



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)

अरुणा 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/WPS/13-14

M/S as per list attached

Sub: Invitation of sealed Quotation

Sir,

Sealed quotations are invited for supply & installation of 02 nos. of Water Purification System for our institute as per the following specifications in two bid system.

PRETREATMENT: Suitable 3 stage pre-treatment including 5 μ , 1 μ filters and Activated carbon cartridge for added advantage over contaminated water quality and also enabling replacement "on demand" to save recurring cost

FIRST STAGE: A microprocessor controlled system to produce Laboratory grade ASTM Type II water suitable for General Lab applications including buffer and dilution preparations and feed to Type I system with a production rate of at least 40 ltr/hr. It should have RO, DI and UV as standard technologies. It should be able to take a potable tap water according to International norms as a feed with at least the following water quality parameters: Silt Density Index: upto 5, Feed Conductivity: upto 1500 μ s/cm, Free Chlorine: upto 0.1 ppm.

The feed water quality testing should be provided by supplier and may provide additional accessories to meet the actual levels of contaminations. The system should be capable of bench or wall mounting installation with clear backlit display with modes and reservoir fill-level status. The system should be GLP compliance and should be able to automatically collect data with RS 232 port in accordance with international guideline. The system should be capable of Validation. The product water quality should be as follows: Resistivity: Clearly 10-15 m Ω cm ("Typically" "May be" will not be accepted), TOC: <30ppb, Bacteria removal: 99% or better, Silica Removal: 99.9% or better.

SECOND STAGE (STORAGE): The water should be stored in a 100 liters compatible tank (from the same manufacturer of the system) which should made up of pigment free polyethylene. The tank should be cylindrical to minimize surface area and should have conical bottom to avoid dead volumes and ease of cleaning and complete emptying. It should be supplied with a vent filter to avoid air borne contaminations and Inbuilt UV lamp to avoid bacterial biofilms in the tank. The tank should have a facility of water filling level adjustments in order to save water in times of low usage. This water should go as a feed into microprocessor controlled Type I system which should be able to produce water for Molecular Biology applications.

THIRD STAGE (ULTRAPURE): System should be able to give at least 200Ltr/day of Type I water. It should have an option of wall mounted remote and volumetric dispensing system from 0.01-65 liter. The system should be equipped with high capacity ultrafiltration cartridge in order to avoid frequent replacements. It should have a provision of monitoring feed water quality and conductivity cells with cell constant of 0.01/cm for accurate measurement enabling elongated consumable life. It should have a suitable sensor/alarm to monitor UV intensity. It should be able to quickly replace a cartridge without wasting time and water avoiding air purging etc. It should have a provision of adding 2 more dispensers with simultaneous dispensing. The system should be GLP compliance and can be validated. The final water quality should be as follows: Resistivity: 18.2 M Ω cm, TOC: 1-5 ppb, Bacteria: <1 cfu/ml or better, Particles: <1/ml (0.22 micron), Endotoxins: 0.001 EU/ml, DNase: <0.4 pg/ μ l, RNase: <0.003 ng/ml, Flow Rate: upto 2 lit/min, The system should be quoted with two years standard warranty. Price for 2nd year consumables and 4th year AMC should be quoted separately.

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. 32000.00 (Rupees Thirty two 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 Water Purification System**" 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