



**DHARANIDHAR UNIVERSITY,
KEONJHAR-758001, ODISHA**

TENDER CALL NOTICE

Letter No: BPD/24EM/GL/72

Dated: 14-05-2025

Sealed tenders are invited from recognized Firms/Manufacturers/ Distributors/ Authorized Dealers with valid GSTIN for the supply of petrological microscope for one research project entitled "Tectonothermal architecture of metapelitic rocks from the northernmost limit of Indian Shield: Results from Petrochemistry, Geothermobarometry and Iso-chemical Phase Section Modelling" under MRIP-2024 funded by OSHEC, Govt. of Odisha.

Last Date: Sealed tender completed in all respect must reach to the Principal Investigator, MRIP-2024/24EM/GL/72, Dept. of Geology, Dharanidhar University, Keonjhar-758001 on or before **20/06/2025** by 5.00 PM. The authority reserves the right to cancel the tender without assigning any reason thereof.

Dr. Biraja Prasad Das
Principal Investigator,
MRIP-2024 (24EM/GL/72)
Dept. of Geology
Dharanidhar University,
Keonjhar-758001

Biraja Prasad Das
14/05/25

Principal Investigator (MRI)
Dharanidhar University
Keonjhar-758002

The details of requirement are given below:

Specifications for Polarizing Microscope with Orthoscopy and Conoscopy for the study of rocks thin sections with built-in 12 Megapixels Digital Camera and measurement program:

1. 4-position individually centrable knurled nosepiece for exact centration of each objective to the stage rotation axis, for quick and easy change of magnification. The nosepiece must have built-in DIN slot to insert the compensator or retardation plates.
2. Plan POL Objectives: 4x/0.10 NA 26.2mm W.D., 10x/0.22 NA 7.8 W.D., & 40x/0.65 NA 0.31 W.D.
3. Circular 360° rotatable stage with anodized surface. Diameter 178 mm or more and laser engraved stage calibration in 1° increments and verniers on two sides to 0.1°. Should have brake for securing rotation location.
4. 30° Pol binocular tube with slot for alignment, 90° and 45° orientation feature on right eye tube for crosshair eyepiece. Eyepiece locking screw on left eye tube. Interpupillary distance range 52 mm – 75 mm.

5. Microscope should have suitable module for attachment of camera with 50%:50% light splitting between the binocular observation tube and camera sensor. The camera must be with 12 Megapixels (JPG images) resolution or higher with HD live image 4k, 60fps, HDR, Full HD MJPG Video recording with 30 fps. The system should be provided with calibration and measurement program to work with external PC or directly with external HD Monitor to work as stand-alone unit.
6. A pair of 10X/20 focusing eyepiece with eye guard and one with built-in Crosshair reticle.
7. Built-in light source and power switch with pilot light. 25,000 hours long life LED illumination with constant color temperature technology cool, white light. Continuous intensity adjustment. Illumination enough for viewing at lowest intensity. 2 hours Auto off (can be disabled or enabled).
8. Conoscopy module with Bertrand lens and analyzer with labeled flip in / flip out controls. The complete module should be inside protective housing.
9. 530nm Lambda and Nosepiece Compensator
10. Strain-free Pol Abbe Condenser 0.85 (for magnification 4x-100x) with variable and adjustable aperture diaphragm with magnification labels properly marked on it. Centrabale and focusable condenser mount.
11. Koehler illumination with variable and adjustable field diaphragm as well as aperture diaphragms.
12. Rotatable Polarizer (built-in scale) for Transmitted light with locking thumbscrew with quick swing-in and swing-out mount.
13. Focus: Low position focus controls. Self-adjusting focus mechanism. 300 microns per fine focus rotation. Calibrated in 3-micron increments. Weighted focus knobs.
14. Stand should have a built-in storage position for centering screws with magnetic attachment and 2 detent attachments for nosepiece compensators to prevent loss.
15. Microscope stand construction Die-cast aluminium, designed for easy carrying and lifting with vertical handle and undercut in front of stand with a cord wrap
16. All touchpoints should be with Anti-Microbial treatment to inhibit the growth of bacteria / germs in a multiuser environment as in educational institutions.
17. Certifications: CE, RoHS, Main optical components meet ISO 9022-11 for mould growth.
18. EC declaration of conformity for EN 62471:2008, 2014/35EU, 2024/30/EU, 2011/65/EU & 2015/863/EU or equivalent standards by BIS mentioning the unique part number for the quoted model of microscope.
19. All the above technical specifications should be categorically published on OEM official website.
20. Accessories: Pair of objective centering tools, 2 Object Clamps, Dust Cover, User Manual CD
21. The quoted microscope model should be upgradable to Incident light 4-segment LED illumination for Brightfield, Oblique and Polarized light. Built-in adjustable aperture diaphragm. Built-in Polarizer with 0°, 45°, and 90° click stops and 180° rotatable analyser slider with scale.
22. Warranty: 1 years
23. Should be able to Physically demonstrate the product within our institute if required at the time of technical evaluation.