

**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 Automatic Sample Preparation Machine** for thin section (Grinding & Polishing )

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:rajeshkeralian@yahoo.co.in

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

**TECHNICAL SPECIFICATIONS**

2	Automatic Sample Preparation Machine for thin section (Grinding & Polishing )	
I	Rock Cutting & Grinding Machine	
1)	Cutting Ability :	Sectioning & Grinding capabilities.
2)	Cut-off Wheel	Diamond Cut-off wheel 203 mm dia. With 0.5–1.5 mm thickness.
3)	Rotational Speed	1800 TO 2200rpm
4)	Vacuum Chuck	1 pieces, 75.2 x 50.8 mm max on grinding side and cutting side.
5)	Precision grinding	+/- 10 $\mu$ m or Better
6)	Motor Power	1/3 Hp [250W] or better
II	Vacuum Impregnation Cold Mounting Equipment	
1)	Vacuum impregnation unit	Should have a rotating turn table inside the vacuum chamber, which can rotate 360 degree in its plane and a pouring mechanism by which the samples would be casted in different moulds one after other while under vacuum. The rotating turn table should be user operatable.
2)	Holder	mounting cup holder with room for up to 8 mounting cups.
3)	Vacuum chamber	should be capable of achieving -26" of mercury (559 torr mm ) Vacuum or better.
III	Grinding & Polishing Machine	
1)	Disc Diameter	300 mm
2)	Grinding & polishing machine Speed :	variable speed 50–400 rpm in steps of 10 rpm.
3)	Rotational directions of the disc	anti-clockwise / clockwise direction only.
4)	Voltage supply	single phase 1/3 x 200–240 V / 50 Hz
5)	Specimen Mover	Three different specimen Mover plates, which can accommodate 4 mounted specimens of 50 mm diameter or or better
6)	Force on specimen	It should be possible to apply force between 0N to 20N with manual

		adjustments in steps of 5N
7)	Speed	60-150 rpm at 50Hz in both direction only 10rpm increments or better.
8)	Motor Power	560 W
9)	ESSENTIAL ACCESSORIES AND CONSUMABLES FOR ABOVE MACHINES	The essential accessories and consumables should be provided along with machines
	<b>OPTIONAL</b>	
<b>I</b>	<b>ROCK CUTTER</b>	
	Cutter	Manual cutting action with best in class lighting, visibility and cut capacity. large workspace and versatile vising options simple, quick and easy positioning of samples for cutting and sectioning Petrographic or Geological cutting .
	Table with X-Y positioning suitable for incorporation in cutter	The PetroCut Vise Table may move 2in [51mm] side-to-side (X-Direction) and 3.125in [79mm] front-to-back (Y-Direction). and two rock clamps
	Motor Power & Consumption	4Hp [3kW] 13amps @ 230VAC; 7.5amps @ 400VAC 3 phase
	Wheel Speed	2800rpm @ 50Hz; or better
	Daimond Wheel Diameter & Arbor	10in [254mm] diameter; 1.25in [32mm] Arbor
	Maximum Cutting Capacity	3.75in [95mm] or better
	Vise Table Dimensions	9.5 W x 9.875in D [240 x 250mm]; 12mm T-slots
	Compliance	CE
<b>II</b>	<b>BONDING FIXTURE</b>	Complete with pressing rod and support ring for gluing specimens on glass slides for making thin sections.
	Compliance Statement	A compliance is must to provide along with technical documents
	Scope of Supply	A detail technical quote with detail

		technical description should be provided with part Nos as the scope of supply
	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:**

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