

**Department of Geology, University of Kerala, Kariavattom,
Thiruvananthapuram, Kerala, India – 695 581, Ph: 91 471 2308403**

31/10/2019

E-Tender Notice (Re-tender)

Department of Geology, University of Kerala, Kariavattom, invites tenders for the purchase of Polarizing Microscope with Camera & Software with following specifications under two bid systems.

Last date and time for submission of tender online	: 30.11.2019 :5 PM
Date and time of opening of tender	: After Technical Evaluation
Hard copies of the sealed tenders to be submitted to the office of	The Registrar University of Kerala Trivandrum
For technical details contact	Dr. R. B. Binojkumar Assistant Professor and Head Department of Geology University of Kerala Ph. No. 9447101220 e-mail: binojrb@gmail.com

Polarizing Microscope with Camera & Software

Specifications

1.	Microscope	Upright microscope suitable for reflected and transmitted light for viewing Thin section and Mineral samples in Geology
2.	Transmitted & Incident illumination	LED light source for both Transmitted and Reflected light source. Standard conoscopy module bertrand Lens Cube, fixed (with centerablebertrand lens) for Incident Illuminator color coded field and aperture diaphragm adjustment to match color and to ensure that the illumination conditions are always matched to the objective
3	Eye pieces and nose piece	i. 10x with 22mm or above field of view and Diopter adjustment on both the eye pieces and one eye piece with cross hairs. ii. Reversed Centrable, Quintuple nosepiece. iii. Trinocular tube with beam splitter 50/50 light distribution
4	Focus	3 step focusing: course, medium & fine(1 & 4 microns) and built-in focus stop to protect samples and the front lens of the objective.
5	Analyzer	180° or above rotatable analyzer
6	Stage	i. Circular graduated stage rotatable 360° which can be fixed at a specific position at 1° increments. ii. Additional attachable mechanical stage a Vernier 0.1mm to be fitted on the circular stage should be provided
7	Polarizer	Transmitted light Polarizer should be 360° rotatable and Reflected light polarizer should have 3 different click stops at 0°, 45°, 90°
8	Compensators	Lambda-plate (wave plate) for compensator
9	Condenser and objective	Dedicated achromat strain – free condenser with switchable condenser top, suitable for objectives 2-100x N.A, 0.90, with color coded iris diaphragm, Universal objective suitable for both reflected and transmitted light <ul style="list-style-type: none"> • EPI Plan Achromat 5x (N.A.0.12) • EPI Plan Achromat 10x (N.A.0.25) • EPI Plan Achromat 20x (N.A.0.40) • EPI Plan Achromat 50x (N.A.0.75)
	Camera and	A digital color camera having resolution 5 Mega Pixels or more. Both USB interface and HD output should be there. HD output should be capable of recording HD movie clip of (1920 x1080 Pixels). Pixel size 2.35µm x 2.35µm. Exposure time 0.5msec to 500 msec. with suitable C-Mount adapter

10.	Software	Image Capture Analysis software that can control all functionalities of the camera as well as capable to do image enhancement, point to point measurement and incorporating image description, date and time, Micron bar on the images. Branded PC:4GB Ram,1TB HDD,1GB Graphics card,i5 -64 bit processor, Windows 10
11.	Warranty/AMC	Warranty 2 Year + 1 Year Labour AMC should be quoted in the standard quote.
12	All components, microscope, camera and software Should be from single manufacturer to have better compatibility and service.	

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. 10,000/-**
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. **Venders**

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 [Preferably South 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: TT after order acknowledgement.
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. Delivery and installation and training (one week) should be made at the Department of Geology, University of Kerala, Kariavattom campus, Trivandrum without extra cost (inclusive of documentation, demurrage, customs duty, clearance and transportation charges). 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 three years** or more.
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. Under taking of support for next 10 Years
4. BoQ
5. Tender fee

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