

INDIAN INSTITUTE OF TECHNOLOGY KANPUR
Department of Earth Sciences

Inquiry No: ES/DP/2014-2015/22

Date: 20.11.2014

Subject: Quotation for supply of Scanning Electron Microscope with EDS.

With reference to the subject mentioned above, you are invited to submit the quotation in a sealed cover in order to reach us by December 05, 2014 in the form of a hard copy to the address mentioned below. If you have any questions please call Dr. D Paul at 0512-2596169, email: dpaul@iitk.ac.in.

The prospective suppliers are required to send quotation in two parts in sealed envelopes, as "Technical Bid" and "Financial Bid". The Technical Bid should contain detailed technical specification of the product being offered and should not mention any prices. The Financial Bid should include the detailed price quotation clearly including the cost of the equipment, taxes, service charges if any, shipping and handling charges. **The two separate and sealed envelopes should be clearly marked appropriately as "Technical Bid" and "Financial Bid".**

Kindly write the inquiry no on the top of envelop.

Technical Specification for Scanning Electron Microscope with EDS:-

1. **Resolution:** 4nm or better in High Vacuum mode and 5 nm or better at Low Vacuum mode
2. **Acceleration voltage:** Variable from 0.5 to 20kV or better
3. **Magnification:** 10X – 250,000X or better
4. **Filament:** Factory pre – centered W (Tungsten), **It should be written on manufacturer catalogue and manufacturer website that the filament is Factory pre centered**
5. **Specimen stage:** Eucentric stage
6. **Sample size:** SEM stage can accommodate sample of 150 mm or more
7. **Specimen stage movement:** X = 80 mm or better, Y = 40 mm or better, Z = 48mm or better. Specimen stage should be three axis motorized
8. **Tilt:** - 10 deg to 90 deg or better
9. **Rotation:** 360 deg endless
10. **Image format:** BMP, JPG, TIFF
11. **Image display mode:** Standard, Dual live image, split live image, digital zoom, dual magnification
12. **Vacuum system:** Turbo molecular pump (standard), menu selectable High vacuum and low vacuum
13. **Detectors:** SE (secondary electron detector), BSE (backscatter electron detector), both detectors should be provided
14. **Operation Control** :- Offered model have provision for up gradation with control through wireless / LAN. Total control panel should be touch panel supported.
15. **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

16. **Energy Dispersive Spectrometer:** EDS to be quoted 130eV resolution, EDS and SEM should be from same manufacturer and integrated.
17. Model quoted should be available on Vendor's website , it should be sold in Worldwide market, not for only India or China market, Any refurbished model will be rejected
18. Model offered should have upgradability possibility with EBSD in future.
19. Warranty for one year.

Optional items to be quoted:

20. Gold Coater with Gold / Palladium targets. (preferably from same make of SEM manufacturer)
21. UPS 5KVA of 30 mins back up to be quoted.
22. AMC for 2 years should be quoted.

Terms and Conditions:-

1. Maximum education discount, if any should be offered
2. Validity of quotation should be at least for 60 days
3. Prices should be on FOB Free on Board (if imported)
4. Prices should include the installation and training cost
5. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/ inspection).
6. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.

Dr.D.Paul
WLE 202, Earth Sciences Department
I.I.T. Kanpur PIN 208016