

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

Ref No: IITD/BCHE/2501/EQPT

Dated Jan 22, 2013

NOTICE INVITING QUOTATION

Sub: Purchase of SEM and EDS from Project RP0 2501

Sealed quotations in separate envelop of technical and commercial bid kept in a one sealed outer envelope are invited for purchase of an “**Scanning Electron Microscope with EDS**” as per specifications given below. Your sealed quotation should reach latest by Feb 11, 2013 to **HOD, Chemical Eng. Dept. (II/278), Indian Institute of Technology Delhi, Hauz Khas, New Delhi-110016**. Your quotation should be superscribed ‘Quotation for SEM-EDS’ dated.

Specifications for Scanning Electron Microscope with EDS

Resolution: High Vacuum: 4nm (20 kV or more), Low Vacuum: 5 nm (20 kV or more)

Acceleration voltage: Variable from 0.5 to 20 kV or more

Magnification: 5x – 300,000x or more

Filament: Factory pre – centered W (Tungsten)

Specimen stage: Eucentric stage.

Sample size: 150 mm or more

X, Y, Z stage: 80 mm , 40 mm, 48mm or more.

Tilt: - 10 deg to 90 deg

Rotation: 360 deg endless

Image format: BMP, JPG, TIFF

Image display mode: Standard, Dual live image, split live image, digital zoom, dual magnification

Vacuum system: Turbo molecular pump (standard), menu selectable High vacuum and low vacuum

Detectors: SE (secondary electron detector), BSE (backscatter electron detector)

Operation Control :- Should have capability for control through wireless mode , LAN / dedicated PC/ Ipad. Total control panel should be touch panel supported.

Desired features: Model should have standby mode, Safety measures, Custom recipe, Image re-generation, beam blanking , Auto contrast, Auto focus, Auto stigma, Auto gun alignment and biasing, Single switch Low Vacuum / High Vacuum switch over

EDS to be quoted 130eV resolution, EDS and SEM should be from same manufacturer.

Gold Coater to be quoted for SEM sample.

Desirable: Model details quoted should be available on Vendor’s website

Model should have capability for upgradability with EBSD.

UPS 5 KVA of 30 min back up with necessary computer system for SEM along with table should be quoted.

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 (FOB and CIF, New Delhi should be mentioned).
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. Warranty details must be given.
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. Specs on Stage and norms for EDS from the same manufacturer may be relaxed depending on budget and resolution of SEM. Any other specs included should clearly be mentioned.
- 11. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.**

Chairman, PFC