

DEPARTMENT OF CHEMISTRY
INDIAN INSTITUTE OF TECHNOLOGY - DELHI
HAUZ KHAS, NEW DELHI - 110016

No. IITD/RP02191/ BCHM

Dated: 01/12/2011

NOTICE INVITING QUOTATIONS

Sub: Purchase of a Piezo scanning stage capable of accommodating confocal microscope

Sealed quotations in separate envelopes of technical and commercial bid kept in one sealed outer envelope are invited for purchase of a Piezo scanning stage System as per specifications given below. Your sealed quotation should reach latest by 5 PM on 16th December, 2011 to **Dr Sameer Sapra, Department of Chemistry, Indian Institute of Technology – Delhi (IIT Delhi), Hauz Khas, New Delhi - 110016**. Your quotation should be superscribed “Quotation for *piezo scanning stage* due on 16th December, 2011”.

Scanning Stage

- Piezo based scanning stage
- Flat geometry for flexible integration with optical microscope
- Optically friendly for transparent optical access from above and below
- At least 80 micron scan range in X, Y and Z axes
- XY resolution better than 0.01nm;
- Z resolution than 0.005nm
- Inertial Motion based Piezo positioning for sample alignment of 6mm and accuracy of <1 micron.
- Fine XYZ positioning with accuracy of <100nm
- Sample size XY>200mm; Z>30mm
- Liquid cell sample mount should also be possible
- Sample load at least 75 grams should be possible

Control System

- High Voltage Amplifier control for XYZ sample scanning and positioning
- All ADCs should be 16 bit and DACs should have 16-bit resolution
- Data Translation Interface box for ADC/DAC should be included
- Multiple input and output ports should be supported and should be specified
- High voltage amplifier should be able to deliver multiple voltages and manual control should also be possible
- Signal access module for user active interaction with scanning and imaging signal
- Add-On Modules option should always be present
- Triggers should be provided for scanning control with fully integrated external excitation and detection sources such as CCD cameras, Electron or Ion Beam Blanking, etc
- A good software for control and automation such as LabView based software for scanning and positioning control with flexible access for user programing and scripting
- Advanced 2D- and 3D Imaging softwares should be provided
- Flexible integration with external devices for online measurements should be possible
- Image and line profiles to be displayed in real time.

- Intuitive scan parameter setup
- Real time processing
- Zooming and offset scans
- Inertial motion software interface for sample positioning
- Extensive image processing options
- Import data in multiple formats such as Windows bitmaps and ACSII. Export data as TIFF and Windows bitmaps and ACSII
- Possibility of sending triggers to external hardware during scan
- PC should be provided with the below mentioned minimum configuration
 - 4MB L3 Cache
 - 800 MHz Front Side Bus
 - 2 GB DDR-3 1333 MHz
 - 320 GB HD SATA 7200 RPM
 - SATA DVD SuperMulti LightScribe
 - 10 USB 2.0 Ports, 4 Front
 - Window 7 Pro 32 Bit
 - Internal HD Audio
 - Three Years Worldwide warranty
 - Monitor: 19" LCD Screen

Vibration Isolation Platform

- Vibration isolation platform for complete isolation of scanning stage from floor or lasers noises
- Simple Set-Up and Adjustment
- Vertical natural frequency of 1/2 Hz or less can be achieved over the entire load range
- Horizontal natural frequency is load dependent. 1/2 Hz or less can be achieved at or near the upper limits of the payload range
- Payload range: 23-48 kg

Confocal Imaging Module

- Illumination module for high beam confocality through upright or inverted optical Microscope.
- Provides small laser spot size of <1 micron
- Flexible mounting of the device on microscope
- Manual XYZ movement for beam positioning
- Suitable for single mode and multimode fiber illumination

Terms & Conditions:

1. Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as "Technical Bid" and "Financial Bid". Both the sealed envelopes should be sent in a single sealed envelope, with clearly marked as "Quotations for **Piezo scanning stage** due on 16th December, 2011". The quote should reach the following address on or before 16th December, 2011, by 5 PM.

Dr Sameer Sapra
 Department of Chemistry
 Indian Institute of Technology Delhi (IIT Delhi)
 Hauz Khas, New Delhi-110016

2. Please quote prices at FOB, inclusive of installation charges.

3. The quotations should be in international currency as well as Indian Rupees wherever possible and should be valid for at least three months.
4. Please attach all the technical literature and a list of similar installations done in India.
5. Standard warranty details should be provided.
6. Payment should be through irrevocable letter of credit.
7. If the quote is being submitted by the representative of the Principals/manufacturer themselves, a valid Agency ship/Dealership Certificate authorizing the agent to quote to IIT Delhi on behalf of the Principals should be enclosed.
8. Complete set of manuals for the operation of equipment should be given.
9. Clearly specify the installation requirements—such as space, power, frequency, environment (Temperature and humidity) etc.
10. If the items quoted are proprietary in nature, please enclose proprietary certificate from the principals stating “certified that _____ is a proprietary item M/s. _____ and no other manufacturer makes these items.
11. If the bidder is an Indian agent, the agency certificate should be enclosed.
12. Please produce compliance certificate for the specification.
13. Training should be provided free of cost.
14. Delivery period should be specifically mentioned and should be as small as possible.
15. The products will be used for educational purposes. Hence any applicable institutional discounts should be offered and stated.
16. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.