

**CORRIGENDUM-1**

Technical Specifications	Bid should be submitted as per below mentioned Revised Technical Specifications
Last date of submission of E-Tender	13.02.2019 (Wednesday) on or before 03.30 p.m
Opening of Techno-Commercial Bid	13.02.2019 (Wednesday) at 04.00 p.m

**Revised Technical Specification of Research Polarizing Microscope**

TENDER NO. RGIPT/Jais/E-Tender-CRF-SS/2018-19/05

**Technical Specifications for Research Polarizing Microscope with Reflected and Transmitted facility, Fluorescence Attachment with Digital camera, Imaging software, Point counting stage and Heating Stage**

**Specification:-**

- Research Microscope stand for Polarization for reflected and transmitted light microscopy, with LED illumination, dovetail for interchangeable stages, height adjustable focus knobs, focus stop and torque adjustment.
- Reflected light axis with built-in quartz plate to avoid pseudo-pleochorim, oblique illumination to increase low contrast, a centrable aperture and field diaphragm and analyzer and polarizer slot.
- Revolving nosepiece 5-fold, for pol, centrable,
- 2-step focusing drive (fine & medium & coarse)
- Pol rotating stage centrable 360 deg with 2 verniers, with 45° clickstop
- Object guide mechanical stage for Pol-Stages with ultra fine xy-control, suitable for different slide formats, including interchangeable resting buttons (0.1, 0.3, 0.4, 1.0 and 2.0 mm) for point counting.
- Standard focus knobs for ergo operation
- Brightfield reflector for advanced Pol-sensitivity.
- Pol Observation phototube FOV 22mm or better with 2 or 3-beam splitter or better :- 100/50/0
- Separate Lamp Housing for LED illumination for reflected and transmitted light microscopy.
- Fluorescence Illuminator attachment for 100W Mercury(Hg) complete with Mirror Housing, Lamp Housing, Mercury Lamp(103 watt), Booster lens, Protective Shield, Fluo-free immersion oil..500ml
- Fluorescence Filter system for UV -Blue and Green excitation with narrow band filter.
- Whole wave and Quarter plate for compensator slot
- Polarizer RL with 3 switchable positons 0°, 45°, 90°, ratatable analyser 180 degree and rotatable polarizer for transmitted light.
- Pol universal condenser with switchable condenser heads, with 2 centring keys and Condenser head for heating stage applications, low-strain

- Set of objectives, Fluotar 5x, 10x , 20x, 40x and 100x (with or without cover slip) for transmitted light microscopy and 50x/oil for reflected light applications & eyepiece pair 10x/22M + with graduated cross-line with 20x/oil objective as optional item
- Digital cooled colour camera with CCD sensor (2/3")
  - active cooling delta 20°C for reduced noise levels
  - max. image size 2560x1920 pixel, 5 Mpixels or better
  - fast live image 1280x960 pixel with 18fps
  - Pixelsize 3.4 µm x 3.4 µm or better,
  - Fast and ultrasharp grayscale modes for more details in delicate imaging situations
- Imaging software provides an environment integrated with the means of acquiring, storing, calibrating, annotating and interactively and automatically measuring microscope images with a Windows style user interface. A scale bar or micron marker can be superimposed on the image with spatial calibration calculated automatically for microscope and camera combinations. Interactive Measurements are made by using the mouse to indicate areas, lines, distances, angles, rectangles, count points. Colour space transformations, convolution and interactive editing further add to the versatility. Automatic thresholding gives binary images that may be processed by amendment, skeletonisation, logical operations, segmentation and manual editing and many other operations. A rich set of automatic measurements including, measurement of multiple particle parameters, Colour, Grey level and Densitometric measurements, Field and Feature measurements, User defined feature expressions with results given in histogram, and statistical formats.
- Point Counting Stage (motorized stepping stage ) with special software for modal analysis, petrographic textural and compositional analysis for the collection of Coal Maceral, igneous, metamorphic, ore, biostratigraphic , etc
- Temperature control microscope stage with upto 120°C with peltier element to control the temperature of sample mounted on a regular microscope slide which can be moved in X and Y directions with temperature controller and software to record the dataplot of of the experiment.
- Computer: Processor Speed> 2.5 GHz, 160 GB HDD, 1GB RAM, CD- ROM, FDD, 18” Colour monitor, Serial and parallel ports, Multimedia Kit, laser printer ,Online UPS with required capacity to run the integrated system including computer (min 5KVA) , 230VAC, 50Hz Single Phase I/P & O/P, 30min backup – Qty 1

**B. On-site Installation and training free.**

**Five Years onsite warranty with spares and AMC of the equipment should be mandatory for 3 years is required on all the items. Warranty period will start from the date of installation.**

**Parts should be given with part no. and name.**

The other terms & conditions of the E-Tender remains unchanged.

This issues with the approval of the Competent Authority.

Sd/-  
Stores & Purchase Officer