## **Instrument Design Development Centre**

Date: 19-08-2011

## **Sub.: Notice inviting quotations (NIQ)**

We plan to purchase PZT-phase Shifting System and Accessories. This PZT-phase shifter will be attached with the Nikon Microscope.

### Specifications: Piezoelectric objective-lens positioning system to be fixed on microscope

Vertical Motion: Open Loop =  $100 \mu m$ ; Close Loop =  $80 \mu m$ .

Resolution: Open loop better than 5 nm. /close loop better than 5nm.

Adaptable to fix on upside-down microscopes

With suitable adapter

Linearity better than 99%

Operating voltage: -10 V -- 150V

Thread M 25 x 0.75, clamp ring M25 x 0.75

Integrated strain gauge sensor

Operating Temperature Range 0 to 40 °C.

#### X-Y-piezo stage motion

High resolution x y - positioner

X-Y motion, Open Loop: 100 μm, Close Loop: 80 μm.

With strain gauge feed back sensor.

Resolution better than 5 nm.

Linearity better than 99%.

Repeatability better than 1nm

Operating Temperature Range 0 to 40 °C.

#### 3-Channel-piezo amplifier

Integrated closed loop controller.

Output voltage: - 20 .... +130V

RS 232- or USB-interfaces 16 bit.

Driver set with all necessary electronic card, controlling software and accessories.

# YOU ARE REQUESTED TO KINDLY SEND THE TECHNICAL AND FINANCIAL BIDS (C.I.F. NEW DELHI) FOR THE SAME IN SEPARATE SEALED COVERS BY <u>06-09-2011 (Tuesday)</u>.

## **Terms and Conditions:**

- 1. Quotations are due by 5:00 p.m. on 06-09-2010 (Tuesday).
- 2. Please quote prices at **CIF New Delhi**, inclusive of installation and freight charges. Any other taxes or levies not included in the price must be clearly indicated. Quote should be in Indian Rupees and/ or in foreign currency (if applicable) and to be valid for at least 3 months. Delivery period must be clearly specified.
- 3. Our payment terms are payment by cheque on receipt & satisfactory installation of the product at our site. In case of foreign currency, the payment terms will be as per the Institute norms.

- 4. Quotation should be directly from Original manufacturer or authorized sales agent with authorization letter. If the items quoted are proprietary in nature, please enclose proprietary certificate from the principals. Also include a letter from the manufacturer that the model quoted will be supported by the manufacturer for a minimum period of 5 years and all the required spares and accessories will be available for this period.
- 5. The technical bid must contain relevant technical literature. A Statement of Compliance (in the form of a table) indicating the specifications asked for, and that for the model offered must also be provided.
- 6. The products will be used for educational purposes. Applicable academic institution discounts must be offered and stated.
- 7. Product must carry minimum one year (preferably 3 years) comprehensive warranty.
- 8. Institute reserves the right to order equipment with better quality over lower price and to accept or reject any or all the quotations without assigning reasons thereof.
- 9. Technical and commercial bids (marked "Technical/ Commercial bid for PZT-phase Shifting System and Accessories") should be submitted separately in separate sealed envelopes to the following address:

(D. S. Mehta)
Associate Professor,
Instrument Design Development Centre
Indian Institute of Technology Delhi
Hauz Khas, New Delhi-110 016, India.