

**Department of Archaeology, University of Kerala**  
**Kariavattom, Thiruvananthapuram**

**TENDER –Pl.A1 No. 2912/ARC/17**

Dated 01.06.2017

**E-Tender Notice**

Department of Archaeology, University of Kerala, Kariavattom invites open tender through e-Procurement (two cover system) from the Original Equipment Manufacturers or their Authorised Dealers for the **Supply and Installation of Research Automated Polarising Microscope with camera and computer**

Last date and time for submission of tender online	<b>17.06.2017 AT 5.30 PM</b>
Last date and time for submission of tender offline	<b>17.06.2017 AT 5.30 PM</b>
Date and time of opening of tender	<b>22.06.2017 AT 11 am</b>
Hard copies of the sealed tenders to be submitted to the office of	<b>The Registrar, University of Kerala,Senate House campus, Palayam Trivandrum- 695 034, e-mail: regrku@gmail.com</b>
For technical details contact	<b>The Head, Department of Archaeology, University of Kerala, Kariavattom campus, Kariavattom P. O., Trivandrum- 695581, Kerala.</b> Phone: 09426536305, Email:rajeshkeraliyan@yahoo.co.in

**For further details logon to [www.etenders.kerala.gov.in](http://www.etenders.kerala.gov.in)**

**TECHNICAL SPECIFICATIONS for**

Sr. No.	Instrument	
1	<b>Research Automated Polarising Microscope with camera and computer</b>	
	Type	Upright Motorized Polarizing Microscope with TL and RL illumination for Orthoscopic/Conoscopic
1	Stand	Motorized Research Microscope stand with an in built programmable TFT monitor to display the microscope parameters and to control all the motorized functions Microscope should work as a stand alone system without PC too.
2	Optical System	(Infinity-corrected Optical System) or better optical system
3	Illumination System	12V/100W Halogen/LED white light /integrated power supply switching of Transmitted and Reflected light mot light intensity control also possible via PC
4	Focusing Mechanism	Motorized focusing with Z step resolution 10-25nm or better with adjustable height stop and torque of focusing.
5	Polarized Light	Built-in Bertrand lens for orthoscopic/conoscopic observations (focusing possible) Bertrand Field Diaphragm
5.1	Reflected light Module	Motorised 6 position reflector turret upgradable to fluorescence
6	Revolving Nosepiece	Coded Sextuple revolving nosepiece with slot for Polarizer.
7	Analyzer	360° dial-rotatable Minimum reading: 0.1° for TL & IL
7.1	Polarizer	Rotatable for TL 0-90 and RL 0-360
8	Stage	Rotatable stage with centering mechanism
8.1		Two types: a) Ball-bearing method, 360° horizontal rotation, lockable in any position, b) X-Y attachment
8.2		Rotation scale (minimum reading: 0.6° or better) Slider holder and cross travelling mechanical stages can be attached. x-y scale with minimum reading 0.1mm
9	Condenser	Universal pol grade Condenser NA: 0.9 Built-in aperture diap
10	Objective Lenses(Pol grade)	SemiPlanapo /Neofluor / Fluorite polarizing objectives 2.5XP , 4X/5XP , 10XP , 20XP , 50XP , 100XP

11	Eyepiece (Pol Grade )	Wide field eye peace with built-in cross line 10X ( FN23)
12	Magnification changer	Magnification changer, 1.6X, 2X, 3.5X
13	Gypsum plate	Gypsum plate $\lambda$ 530nm
14	Tint Plate	1 wave length plate (R= 530nm) and $\frac{1}{4}$ wave length plate (R= 137nm) A plate
15	Compensator	tilting compensator k 0-30, tilting compensator B 0- 5
16	Camera & software	High Resolution CCD Digital Camera with Minimum 12bit, 5 MP resolutions for each colour R, G, B with, 2/3 inch sensor size, speed up to 15 fps Imaging software should be able to synchronise microscope motorization (for Future up gradation) & image acquisition device (camera). The imaging software should also possess features such as movie acquisition, play, measurement and counting.
17	Computer System	Intel Pentium i7 Processor, Windows 7, 64 bit,8GB RAM with 2TB GB HDD, DVD Writer, N videa graphics card, 24” TFT Monitor, key board wireless mouse
18	Warranty	1yr
19	Compliance	A compliance is must to provide along with technical documents
20	Scope of Supply	A detail technical quote with detail technical description should be provided with part Nos as the scope of supply
21	Authorized Distributor, Dealers, Manufacturer, Authorized Agents etc can quote	Authorization should attach from the principals or manufacturers with Tender No, If two authorize parties quote the same product, Only sole authorize agent from the principals will be considered

**General Conditions:**

1. The Bidder should be a manufacturer or their dealer specifically authorised by the manufacturer to quote on their behalf for this tender as per Manufacturer Authorisation

Form 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 equipments 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.

- \* Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof.
- \* 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 it's working. Also include adequate proof for the claim regarding the performance.
- \* 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.
- \* 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.
- \* The price should be inclusive of all taxes, duties, transportation, installation etc. Nothing extra will be paid in addition to the quoted rate.
- \* Payment Terms: 90% payment shall be made through irrevocable L/C 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.
- \* 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.
- \* **Every tenderer should submit Tender fee of Rs. 500**
- \* Delivery and installation: Proposed delivery schedule should be mentioned clearly. Delivery and installation should be made at Department of Archaeology, University of Kerala, Kariavattom campus, Trivandrum- 695581, without any extra cost.

- \* Service facility: Supplier should mention their details of service setup and manpower in Trivandrum who are responsible for after sales support.
- \* The model number, make, and a printed literature of the product shall submit positively.
- \* In case of any dispute, the decision of the University authority shall be final and binding on the bidders.
- \* The quoted item should be under comprehensive warranty for 5 years or more.
- \* The undersigned reserves the right to reject any or all of the tenders received without assigning any reason thereof.

**Documents to be Uploaded**

- \* Signed Compliance Matrix
- \* Detailed Technical Brochure
- \* Under taking of support for next 10 Years
- \* BoQ
- \* DD/Hard copy of Bank Guarantee if opted

**The Registrar,  
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Senate House campus, Palayam  
Trivandrum- 695 034, Kerala.**