राष्ट्रीय पादप जीनोम अनुसंधान संस्थान

(जैव प्रौद्योगिकी विभाग, विज्ञान एवं प्रौद्योगिकी मंत्रालय, भारत सरकार का स्वायत्त अनुसंधान संस्थान)

NATIONAL INSTITUTE OF PLANT GENOME RESEARCH

(An Autonomous Institution of the Department of Biotechnology, Ministry of Science and Technology, Government of India)

अरूणा आसफ अली मार्ग, पो. बाक्स नं. 10531, नई दिल्ली–110067

Aruna Asaf Ali Marg, Post Box Number 10531, New Delhi-110067

October 09, 2013

NIPGR/NIQ/PH/13-14

M/S as per list attached

Sub: Invitation of sealed Quotation

Sir,

Sealed quotations are invited for supply & installation of **02 no. of All-in-one pH/conductivity meter** for our institute as per the following specifications **in two bid system.**

All in one pH and conductivity meter specifications

A bench top instrument with the ability to accurately measure (result display x.xxx value) pH, mV, conductivity, salinity, TDS, dissolved oxygen and temperature is needed. This instrument should be able to measure micro samples (0.5 mL and more) and routine measurements in larger sample volume. The micro electrodes shouldbe able to measure readings in samples located in smaller narrow 1.5 mL tubes (11 mm diameter and 45 mm length). Instrument should have following features.

pH measurements:

- range 0 to 14 pH along with selectable resolution from 0.001 pH to 0.1 pH
- automatic multi-point calibration with pre-programmed and user specified pH buffer tables

mV measurements:

- selectable resolution from 0.1 mV to 1 mV
- features for mV calibration for accurate ORP measurements

Conductivity measurements:

- should be able to measure from 0.001 µS/cm to 100 mS/cm with a single electrode
- option for selecting reference temperature (20° or 25°C)
- should have option to automatically select correct range and frequency
- should have automatic cell constant determination with a preprogrammed standard (0.01M KCl)
- option to lock the initial conductivity range to avoid non-linear titration curves

Temperature measurements:

- measurement range 0…100C
- should have manual or automatic temperature compensation

Dissolved oxygen:

- Dissolved oxygen 0...60 mg/l and 0...600%
- Operates with a galvanic dissolved oxygen electrode requiring no polarisation time and no zero calibration
- Selectable resolution from 0.01 mg/l (0.1%) to 0.1 mg/l (1%)

The instrument should have option for digital output to a PC and interface for connection to a printer. Provision for inbuilt data storage (12000 values including temperature, time and date). Should have an indicator that prompts the user when readings should be taken along with hold function allowing to freeze the display for convenient reading or recording. The instrument should have a robust dust and splash-proof cabinet bright LED display for better readability. Should have feature to simultaneously connect probes (two channel) for pH and conductivity and should have ability to read pH and conductivity measurements at the same time in the same sample. Instrument should come with suitable electrodes that is needed for all above said measurements for both micro and macro sample size. Probes and solutions for all needs (including calibration, for both pH and EC measurements) should be supplied along with the instrument.

Three year warranty is required.

Other preferred features

- bluetooth ready and smartlogger II software for data collection
- inputs (Two BNC inputs for pH, mV, dissolved oxygen or conductivity)
- data acquisition software

You are therefore requested to please send your comparative offer indicating the maximum discount offered, along with a copy of Catalogue/Proprietary certificate. The Technical bid must accompany a Demand Draft amounting to Rs. 6000 .00 (Rupees Six Thousand Only), being the EMD in the name of Director, NIPGR, New Delhi and must be send in a **Sealed Envelope** duly super-scribed on top of envelope as **"Quotation for All-in-one pH/conductivity meter"** so as to reach to the undersigned latest by **29/10/13 (3.00 PM),** the same shall be opened on **30/10/13** at **3.30 PM**.

Thanking you,

क्रय एवं भंडार अधिकारी