# DEPARTMENT OF CHEMICAL ENGINEERING INDIAN INSTITUTE OF TECHNOLOGY - DELHI HAUZ KHAS, NEW DELHI - 110016

Dated: 10/05/2012

## NOTICE INVITING QUOTATIONS

### Sub: Motorized High NA On-Axis Zoom Microscope

Sealed quotations in separate envelops of technical and commercial bid kept in a one sealed outer envelop are invited for purchase of a <u>Motorized High NA On-Axis Zoom Microscope</u> as per specifications given below. Your sealed quotation should reach latest by 5 PM on 26 May, 2012 to **Prof. S. Basu, Department of Chemical Engineering, Indian Institute of Technology – Delhi** (IIT Delhi), Hauz Khas, New Delhi - 110016. Your quotation should be superscribed "<u>Quotation</u> for Motorized High NA On-Axis Zoom Microscope due on 26 May 2012".

#### Minimum Specifications: Motorized High NA On-Axis Zoom Microscope

#### Apochromatic On-axis zoom design.

**Continuous Magnification Range** 11x to 179x (through eyepieces) achieved with no alteration in eyepieces or objective lens during operation.

Motorized Zoom range 16:1

Motorized focus range 340 mm (step size 0.35 µm or better)

**Variable speed motorized zoom** and **motorized focus** with controller units with real time on screen display of all essential working parameters such as total magnification, object field, Z-position, depth of field, resolution etc.

#### **Objectives** : Plan APO 1X

High N.A. 0.25 (or higher) for maximum brightness and resolution.

Working Distance 60mm or higher

Eyepiece pair 16x and Field No. 16

**Observation tube** Trinocular with inclination 15 degree. Light distribution 100% through eyepieces or 100% through camera port.

**Transmitted light stand base with light guide** and 2 shiftable and tiltable reflectors for bright field / darkfield and variable oblique light.

**Transmitted light - Cold-light source** up to 900lm light flux or more with minimum 50,000 operating hours until intensity drop to 70% with Day-light filter and Halogen light filters.

Slit-ring Epi-scopic illuminator with light guide 2000 mm long.

**Epi-scopic light - Cold-light source** up to 900lm light flux or more with minimum 50,000 operating hours until intensity drop to 70% % with Day-light filter and Halogen light filters. Simultaneous usage of both the above illumination i.e, reflected as well as transmitted. C-mount adapter suitable for 1" Chip.

**3- Plates Mechanical Stage** with minimum travel 6"x 4" to be used for reflected light or transmitted light application with horizontal coaxial drive.

Adequate safety mechanism for protection against collision between lens and sample. **Operating ambient temperature** : +10 to  $+40^{\circ}$ C

#### Operating and the humidity may 75%

**Operating relative humidity:** max 75%

Preferably single control and display unit for all settings such as illuminations intensity control for reflected light and transmitted light, focusing, zooming along with the display for all vital parameters like total magnification, resolution, Depth of field, field of view, zoom and focus positions, light levels etc and provision for data transfer to PC. Preferably with 2-objective coded nosepiece for further up-gradation.

#### **Terms & Conditions:**

- 1. The quotations must have validity of at least three months.
- 2. Quotation must include insurance and air-freight charges, delivery period of the items addresses to The Indian Institute of Technology, Delhi, India (CIF, New Delhi).
- 3. The products will be used for educational purposes. Any applicable academic institution discounts should be offered and stated.
- 4. Detailed Brochures should accompany the offer.
- 5. If the bidder is an authorized dealer then the authorized Indian dealership certificate from the principles should be enclosed.
- 6. 2 years warranty desirable.
- 7. Payment will be through irrevocable letter of Credit.
- 8. In case the items are proprietary products of the company, a proprietary item certificate stating the same must be provided.
- 9. Training should be provided free of cost.
- 10. List of End user should be provided.
- 11. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.