Dr. N. Radhakrishnan International Centre for Medical Innovation
MAHATMA GANDHI UNIVERSITY
Priyadarsini Hills, Kottayam, Kerala, India -686560

Dr. Radhakrishnan E. K.
Director (Hon.)

NRICMI/04/Tender/2024 Dated: 16.03.2024

SHORT-TENDER NOTICE

The Hon. Director, Dr N Radhakrishnan International Centre for Medical Innovation (NRICMI), invites sealed competitive Tenders from reputed firms for the purchase of the "Minor equipment" as per the specifications mentioned below. The sealed covers containing Tender details are to be superscribed "Tender for Minor equipment" and sent to The Director, Dr N Radhakrishnan International Centre for Medical Innovation (NRICMI), Room no 703, 6th Floor, Convergence Academia Complex, Mahatma Gandhi University, P.D Hills P.O, Kottayam- 686560. **Submit two separate sealed covers for the two-bid tender, with one cover containing the financial bid and the other containing the technical bid.**

Last Date of Receiving Tenders: 23.03.2024, Time: 3.00 pm

Opening date of Tenders: 25.03.24, Time: 11 am

Items: Following Minor equipment

1. Digital dry bath- 1 no.
2. Horizontal electrophoresis system- 1 no.
3. Power supply for horizontal electrophoresis system- 1 no.
4. Heating water bath- 1 no.

SPECIFICATIONS:

1. **Digital dry bath- 1 no.**

The Dry Bath must have block heating capabilities ranging from Ambient + 5 to 120°C or better.

It should offer features such as water bath functionality.

The ramp rate should be at least 4°C/min or better.

Bead bath capability should be included.

The dry bath should feature a reversible block.

The device should incorporate feather-touch switches.

Should be powered by advanced microprocessor controls or better.

Should offer timed or continuous operation with a removable lid or better.

It should come with a transparent lid to ensure better uniformity and minimize temperature stratification in the block by maintaining a warm air jacket layer or better.

Energy-efficient design should be employed to reduce heat loss and enhance efficiency.

Should include a reversible block capable of accommodating tubes from 1.5 to 2.0ml, 0.2ml tubes, PCR strips, or a PCR plate.

Should be suitable for multiple applications such as water bath, block heating, oil bath, and bead bath or better.

It should offer a wide temperature range of up to 120°C or better.

Double block and single block options should be available.

Certification should include CE EN IP21 or better.

The display should be LCD or better.

The controller should be a microcontroller or better.

The body material should be ABS plastic or better.

Heat insulation should be provided.

The heat chamber and block material should be aluminium or better.

Programmable mode should include 5 preset values and 5 pre-log values or better.

Should provide a warranty of at least 3 years

Should provide all the necessary and available accessories.

2. **Horizontal electrophoresis system- 1 no.**

The horizontal electrophoresis system should be capable of running gels sized 7x10cm and 15x10cm with a safety lid and a sample throughput of 10-60 or better.

It should include at least two UV transparent gel trays of size 7x7 and 15x10 with integrated fluorescent rulers.

The system should have a tape-free gel casting module (gel caster) compatible with both 7x7 and 15x10 gel trays or separate casting modules for the 7x7 and 15x10 gel trays for leak-free operations.

The system should include at least two sets of three 1.5mm fixed-height combs with 8, 15, and 20 wells.

The system should offer the option for adjustable height combs with comb holders.

The migration rate of Bromophenol Blue dye should be at least 4.5cm/hr (at 75 V) or better.

A lock-in design should be incorporated to run precast-ready agarose gels or better.

The system should come with all the necessary accessories.

Up to 60 samples can be run simultaneously.

Clear plastic construction for easy sample visualization.

Should have Gel casting gates to cast gels right in the cell

Easy to replace electrode assemblies.

Should provide a warranty of at least 3 years

Should provide all the necessary and available accessories.

3. **Power supply for horizontal electrophoresis system- 1 no.**

The power supply must have a programmable output range of 10–300 V or better, fully adjustable in 1 V steps, and 4–400 mA, fully adjustable in 1 mA steps or better, with a maximum power output of 75 W or better.

It should provide a constant voltage, and constant current output with automatic crossover or better.

The system should feature 4 pair recessed banana jacks floating in parallel or better for output terminals or better.

A timer adjustable from 1 to 999 minutes or better should be included.

The power supply must offer a pause/resume run function.

An LED display should be provided for clear visualization or better.

Operating conditions should range from 0 to 40°C, with humidity levels up to 95% in the absence of condensation or better.

Compliance with safety standards EN–61010 or better is mandatory.

EMI emissions should conform to CE Standards for Emissions and Immunity class A, tested only at 230 V, with TÜV EMC certification or better.

Safety features such as no-load detection, sudden load change detection, overload/short circuit protection, input line protection, and auto power-up after power failure should be integrated or better.

Input protection should include fuses on both hot and neutral lines or better.

Input power should be adaptable, ranging from 90–120 or 198–264 VAC, at 50 or 60 Hz, with auto switching capability or better.

The power supply must possess CE Certification or better.

Service support from the manufacturer, with a base in Kerala, should be available for the quoted model, with supporting documentation to be submitted.

Should provide a warranty of at least 3 years

Should provide all the necessary and available accessories.

4. **Heating water bath- 1 no.**

Handles should be present on the left and right sides for convenient carrying and moving.

The internal bath must be of integral structure, made of stainless steel for excellent durability or better.

It should have a compact design to ensure excellent space utilization.

A clear VFD panel or better must be provided for clear information display.

Temperature control should be precise, using the microprocessor PID method or better.

Temperature auto-tuning should be optimized for efficient temperature control.

A 3-point calibration function or better should be included to minimize temperature difference.

The device should allow saving and using three frequently used temperatures or better.

Automatic restart of operation should be enabled upon power restoration after a sudden power failure.

The heating bath must have a top-rated overheating prevention system (registration 10-0397583) or better.

An over-temperature limit function should be included for safety or better.

The heater, sensor, and pump inside the bath must be separated by covering plates for added safety or better.

Malfunctions should be prevented by a controller lock function or better.

The bath volume should be 3.5 L (0.1 cu ft) or better.

The working temperature should be in the range of 7°C to 100°C or better.

Temperature stability at 50°C should be 0.4°C (0.72°F) or better.

The heat-up time to 70°C should be 34 minutes or better.

The net weight of the device should be 6.5 kg (14.3 lbs) or lower.

Should include accessories like a Gable Type Cover, which prevents condensed water from falling onto the specimen, and a Flat Type Cover, made from stainless steel with high corrosion resistance and a convenient handle or better.

Should have a warranty of at least 3 years

Note:

All the accessories and spares for installation and demonstration should be supplied by the firm along with the instrument. The instrument should meet all the specifications given in the tender

and minor variations will be examined by the technical committee before acceptance/rejection of the tender. Loading, unloading and transportation costs will be met by the bidder. The instrument should be supplied in the Research lab, Room 703, Dr N Radhakrishnan International Centre for Medical Innovation (NRICMI), Mahatma Gandhi University, P.D Hills P.O, Kottayam- 686560.

For more details contact Dr N Radhakrishnan International Centre for Medical Innovation (NRICMI), Mahatma Gandhi University, P.D Hills P.O, Kottayam on all working hours.

Terms & Conditions:

1. Tender form can be downloaded from the official website of Mahatma Gandhi University (https://www.mgu.ac.in/uploads/2020/08/Tender-Form.pdf?x99264) and the Tender form rate-0.2% of the quoted amount (Lowest amount = Rs. 400/- +GST, Maximum amount = Rs.1500/- +GST) can be paid by online in the University online payment system and challan should be attached along with the Tender.

2. The Tender Amount should be including all taxes.

3. Tenure of Tender should be three months.

4. A preliminary agreement in document paper of Rs. 200/- has to be submitted along with the tender.

5. Ernest Money Deposit (EMD) calculated @ 1% of (quoted amount) the Purchase assessment cost (PAC) should be paid by through the University's online payment (www.mgu.ac.in.online payment - miscellaneous) or Demand Draft in favour of The H O D, School of Biosciences and submitted along with the sealed tender.

6. An agreement must be submitted by the qualified bidder and should submit 5% of the PAC as the security deposit.

7. Tenders received after the last date and time should be rejected. The Registrar has the right to accept or reject the tender without any reason. If the tender opening day is a holiday it will open in the next office working day.

8. If not received the minimum number of tenders, the last date will be extended to the next 15 days.

9. If more tenders are received during the extended period, the first received tenders are also to be considered.

10. Final payment should be released only after the proper installation and satisfactory report from the Technical Officer, School of Biosciences.

Hon. Director,

NRICMI, MG University