

**NOTICE INVITING QUOTATION**  
**December 6<sup>th</sup>, 2013**

NIQ Ref. No.: IITD/PHY/2013\_14/AFM

Quotations are invited for AFM probes with the following technical specifications:

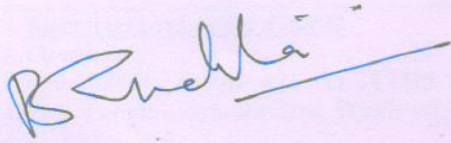
**Due Date: 25-12-2013**

S. No	Item	Quantity
1.	<p><b><u>Electrical probes for CAFM</u></b> <i>Cantilever:</i> Material: Si, Frequency ~ 11-18 kHz, Spring constant: 0.1-0.6 N/m, Shape: rectangular, Reflex coating: Pt/Ir, Length~ 440-460 μm, Width ~ 35-45 μm, Thickness~ 2.0-3.0 μm</p> <p><i>Tip</i> Material: Si, Coating Pt/Ir, Shape: pyramidal, Height: ~ 14-16 μm, Aspect ratio ~ 1.5-3.0, ROC ~ 30 nm</p>	40 probes
2.	<p><b><u>Magnetic probes for MFM</u></b> <i>Cantilever:</i> Material: Silicon, Shape: Rectangular, Reflex coating: Cr/Co, 150 nm ± 5, Spring constant: 1.2 to 6.4 N/m, Frequency: 47 to 76 KHz, Length: 215 to 235 μm, Width: 25 to 35 μm, Thickness: 2.5 to 3.5 μm.</p> <p><i>Tip:</i> Material: Silicon, Shape: Pyramidal, Height (μm): 14-16, Aspect ratio: 1.5-3.0, Coating: Cr/Co, 150 nm ± 5, ROC (nm): 75 (Nominal specification; guaranteed &lt; 160nm)</p>	40 probes
3.	<p><b><u>Tapping mode AFM probes for KPFM</u></b> <i>Cantilever:</i> Material: Si, Coating Pt/Ir, Resonant frequency: ~ 75 kHz, Spring constant: 1-5 N/m, Length: 200-250 μm, Width: 23-33 μm, Thickness: 2.5 to 3.5 μm</p> <p><i>Tip:</i> Material: Si, Geometry: Anisotropic, Coating Pt/Ir, Height: 10 - 15μm, ROC: 20-25 nm, Front angle: 25°, Side angle: 22.5 °, Back angle: 15 °</p>	40 probes
4.	<p><b><u>Contact mode AFM probes</u></b> <i>Cantilever:</i> Material: Silicon, Shape: Rectangular, Reflex coating: Al, 30 nm ± 5, Spring constant: 0.01 to 0.6 N/m, frequency: 8-37 kHz, Length: 215 to 235 μm, width: 41 to 51 μm, thickness: 0.5 to 1.5 μm.</p> <p><i>Tip:</i> Material: Silicon, Shape: Pyramidal, Height (μm): 14-16, Aspect ratio: &gt;3.5, Coating: None, ROC 2 nm (Nominal specification; guaranteed &lt; 5nm)</p>	40 probes

**TERMS and CONDITIONS:**

1. The quotation, in sealed envelope marked as "Ref: IITD/PHY/2013-14/AFM" should reach the undersigned on or before **25-12-2013**. **Separate quotations should be submitted for technical bid and commercial bid in two separate and clearly marked envelopes. Please provide agency certificate and proprietary certificate wherever applicable.** The prices quoted must include **CIF New Delhi Airport** charges.
3. Institute reserves the right to accept/ reject all/ any quotation without assigning any reason thereof.
4. The delivery period should be clearly indicated in the quotation.
5. Incomplete and conditional submitted tenders would be summarily rejected.

7. The mode of payment should be clearly indicated.
8. Necessary certificate should be enclosed by the vendor in case of proprietary nature of the quoted items.
9. In case the quotation is being submitted by authorized agent of the principal manufacturing company, the AUTHORISED SALES AGENCYSHIP certificate from the PRINCIPALS should be furnished along with the quotation. Quotations without this authorization certificate will be rejected.



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