# University Of Kerala

# Centre for Marine Biodiversity

K. Padmakumar, Ph.D Hon. Director

29 May 2018

## **QUOTATION NOTICE**

Sealed quotations are invited from the Manufacturer and their authorised reseller only for the supply of MULTIPARAMETER PORTABLE METER for DBT SNIPH Research Project, Centre for Marine Biodiversity, University of Kerala, Kariavattom Campus.

### **Specifications:**

- 1. Portable Multiparameter for measuring pH, oxidation reduction potential (ORP), dissolved oxygen (DO), conductivity, total dissolved salts (TDS), temperature, salinity and resistivity measurements.
- 2. Temperature range -10 to 110° C.
- 3. pH Measurement at the range of -2.000 to 20.000 with an accuracy of up to  $\pm 0.002$  pH and resolution of up to 3-decimal points and 5 Calibration Points.
- 4. Dissolved oxygen probe should measure up to 90.00 mg/L and 600 % in DO saturation
- 5. Salinity: 0 to 80.00 psu
- 6. Conductivity probe should measure up to 500 mS/cm
- 7. TDS: 0 to 200.0 ppt
- 8. Oxidation-Reduction Potential (ORP-mV) ±2000 mV

#### Ion Selective Electrodes Needed

- 9. Ammonia Electrode Gas Sensing combination
- 10. Nitrate Ion Selective Electrode
- 11. Carbon Dioxide Ion Selective Electrode
- 12. Fluoride Ion Selective Electrode
- 13. Cadmium Ion Selective Electrode
- 14. All electrodes should be supplied with respective standard solutions

- 15. Should have a provision to attach additional/optional sensors
- 16. Rugged and waterproof for use in harsh environments
- 17. Meter automatically logs up to 500 readings with time and date
- 18. High/low alarm limits
- 19. Password protection to prevent tampering
- 20. Carrying case for safe transportation of meter with all its probes and other accessories and Holder for electrodes has to be provided.
- 21. Should be operated with standard power supply and batteries also.
- 22. USB / IrDA Interface Adapter
- 23. GLP compliant.
- 24. Warranty 3 years on meter and 1 year for electrodes

#### Terms and conditions

- 1. The rates quoted should be inclusive of all kind of charges including cost of equipment, Concessional tax/duty, transportation, loading, unloading, installation and modification charges etc.
- 2. The quotation should be only in Indian Rupees for indigenous items. In case of foreign quote, the vendors may quote their rates in Indian Rupees as well as in Foreign Currency.
- 3. All relevant technical literature pertain to items quoted with full specifications (Drawing, if any), information about the products quoted, including brochures if any should accompany the quotation.
- 4. A list of reputed clients to whom the firm has supplied similar items to be furnished along with the quotation.
- 5. Quotation should be valid for a period of 90 days from the date of opening and the period of delivery required should also be clearly indicated.
- 6. Compliance Statement: Equipment point-by-point comparison/compliance statement with technical specification indicated in the tender, should be enclosed along with the tender as well as any other extra features of the equipment be shown separately therein and also compliance statement for all commercial terms.
- 7. The undersigned has the right to accept or reject any quotation without assigning any reason thereof.
- 8. Complaints with the items supplied during warranty period should be rectified/replaced to the satisfaction of the University by the suppliers at their own cost.
- 9. The payment will be made after satisfactory installation.

The sealed quotations should reach The Principal Investigator, DBT Research Project, Centre for Marine Biodiversity, Kerala University Campus, Kariavattom Campus P.O., Thiruvananthapuram-695 581, Kerala on or before 11.06.2018 12.00 p.m. For any other details please contact 09447794323.

Hon. Director Centre for Marine Biodiversity