



**INDIAN INSTITUTE OF TECHNOLOGY KANPUR**  
**Department of Chemical Engineering**

**Contact:**

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**Enquiry No: IITK/CHE/FIST/PGRL-2**

**Enquiry Date:22/05/2018**

**Closing Date:27/06/2018**

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**Tender Notice**

**Sealed quotation(s) in Indian Rupees with all technical details so as to reach latest by 3:00 PM on June 27, 2018 are invited for the supply of following items**

**Accessory for TESCAN FESEM**

**Energy Dispersive Spectroscopy (EDS) detector**

**Tender Specifications:**

- 1) The EDS system should be very latest, state of art system designed to work with TESCAN FESEM, Model: MIRA LMH. The supplier would be responsible for supply of all the necessary hardware and software to prove field integration of EDS microanalysis system with TESCAN FESEM.
- 2) The EDS detector should be LN2 Free type based on latest Silicon Drift Detector (SDD) technology. The SDD crystal size should be in the range 50 mm<sup>2</sup>-65mm<sup>2</sup>.
- 3) The detectable element range should be Boron (B) to Californium (Cf) or better.
- 4) The EDS system should guarantee following resolutions at site.
  - i. Carbon C: 54-56 eV
  - ii. Manganese Mn: 126-127 eV
- 5) The output count rate of the EDS detector should be in the range 500K-600K cps.
- 6) The EDS detector should have motorised slide movement for controlling the solid angle of X-ray collection easily using system software.

- 7) The EDS detector and related hardware should be extremely stable such that shift in peak position and resolution is  $< 1\text{eV}$  for higher count rates.
- 8) The EDS system software should allow user to use standards to enhance the accuracy of quantitative analysis. The supplier should provide multi-element standards block containing at least 50 standards.
- 9) The EDS system software should be very latest, multitasking type based on latest WINDOWS 7 operating system. The software should cater to applications like elemental analysis, image co-related elemental analysis, Line & Scan, multi element mapping with spectral imaging. The mapping process should store EDS spectrum from every pixel mapped. The EDS should be capable of selective element mapping, line scan, selected area analysis, quantitative analysis, qualitative analysis, multipoint analysis.
- 10) The EDS system should be fully upgradable in future to add WDS / EBSD detectors.
- 11) When available and requested, the supplier must upgrade the software free of cost for a period of 6 years from the date of installation.
- 12) A separate PC (with monitor) & a colour laser printer with latest specification must be provided with the EDS system.
- 13) The vendor must have several installations in India, preferably in national institutes and reputed CSIR/other government research laboratories.
- 14) Warranty: 5 years Comprehensive warranty (Labour & Spare Parts). Warranty should start from the date of installation.

**Terms & Conditions:**

- 1) Quotations must reach undersigned by 27.06.2018 by 3.00 pm
- 2) Quotations should have a validity of minimum of 90 days.
- 3) Atleast 10 users list should be provided with satisfactory certificates.
- 4) Technical specification sheets, authorization certificate or proprietary certificate (if applicable) and any other relevant documentation should be included with the quotation.
- 5) Quotations are required in duplicate: (1) TECHNICAL BID (2) FINANCIAL BID, in separate Sealed envelopes, both to be finally put in one single envelope with Tender Enquiry Number Mentioned clearly in all sealed envelopes.

- 6) The technical bid should include a signed copy of the compliance certificate against the tender specifications. The compliance sheet should also include reference to (e.g. Page No) their online brochure for every technical specification.
- 7) The tender specifications should be justified with company catalogue.
- 8) Please specify the maximum permissible educational discount, if any.
- 9) Delivery of system should be within 3-4 weeks on receipt of the final purchase order.
- 10) The downtime of service should be taken care within 48-72 hours on information, otherwise it is subjected to penalty.
- 11) The rate offered should show both FOB (your international airport) ,CIF (New Delhi) and IIT Kanpur including packing and forwarding, Insurance and freight.
- 12) Please clearly mention the tax rate (like GST etc.) and transportation charges up to IIT Kanpur, India.
- 13) After sales Service in India and warranty period should be clearly mentioned.
- 14) The Institute reserves the right of accepting and rejecting any quotation without assigning any reason.
- 15) Quotations by E-mail will not be accepted.

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Kindly mention the enquiry number on the sealed envelope carrying the quotation and send the sealed quotation(s) to the following address:

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