

**Department of Mechanical Engineering  
Indian Institute of Technology, Kanpur**

**IITK/ME/2012-2013 /SB/ 05**

**Date: 10-10-12**

**Quotations are invited for the following items necessary for the “fabrication of a low force microtensile/compression test set-up” for *in situ* applications.**

- 1. Single axis nanopositioner with a travel of upto 10 mm and sub-nanometer resolution. The nanopositioner should be able to withstand a payload of 1 kg. Quotations should include the price of any controllers that are necessary and a feedthrough. The feedthrough should be able to connect the nanopositioner through a flange to the controller. The positioner should be vaccum compatible upto  $10^{-4}$  Pa.**
- 2. Force sensors that are vaccum compatible (low outgassing) upto  $10^{-4}$  Pa and can measure loads of upto 0.1 N with sub-microN resolution. Feedthroughs necessary for connecting the sensor to a strain indicator should also be quoted.**
- 3. A five axis manual positioner capable of about 5 mm movement in the x, y and z directions and tilt adjustments in  $\theta_x$  and  $\theta_y$ . The resolution in the translation directions should be less than 1 micrometer and 0.01 rad in case of the rotations. The positioner should be vaccum compatible upto  $10^{-4}$  Pa.**

**Quotations for any of the above items should be sent in sealed envelopes to the address mentioned below latest by 30-10-2012.**

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