### Department of Zoology, University of Kerala,

Kariavattom Campus. Thiruvananthapuram. 695 581

TENDER No. Pl.A1/1835/Zool/16

## E-Tender Notice

Dated: 24/12/2016

Department of Zoology, University of Kerala, invites open tenders through e-Procurement (two cover system) from reputed manufacturers/authorized distributors/ Indian Agents with sound Technical and Financial capabilities for Supply, Installation of Nanodrop BioSpectrophotometer (Micro volume & Cuvette Spectroscopy) and Refrigerated Micro centrifuge.

Last date and time for submission of tender	13.01.2017 17.00 Hrs	
online		
Last date and time for submission of tender offline	13.01.2017 17.00 Hrs	
Date and time of opening of tender	17.01.2017 11.00 Hrs	
Hard copies of sealed tenders to be submitted	The Registrar, University of Kerala, Palayam	
to the office of	Trivandrum- 695034, Kerala.	
For technical details contact	Dr. Sreejith. P, Assistant Professor Department	
	of Zoology, University of Kerala.	
	Phone No. 9496793794	
	E-mail:p.sreejith@gmail.com,	
	Psreejith@keralauniversity.ac.in	

For further details logon to www.etenders.kerala.gov.in

# <u>I. Specifications of Nanodrop BioSpectrophotometer (Micro volume & Cuvette Spectroscopy)</u>

SL NO	PARTICULARS	TENDER SPECIFICATION	
1	Instrument control	Built in touchscreen	
2	Minimum Sample	Volume 1µl	
		Minimum starts from 0.3µl	
3	Limit of detection	dsDNA: Pedestal:2.0ng/μl	
		Cuvette:0.2ng/ μl	
		BSA(IgG):Pedestal:0.06(0.03)mg/ml	
		Cuvette0.006(0.003)mg/ml	
4	Maximum Concentration	dsDNA: Pedestal:27,5000ng/μl	
		BSA(IgG):Pedestal:820(400) mg/ml	
5	Measurement & Data Processing time	>10 Seconds	
6	Measurement Repeatability Typical	0.002A(1.0mm path)	
		or 1% CV, which is greater	
7	Wavelength	Range:190-900nm	
		Accuracy: ± 0.75nm	
8	Photometric Range(10mm Equivalent)	Pedestal:0-550A	
		Cuvette:0-1.5A	
9	Accuracy	3% at 0.97A,302nm	
10	Resolution (Spectral Bandwidth)	1.8nm(FWHM at 254nm)	
11	Pathlength	0.030 at 1.0mm auto ranging	
12	Software Capability	1. The instrument should have embedded technical support for contaminant analysis to ensure real time	
		sample quality for downstream application with	
		instant feedback and report with corrected	
		concentration.	
		2. Must have an embedded sensor and digital image	
		analysis capability to monitor for bubbles and broken	
10	1:1:0	sample columns	
13	Light Source	Xenon flash lamp	
14	Temperature Control for cuvette only	37° C	
15	On board control Operating system	Android	
16	Connectivity	Three USB-A ports, Ethernet, Bluetooth and Wi-Fi	
17	Internal Storage	32GB Flash Memory (with Additional memory using flash drive)	
18	Audio	Built in speaker	
19	Stirring (Cuvette only)	9 Speeds	

### II. Refrigerated Micro centrifuge

SL NO	PARTICULARS	TENDER SPECIFICATION
1	Model	Centrifuge
2	Max g force	25,000rcf
3	Speed Range	100-18,000rpm
4	Number of Rotors	< 9
5	Refrigeration	Yes
6	Temperature control range	-11°C to 40°C
7	Power supply	120V,50/60Hz
8	Power consumption max	550v
9	Acceleration time to max speed	18 s(in FA-45-24-11)
10	Acceleration /Brake speed settings	2
11	Timer	10 s-9h 59 min, infinite
12	Dimensions (WxDxH)	12.6 x21.3 in 31.9 x 54cm/9.8 in 25cm
13	Weight	66.1lb/30kg
14	Max Capacity	48 x 1.5/2.0 ml tubes
15	Rotor type	Metal

#### **GENERAL INSTRUCTIONS**

- 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.
- 2. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof.

3. The price should be inclusive of all taxes, duties, transportation, installation etc. Nothing extra will be paid in addition to the quoted rate.

4. The Price item should be mentioned in the currency of the country of origin of the equipment and should be shown as CIP Trivandrum price with customs clearance at

Trivandrum Airport.

5. 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.

6. Validity of tender: Tender submitted shall remain valid at least for 90 days from the date of opening the tender. Validity beyond three months from the date of opening of the tender shall be by mutual consent.

7. Delivery and installation: Proposed delivery schedule should be mentioned clearly. Delivery and installation should be made at the Department of Zoology, University of Kerala, Kariavattom campus, Trivandrum-695581, without any extra cost.

8. **Service facility:** Supplier should mention their details of service setup and manpower in Trivandrum who are responsible for after sales support.

9. Charges for annual maintenance contract after expiry of warranty period to be quoted separately

10. The model number, make, and a printed literature of the product shall submit positively.

11. The vendor should provide a compliance certificate showing the items quoted with tender specifications.

12. In case of any dispute, the decision of the University authority shall be final and binding on the bidders.

13. The undersigned reserves the right to reject any or all of the tenders received without assigning any reason thereof.

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