAT as applicable, 50% of the cost of the original copy, upper rounded to the nearest multiple of 100 + VAT as applicable ]
4	Period of supply and installation	Within 90 days from the L/C opening date
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	<b>26.7.18 2 PM</b>
8	Last date and Time of submission of relevant documents by speed post	<b>27.7.18 4 PM</b>
9	Date and time of opening of bid opening	<b>28.7.18.2PM</b>

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 The Registrar, M.G. 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 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 dealership certificate.	Copy of valid 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

#### **Special Conditions**

1. The quoted Price should be inclusive of all taxes/freight/Installation etc. Customs / Excise Duty Exempted price should also be quoted
2. Scanned copy of brochure of different models quoted should be enclosed
3. **Warranty, AMC conditions**, nearest servicing centers details, user reference and supporting catalogues should be provided (hard and soft copies).
4. If the product has a Valid DGS & D rate contract , it may be quoted
5. The Delivery Schedule, Payment Terms & Warranty/Guarantee etc must be clearly indicated in the technical bid.

The bids will be opened at the date and time specified. Further details can be had from the *Administration B4 Section* 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/-

REGISTRAR

## **SPECIFICATIONS**

### **THREE ACCESORIES for PREPARATIVE cum ANALYTICAL HIGH PERFORMANCE LIQUID CHROMATOGRAPHY SYSTEM**

#### **1. SHAKING INCUBATOR**

- Temperature range and accuracy 5°C to 60°C  $\pm$  0.5°C
- Internal volume 215 L
- Platform size 580mm x 600 mm
- Clamps to cover the platform completely
- Clamps should be a combination of 250 mL (25%), 1000 mL (25%) , 500 mL (50%)
- Maximum shaking capacity 250mL x 33, 500 mL x 24, 1000 mL x 15
- Shaking speed range (RPM) 20 to 250
- Shaking Amplitude 25mm
- Internal dimensions W x D x H (mm) 660 x 765 x 650
- External Dimensions W x D x H (mm) 800 x 1150 x 1300
- Temperature control micro processor with PT-100 sensor
- Display 4" LCD screen, large size display for ease of reading
- Alarms - Audio visual power failure alarm, door open, temperature variation
- Illumination 8 watts fluorescent tube 1 inbuilt + 3 additional
- UV lamps 2 inbuilt + 2 additional
- Internal body material stainless steel- 304 grade (standard models), Stainless steel -316 grade (GMP Models)
- External body material Powder coated CRCA steel (standard models), Stainless steel – 304 grade (GMP Models)
- Insulation (CFC free polyurethane foam) 70 mm minimum for body and 80 mm for door
- Noise level Less than 65 db (A)
- Voltage stabiliser VS-02
- CE certification
- Warranty : 3 years

## 2. Autoclave

- Fully Automatic Vertical Top Loading Autoclave with capacity 180 - 200 Lit
- Single lever lock for lid with single hand opening.
- Chamber dimension: 550x850mm
- Usable Size: 550 x 760 mm
- Heater Power: 5.0 kW
- Temperature Range: 121°C with Resolution 1°C (User Settable)
- Operating Pressure: 15 Psi
- Programmable Logic Control with drying required.
- Equipment should have the sterilizer timer, Drying Timer & Lid/Door Interlock
- Dual LED display for temperature & Time
- Digital Timer upto 99 minutes for drying
- All wetted parts should be made of Stainless steel including lid.
- Epoxy coating on steel exterior
- Equipment should have the safety parameter like - Low water detection, Spring loaded safety valve for over pressure, Independent self-resetting Thermal Safety Cut-out, Pressure interlock on door, MCB for electrical safety etc.
- External bottle for draining water & condensing steam.
- Microprocessor Based Control for ensuring repeatability & a high accuracy.
- Castors for ease of movement required.
- Process will not start unless lid locked fully & lid will not open when chamber under pressure.
- Chamber should be tested as per ASME guidelines
- Equipment should confirm CE Certification.
- Minimum 5 years warranty for the equipment.
- Compatible carriers (2 nos required)
- Compatible dressing drums (2 nos required)

### 3. **Biological Safety Cabinet**

- Biological safety Cabinet, Class II, Type A2
- Working Dimension: 1220 x 620 x 650 mm
- Digital Microprocessor Control system with LCD display for supervising all cabinet functions.
- The hot-bulb air velocity transducer for real-time monitoring of the air velocity of the working area and keeps the safety cabinet under constant air velocity through adjustment of the fan speed by microcomputer system.
- Double side Airflow design of blower for low running noise
- Filter Typical Efficiency of ULPA Filters provide should be 99.9995% @ 0.12 $\mu$ m
- American AAF two ULPA filters tested to efficiency of 99.999% micron particles
- Side air flow disruption design for eliminating the exposure of microorganism.
- Down flow should be 0.34m/s (+/- 5%)
- Inflow Velocity should be 0.55m/s
- Blower Power not to be less than 475 W
- Fluorescent lamp Intensity (Lux) 900 should be available
- Sound Emission (Typical) should be <62dBA
- UV lamp with timer, remaining lifetime of filter display.
- Real time display of key parameters like down flow, velocity, inflow velocity, airflow volume, static pressure, negative pressure, Accumulative running time of fan.
- Equipment should have Removable 1.5 mm, Screw less, SS platform
- 304 grade stainless Steel interior and operation platform without screws to avoid contamination
- The 10 degree angle and 75 mm adjustable supporter ensure convenient working for different users
- Adjustable foot stand for stable working on uneven surface
- Swivel casters wheels with internal thread support leg.
- Sound & Flash alarm should be available
- Equipment should be CE, SFDA and EN 12469 certified
- Air Quality: ISO 14644.1, Class 3, Worldwide US Fed Std 209E, Class 1 USA
- Filtration: EN-1822 (H14), Europe, IEST-RP-CCOO1.3, USA, IEST-RP-CCOO7, USA, IEST-RP-CCO34.1, USA
- Electrical Safety: EN61010
- Warranty: 5 years