

16312/PLANING A1/2020/UOK

**Department of Optoelectronics, University of Kerala, Kariavattom,
Thiruvananthapuram, Kerala, India –695581, Ph: +91 471 2308167**

Retender Notice

Department of Optoelectronics, University of Kerala, Kariavattom, invites tenders for the purchase of new "EDAX System" on buyback basis by inspecting the existing "EDAX System" having following specifications.

Last date and time for submission of tender online	: 10.09.2021 5.00 PM
Date and time of opening of tender	: After technical evaluation
For technical details contact	Head, Department of Optoelectronics, University of Kerala, Thiruvananthapuram Ph. No. +91 471 2308167 e-mail: optoelectronics@keralauniversity.ac.in

Item: ENERGY DISPERSIVE X-RAY SPECTROMETER

EDS DETECTOR

- Compatible for FESEM, FEI NOVA NANOSEM 450
- Vibration-free, maintenance-free, LN2-free high-resolution Peltier cooled silicon drift detector (SDD)
- Energy resolution : - 129 eV or better at Mn K alpha
- Lighter element resolutions should be specified.
- Active detector area : 30 mm² or larger
- Maximum input count rate : more than 1000 kcps or better
- Detection of elements down to Beryllium and Quantification from Boron (5) to Californium (98) or better
- Retractable detector from active area.

EDS SOFTWARE

- Image acquisition software from two selectable signal sources, e.g. SE, BSE
- Analysis modes: Object, Point, Line scanning and Mapping
- Multipoint analysis including Point, Rectangle, Ellipse, Polygon, Irregular shape etc
- Elemental mapping with auto elemental identification
- Spectral imaging with up to 4096 x 4096 pixel resolution or better, online deconvolution and pseudo color mapping.
- Qualitative and Quantitative spectrum analysis for accurate peak identification, background subtraction and automatic peak evaluation
- Deconvolution of spectra for separate element contributions.
- Quantification software must have options for ZAF or similar corrections
- User interactive qualitative and standardless quantification with K, L, M, N line database.
- Software should be capable of performing data acquisition, generate reports and export to common Windows based application format (MS word, Excel etc)
- All these capabilities should be applicable for polished flat specimens, fractured samples, powder and nanostructured material
- Suitable Workstation Computer to run the software & hardware

- The software should be compatible with the latest operating system.

OPTIONAL FEATURES

- Metal standard for quantification at least 5 metals covering the whole range.

INSTALLATION & TRAINING

- Onsite installation and demonstration of all specifications quoted.

General Conditions:

1. Every tenderer should submit Tender fee of **Rs. 2,500/-**
2. Every tenderer should submit an Earnest Money Deposit (EMD) of **Rs. 25,000/-**.
3. The tender shall be submitted in the **two bid** viz. Technical Bid and Financial Bid. Only those qualified in technical bid will be eligible for participating in financial bid. A presentation regarding the technical specification and item to be supplied shall be done before the technical evaluation committee if requested.
4. The bidder should be a manufacturer or their dealer specifically authorized by the manufacturer to quote on their behalf for this tender as per Manufacturer Authorization from and Indian agents of foreign principals, if any, who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the "Technical Specification". Such equipment must be of the most recent series/models incorporating the latest improvements in design. The models should be in successful operation for at least one year as on date of Bid Opening.
5. **Compliance Statement:** Along with the technical details provide a tabular column indicating whether the equipment quoted by you meets the specifications by indicating 'YES' or 'NO'. If 'YES', support the claim by providing original brochures. **Vendors should provide clear brochures/data sheets about the equipment and its working. Also include adequate proof for the claim regarding the performance.**
6. **Reference:** Names of Institutes with contact person and telephone/ email where similar equipment supplied by you in India shall be mentioned in the bid.
7. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof.
8. The price should be inclusive of all taxes, duties, transportation, insurance, installation etc. Nothing extra will be paid in addition to the quoted rate. Any amount in Indian rupees for installation, commission, labour, spares, service etc shall be entered in item 2 of BoQ.
9. Payment Terms: 90% payment shall be made through irrevocable LC on presentation of complete and clear shipping documents and balance 10% of the amount shall be released after the receipt, installation commissioning and acceptance of the equipment **in case of foreign consignment.**
10. Validity of tender: Tender submitted shall remain valid at least for 120 days from the date of opening the tender. Validity beyond 120 days, from the date of opening of the tender shall be by mutual consent.

11. Delivery and installation: Proposed delivery schedule should be mentioned clearly. The item should be installed at the Department of Optoelectronics, University of Kerala, Kariavattom campus, Trivandrum without any extra cost (inclusive of documentation, demurrage, customs duty, clearance and transportation charges). Training should be made at the Department of Optoelectronics, University of Kerala, Kariavattom campus, Trivandrum. University of Kerala will provide customs duty exemption certificates if required.
12. Service facility: Supplier should mention their details of service setup and manpower in Thiruvananthapuram who are responsible for after sales support.
13. The model number, make, and a printed literature of the product shall submit positively.
14. In case of any dispute, the decision of the University authority shall be final and binding on the bidders.
15. The undersigned reserves the right to reject any or all of the tenders received without assigning any reason thereof.
16. The quoted item should be under **comprehensive warranty for minimum 3 years**.
17. If any component is found to be defective during the warranty period, the vendor has to replace the defective item immediately at their own cost.

Documents to be Uploaded

1. Signed Compliance Matrix
2. Detailed Technical Brochure
3. BoQ
4. Detailed Financial Bid in pdf format.