



# UNIVERSITY OF KERALA

## Central Laboratory for Instrumentation and Facilitation (CLIF)

Kariavattom Campus, Thiruvananthapuram, Kerala, India -695 581

Prof. (Dr.) G M Nair  
Hon. Director, CLIF

E-mail: siccuok@gmail.com  
Website: www.keralauniversity.ac.in  
Phone: 0471-2308566

24.05.2022

### Quotation Notice

Sealed quotations are invited from Authorised dealers/ manufactures for Supply of following items as per the specification given below for the purchase of Incubator Shaker to CLIF, University of Kerala, Kariavattom Campus.

Name of the equipment	<b>GRADIENT THERMAL CYCLER (PCR)</b>
Quantity	1
Documents to be submitted	<ul style="list-style-type: none"><li>• Address and Details of the Firm.</li><li>• Technical Details/Specification.</li><li>• warranty information</li><li>• Any other relevant information</li></ul>
Period of Completion	30 days
Last Date of receipt of Tender/ Bid closing	31.05.2022 5 PM

### SPECIFICATIONS FOR GRADIENT THERMAL CYCLER

1. The thermal cycler should have 96 well block format. It should be compatible with 0.2 mL PCR tubes, strip tubes, 1x96 well plate
2. Should have a block ramp rate of 4°C/sec or better with Peltier based heating and cooling
3. Temperature range of the block should be 0°-100°C and should have heated lid with temperature adjustable upto 105°C
4. It should have gradient feature to precisely set target temperatures for PCR optimization
5. The peltier block should have atleast three segmented temperature zones with a range of 20°C (10°C from zone to zone) and should enable to set upto three user-defined annealing temperatures simultaneously
6. Temperature accuracy:  $\pm 0.25^{\circ}\text{C}$  (35°-99.9°C)
7. Temperature uniformity:  $< 5^{\circ}\text{C}$  (30 sec after reaching 95°C)
8. Sample volume range: 10-80  $\mu\text{L}$

9. The instrument should have the ramp rate simulation feature to run other PCR instrument models with pre-programmed thermal simulation modes
10. The instrument should have the security system to create username and password for each user as well as the password protection could be turned off under the administrative user
11. The thermal cycler should have the auto restart facility in the events of power failure
12. It should have a memory to store 1000 or above experimental protocols
13. Instrument should have USB, ethernet interfaces
14. It should have provision for convenient remote access of monitoring using cloud or equivalent networks
15. Should have user-friendly touch screen LCD display (8 in or above)
16. Should be a CE certified model

#### Terms and conditions

- The Quotation is invited in 2 (Two) cover system from the registered and eligible firms. Technical and Financial quote should be submitted separately in two covers.
- The Bidder shall quote price in clear terms and the specification of products. The rates quoted must be inclusive of all taxes, cost of supply at site including loading and unloading charge.
- Validity: - The Bid will be valid for 60 days from its date of opening. Further extension can be done by mutual consent.
- Delivery: - The item should be delivered at CLIF, University of Kerala, Kariavattom Campus.
- Installation and commissioning: - The items shall be installed and commissioned at the CLIF, University of Kerala, Kariavattom Campus.
- Warranty/Guarantee: - The supplier shall guarantee to repair/replace the items or its part -if found defective within the warranty period of 3 years.
- The entire expenditure for repair/ replaces the item in this regard shall be borne by the supplier. Warranty shall be applicable for entire item.
- In case of dispute arises, the decision of University authority shall be final and binding on bidders.
- The undersigned reserves the right to reject or accept any or all the tenders received fully or partly without assigning any reason thereof.
- General rules relating to purchase of equipment, will also applicable to this tender.
- The cover may be super scripted with "**GRADIENT THERMAL CYCLER (PCR) IN CLIF**". The bids shall be addressed and send to the "The Honorary Director, Central Laboratory for Instrumentation and Facilitation (CLIF), University of Kerala, Kariavattom Campus, Trivandrum-695581 on or before the date mentioned above.

  
Hon. Director, CLIF