Indian Institute of Technology Kanpur Department of Physics

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Tender Notice

Enquiry No.: IITK/PHY/2018-19/09 Enquiry Date: 22/11/2018 Last Date: 12/12/2018

Sealed quotations should reach the undersigned latest by 5:00 pm on 10th December 2018 for the following items:

S. No.	Description of item	Quantity
1	Optical table top with size ~ 1.2 m X 2 m and thickness > 200 mm	1
2	Active vibration isolation supports (set of 4 legs) with self-leveling, height $\sim 700 \text{ mm}$	1
3	2 m long lean bars (for the longer sides) (set of 2)	1
4	Air compressor with air filter and regulator	1

The above-mentioned item should meet the following technical specifications and <u>appropriate data sheets should</u> <u>be attached showing the extent of compliance</u>:

1. Optical table top with size ~ 1.2 m X 2 m and thickness > 200 mm:

- Dimension: 4 ft X 6 ft, or 1.2 m X 2.0 m
- Thickness: ~ 9 inch, or > 200 mm
- Flatness of Top Skin: $< \pm 0.1$ mm over any 1 m² or larger area
- Top and bottom plates: Stainless steel plates with thickness 5 mm or more
- Core construction: Stainless steel honeycomb
- Threads and spacing: M6 tapped holes on 25 mm grid
- Deflection under load: $< 1.7 \mu m$ for 150 kg load

2. Active vibration isolation supports (set of 4 legs) with self-leveling, height ~ 700 mm:

- Height: ~ 700 mm, such that height of the table becomes ~ 900 mm.
- Vertical resonance frequency: < 1.25 Hz
- Horizontal resonance frequency: < 1.0 Hz
- Vertical Transmissibility at Resonance: < 10 dB
- Horizontal Transmissibility at Resonance: < 12 dB
- Vertical Transmissibility at 5 Hz: 90% Isolation
- Vertical Transmissibility at 10 Hz: 97.5% Isolation
- Horizontal Transmissibility at 5 Hz: 94% Isolation
- Horizontal Transmissibility at 10 Hz: 97% Isolation
- Maximum Load Capacity (set of four): 2500 kg
- Height Adjustment Range: -13 mm, +5 mm
- Self-Leveling Repeatability: 0.5 mm

3. 2 m long lean bars (for the longer sides) (set of 2):

- Lean bars attached to the support legs to protect the work area from accidental knocks
- Length: Span of the entire length of the optical table, 6 ft or 2 m.

4. Air compressor with air filter and regulator:

- Delivery pressure: Up to 8 bar
- Air tank size: 3.5 l or larger
- Input voltage: 230 V AC @ 50 Hz
- Low noise operation: 30 dB at 1 m
- Air filter: To remove moisture and particles down to 5 µm

Terms and conditions:

- Quotations should have a validity of a minimum of 60 days.
- The equipment should be provided with a warranty of 1 to 3 years.
- Quotations are required in duplicate. Single technocommercial bid in a sealed envelope should be sent to us with enquiry number mentioned on the envelope. Technical specifications along with the extent of compliance should be mentioned. Quotations that do not provide a compliance sheet will be rejected.
- The delivery period should be specifically stated.
- Permissible educational discount should be provided since the equipment will be used for research work of students.
- For suppliers from outside India, the rate offered should show both FOB (specify city) in the country of origin and CIF (New Delhi, India). IIT Kanpur has its own freight forwarder for shipping from outside India.
- IIT Kanpur is exempted from payment of Excise Duty under notification no.10/97 & partially @ 5.15% Customs Duty exemption certificate under notification 51/96. Road permit will be provided if applicable.

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