# Indian Institute of Technology - Kanpur Department of Biological Sciences & Bioengineering

Enquiry Number: IITK/BSBE/AKS/NC/2015-16/05, dated: 23-11-2015

## Sub.: Inquiry for Digital Orbital Shaking incubator system

Opening date: November 23<sup>th</sup> 2015 at 10:00 AM Closing date: December 04<sup>th</sup> 2015 at 5:00 PM

Sealed quotes (technical bid and price bid separately sealed) are invited for the above mentioned laboratory product as per the specifications given in the next page.

Your quote should mention/include the following:

- Maximum discount if any should be offered and mentioned.
- Quoted price should include the cost for installation, warranty and required accessories (see below).
- Validity of the quote at least for 90 days.
- FOB (indicating port of shipment) and CIF (New Delhi) values should be quoted separately if import is required. For quotes in INR, the price quote should be for delivery at Kanpur.
- The quote should cover insurance for transport up to Kanpur.
- Indian agency commission if applicable (should be certified by the principal if no agency commission is applicable) in case of import.
- Authorization certificate from the principal if you are a local agent.
- Terms and conditions for the payment, including the banker's name of the principal and the account number, if any, for electronic transfer.
- Include proprietary item certificate if applicable.
- Technical literature to support your product (in technical bid).
- Users' list with contact address in technical bid.

Note: Only principal manufacturers or authorized representatives are requested to send the quote along with proper certificates. The envelope should be marked as "Inquiry for digital orbital shaking incubator system"

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### Item Required: Digital orbital Shaking Incubator with cooling (quantity 01)

## **Specifications:**

- 1. Triple walled Construction, Inner chamber and Shaking platform should be made of Stainless steel S.S. 304 grade. and Outer body should be made of Thick gauge Mild Steel Sheet supported on Angle Iron Frame Work of 50mmx50mmx 6mm Thick and Outer chamber should be neatly powder coated for long lasting finish.
- 2. Graded layers of Insulation should be filled between the walls to prevent thermal losses. The Door should also be of double walled insulated fitted with double Pan Toughened glass window and with special silicon gasket to keep the Unit seal against atmospheric effects.
- 3. Fully Balanced CFC free Refrigeration system consisting of ISI Mark Sealed should be included. Compressor charged with CFC free refrigerant with condenser cooling fan Motor and Necessary relay & Guards should be provided to have temperature range room 5°C to 60°C.
- 4. Specially designed stainless steel air Heating element of Kanthal A-1 nichrome wire should be provided to achieve above ambient Temperature. Temperature should be controlled by a Microprocessor based dual display auto tuned P.I.D. digital temperature indicator cum controller with SSR power Supply and RTD Pt-100 sensor to control the temperature with accuracy of +0.5°C, having display resolution of0.1°C.
- 5. The dynamically balanced shaking system consists of sealed Ball bearings based Triple Eccentric drive mechanism should be included which ensures reproducible, smooth rotating motion with unbalanced loading of material in 1" orbit driven through PANASONIC" A.C. Induction Brush-less Geared Motor for Smooth and Silent long lasting working.
- 6. Shaking speed from 20 to 250 strokes per minutes should be controlled with latest soft start "DELTA" AC Frequency speed drive with Digital speed Indicator and step less speed regulator. Inner working chamber size; 26"x27"x24" (WXDXH), having Stainless steel shaking platform of size 24"x 21" to hold 8 clamps for 2000 ml flasks,, which can easy befitted by easy screw openings. One Stainless steel Rod Mesh Tray should also be provided at front top of the chamber for keeping petri dish etc.
- 7. The Shaking Tray should also have arrangement to pull out from the chamber for easy loading and unloading of Flasks. It should be supplied complete with Voltage stabilizer of Triple step of suitable rating to protect the Instrument against voltage fluctuation and High Voltage Input. Control Panel Consisting of Mains MCB Switch, PID Temperature Controller, Digital Speed control Drive, with required indicator light, switches and safety fuse should be provided. Suitable for Single phase 230 V AC Power supply. It should come with connecting cord and plug Top.

Important: Please attach a summary table to highlight the compatibility of your set-up against specific features mentioned here. Absent this table, quotations will not be considered.

#### Please note:

<u>Warranty and AMC:</u> Minimum one year warranty and additional two year AMC must be included in the quoted price. Absent this, the quotations will not be considered.

<u>Accessories:</u> Appropriate voltage stabilizer and UPS for the equipment should also be included in the quotation.

The Vendors providing the quotes should have several installations in and around Kanpur and have service center at Kanpur/Lucknow area.