



Indian Institute of Technology Kanpur

Advanced Center for Materials Science

Enq. No.: ACMS/ AU/ 2012-13/ E-6

Enquiry Dated: March 02, 2013

Closing Date: March 18th, 2013

ACMS requires the quotation for **Tabletop Scanning Electron Microscope**. The specifications for the equipment are in the addendum. The quotation should also include following attachments: **BSE detector (SE detector is desirable)** and **Liquid N₂ free EDS detector**. The specifications for the equipment are in the addendum. The closing date for the above item is **March 18th, 2013**.

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”.

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 CIF and FOB separately (if imported)
4. Prices should include the installation and training cost
5. Warranty should be for at least three years after installation
6. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/ inspection)
7. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.
8. An undertaking that the vendor will supply all the spares and services for the equipment for at least 5 years from the date of commissioning
9. Delivery must be within 6 months (updated March 7th, 2013)

Kindly send the Technical and Financial bids in sealed envelopes latest by 18th March 2013 to:

Dr. Anish Upadhyaya
Head, Advanced Center for Materials Sciences
IIT Kanpur, U.P. 208016, India.
e-mail: anishu@iitk.ac.in

Technical Specifications for Tabletop-EM

<u>Specifications of Tabletop Scanning Electron Microscope*</u>	
Footprint	Small and light weight design
Acceleration Voltage	5 kV – 15 kV, tungsten source
Resolution	Smaller than 25 nm
Magnification	Greater than 25000 X
Specimen exchange time	1 -2 min
Specimen size	70 mm diameter and 50 mm thickness
Vacuum system	Oil free vacuum system (high performance turbo-molecular pump)
Detectors	High-sensitive semiconductor back scattered electron detector. Secondary electron detector is optional.
Depth of focus	Around 0.5 mm
Sample Stage Traverse	X: ±15 mm, Y: ±15mm
Spare Parts	Require spare parts of Wehnelt cap (1 in number), 24 extra cartridge filaments, anode, inner tube and inner pipe (including aperture).
Image Processing	BMP, TIFF, JPEG (with resolution of 1280 X 960 pixels)
Modes	Require low vacuum mode essentially but it will be good if it also work on high vacuum mode.
Supporting software	User friendly GUI with auto functions
Additional detectors(EDS)	LN2 free SDD detector. Must have mapping, quantitative analysis.
Sample Coater	Au coater with stub for multiple samples.
Sample holder	Single and multiple specimen stubs, specimen handing tools and stage tools
Interface	USB
Operating system	Windows 7
CPU	<ul style="list-style-type: none"> • Intel Core Duo processor or better • 4 Gb of DDRAM minimum • HD 500 Gb minimum • CD-ROM writer • 23" color display • Windows 7 Business, 32 bits edition • Laser Printer
Power backup	Work with 220 V and 50 Hz. UPS is required as a power backup

Technical Specifications for Tabletop-EM

Installation, Commissioning and Training	<ul style="list-style-type: none"> • The delivery of the Microscope should be considered complete only after successful commissioning of the instrument • The pre-installation requirements should be communicated to IIT Kanpur well in advance of the installation • The Installation, commissioning and training should be done only by well trained factory engineers • The supplier should provide training to at least two candidates at the installation site to make them familiar with smooth operation of the instrument
Guarantee	Preferably 3 years
After-sales Service	<ul style="list-style-type: none"> • The supplier should provide a prompt after-sales service such as regular instrument maintenance, troubleshooting and fixing • The list of service centers in India should be included.
Spares	<ul style="list-style-type: none"> • List of standard spares to be provided for each year starting from 1st to 5th year along with cost and discounted rates • An undertaking that the vendor will supply all the spares and services for the equipment for at least 5 years from the date of commissioning
Annual Maintenance Cost	Include the cost of annual maintenance for each year for five years after the guarantee/ warranty period. Provide the amount and the terms, Note that those providing better after sales service and support with written evidence will be given preference
<p>*Additional optional accessories should be indicated separately along with their price. The above specs are desirable and the actual numbers achievable for your system should be indicated.</p>	