

Indian Institute of Technology

Date: 26-08-2013

Department of Biological Sciences and Bioengineering Kanpur 208 016, INDIA

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 Closing Date: 02-09-2013

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Subject: Request for submission of quotation for CO2 Incubator.

Please send a sealed quotation in duplicate for **CO2 incubator** for our laboratory at Centre for Environmental Science and Engineering, Indian Institute of Technology Kanpur (IIT Kanpur) with specification and requirement as given below. The quotations should include taxes, warranty, educational discounts if any, freight and delivery. The quotation should reach our office at the below mentioned address on or before 02.09.2013.

CO2 INCUBATOR (Air Jacketed)

TECHNICAL SPECIFICATION OF CO₂ INCUBATOR (Air Jacketed)

- 1. Internal Volume should be at least 150 liters and display should be LCD with touch screen and enables rapid access of important information of each critical parameter in the incubator and should be able to directly connected to PC with USB Cable
- 2. Temperature set range should be from ambient +3°C to 55°C with event logging feature.
- 3. CO₂ control range should be from 0 to 20% or better.
- 4. Humidity control should be 95% rH or more.
- 5. Recovery time for humidity loss during door opening for around 30 seconds upto 95%rH should not be more than 30 minutes.
- 6. The incubator must incorporate a direct humidification design, in which internal water reservoir is in direct contact with a heated surface to maximize humidification efficiency,
- 7. Unit must be equipped with a water level sensor and alarm to alert user when humidification water refill is required.
- 8. System should be supplied with built-in automatic decontamination routine where along with the inner chamber, all the accessories such as the air-circulation fan, shelves and its support, sensor etc. should be decontaminated and there should be no need of unfitting or refitting of such accessories.

- 9. Automatic Decontamination routine at 90°C with moist heat to eliminate Mycoplasma, bacteria, Fungi.
- 10. Validation certificate of the decontamination routine from any accredited agency such as FDA, CAMR etc should be enclosed.
- 11. System should be supplied with heat resistant TCD sensor (to withstand heat of decontamination).
- 12. The incubator must offer a direct access port on the interior incubator door to enable comparative CO₂ measurement by an external device.
- 13. There should be possibility of stacking of one incubator over another in future.
- 14. Interior should be made of stainless steel with coved corners for ease of cleaning.
- 15. Nut-bolts inside the chamber should be avoided to minimize chances of contamination.
- 16. Suitable Servo voltage Stabiliser for trouble free working.
- 17. Warranty 24 months from the date of installation.
- 18. A double stage CO2 regulator and a CO2 cylinder should be supplied with the incubator.
- 19. A provision for up gradation for O2 control range 1 21% should be available.

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