



Advanced Biotechnology Research Laboratory

St. Edmund's College

Shillong- 793003, Meghalaya, India

No: SEC/BT/NRL/2022-23/PC/001

Date: 22nd July 2022

e-TENDER NOTICE

On behalf of the Governing Body and the concerned Purchase Committee, sealed quotations are invited for the execution/ supply and installation of the laboratory equipment's under **NRL Sponsored Project** from approved and eligible Govt. / Private Supplier/ Manufacturer/ authorized dealers/vendors, etc. having valid license. The bid document is available in the college website, w.e.f **22nd July 2022 to 1st August 2022**. The sealed bid documents (Financial & Technical) shall be received till **16:00** hrs, on or before **1st August 2022** at the Department of Biotechnology, St. Edmund's College.

The bidders may download the pdf of the tender documents from the website (www.sec.edu.in) and submit the same within the stipulated time.

[NB: Interested Bidders are requested to submit all documents (Financial & Technical) as laid in the terms & conditions, failing which the Purchase Committee has every right to reject the tender documents]

(Chairman)

(Purchase Committee)



REQUIREMENT OF INSTRUMENTS TO BE PROCURED UNDER ADVANCED BIOTECHNOLOGY LABORATORY

1. Equipment 1:

<u>General:</u>	Gas Chromatograph (GC) with required detector for Petroleum hydrocarbon/Hydrocarbon analysis, Related Software for analysis, Gas Filter, and Suitable Capillary Columns. Easily swappable injector and detector modules as and when required by the user without any mechanical tools
<u>Gas Chromatograph</u>	Fully Automated Microprocessor controlled GC with extensive self-diagnostic facility, Intuitive user interface with control PC for easy control of the system and real time signal display, Should be with Programmable / Electronic Pneumatic Control and monitors for all Carrier, Injector, Split Vent, Detector and Auxiliary gases electronically, Auto shut down of instrument in case of leak detection in carrier gas, Auto adjustment of carrier gas flow to compensate for variations in ambient temperature and pressure. User interface health updates
<u>Injector:</u>	Injectors - Split / Split less injector Qty-1 <ul style="list-style-type: none">• Split / Split less injector for capillary Columns with Septum Purge functions• Must be suitable for all capillary columns, 50 um to 530 um id• Split ratio range: 10,000:1 or better, must be available to avoid column overload• Maximum operating temperature up to 400°C• Efficient carrier gas saver function built-in to reduce gas consumption during standby without affecting performance.• Must have electronic septum purge flow control to eliminate carry-over
<u>Column oven</u>	<u>Gas Chromatograph:</u> Should have an operating range of few degrees above ambient to 450°; Maximum Heating Rate: 125 °C/min or better; Maximum Number of Ramps to facilitate better analysis of environmental pollutant, Operating Range: Ambient +3 °C to 450 °C or better, Oven cool-down (22 °C ambient): 450 °C to 50 °C in <4 min, EPC Pressure Range: 0-150psi or better, Automated LED illumination
<u>Column:</u>	Suitable Capillary Column for Petroleum hydrocarbon/Hydrocarbon Analysis,
<u>CDS Software:</u>	Software controls all GC, should allow fully automated quantitative and qualitative analyses with standard and optional Custom Reports. 21CFR Part 11 Compliance with integrated database. Software should be compatible with Windows operating system.
<u>Flame ionization Detector (FID)</u>	FID – Qty – 01 <ul style="list-style-type: none">• Should be compatible with Capillary column and packed column• Flameout detection and automatic re-ignition• Minimum Detectable Level (MDL): <1.2 pg C/s or better• Sensitivity: >0.03 Coulombs/gC or better• Linear dynamic range: >10⁷ or better• Data acquisition: 600 Hz. or higher
<u>Local Accessories</u>	<ul style="list-style-type: none">• UHP Grade Nitrogen Gas with Double Stage SS Diaphragm Regulator-1 set FOR GCMS• UHP Grade Hydrogen Gas with Double Stage SS Diaphragm Regulator 1 set (FOR FID)



SPECIAL NOTE:

- UHP Grade Zero Air Gas with Double Stage SS Diaphragm Regulator 1 set (FOR FID)
- Gas purification panel for all required gases 5ml Gas Tight Syringe -1 No
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- All specifications offered Needs to be supported with original literature as well as the same literature needs to be available in the website of the manufacturing company.
- The offer to be made in detail with all technical specification, item details with part no's.
- All supporting technical literatures complying the technical specification need to be attached along with the order.
- Extensive Training to be provided at installation site with a qualified application specialist
- Supplier with international ISO manufacturing certificates.
- Supplier with minimum 10 installation in a reputed IIT, IISER, NIT Government institutes.
- Make in India Class two product will get special preference as per GOI Rules.
- An Autosampler option to be given incompatible with the above instrument's configuration

Accessory
(Optional)

2. Equipment 2:

General:
Specifications:

Rotatory Vaccum Evaporator

Rotary Evaporator:

- Rotation speed range of 5-300 RPM or higher with a control of 1 RPM or better
- Digital Display of Speed and Heating bath temperature Set & actual.
- Manual lift with safety "lift-out-function" on power failure, with 115-125 mm stroke.
- Clearly visible glass Digital display (black and white)
- Locking Mechanism for Vapor Tube with Color coated display.
- Vertical Glass Condenser with minimum 1500 cm² or higher cooling surface
- Heating Bath temperature: RT to 180°C or higher
- Heating Control accuracy of ± 1 K, heat output 1300 watt. Or better
- Heating Bath capacity: 4-5 liters to accommodate Flask size 50ml to 3000ml.
- Protection class according to DIN EN 60529 IP 20 or equivalent
- Instrument should include Rotary Evaporator, heating bath, Vertical Condenser, 1 Lit Evaporation and 1 lit receiving flask, Solvent trap vapor tube and all necessary accessories to make it functional.
- Warranty: 3 years

Vacuum Pump: Having minimum following specification

- Four Cylinder Dry Chemical Resistant Speed regulated vacuum pump.
- Integrated vacuum controller, digital TFT display with remote control.
- Pump rate max. 1.3 [m³/h] or better
- Final pressure without gas ballast [mbar] 2-5 of better
- Pump should have Boiling point detection facility & digital Solvent library
- Pump should have Timer setting facility
- Pump Should have automatic, manual, pump % & program Mode
- Protection class according to DIN EN 60529 IP 20 or equivalent



- System should have USB interface & RS 232 interface both.

Optional

Re-circulating Chiller: Having minimum following specification:

- Working temperature Range: -10°C to Room Temperature or better
- Digital LED Temperature display with Pt 1000 sensor & temperature control
- Temperature stability: 0.5°C or higher
- Display resolution: 0.1°C or better
- Set temperature resolution: 0.1°C or better
- Cooling Bath Capacity should be 3.5 liter or better
- Natural Refrigerant cooling gas R290
- Cooling capacity 400W @ 20°C or better
- Pump type: Pressure - suction pump
- Pump pressure (discharge side) max. 0.35 bar and pressure (suction side) max. 0.15 bar
- Flow rate: 17-18 L/min or better
- Protection class according to DIN EN 60529 IP 21 or equivalent
- RS 232 interface and USB interface both should be there for better PC connectivity
- Voltage [V] 230, Frequency [Hz] 50/60

General:

- Rotary Evaporator and accessories as pump and chiller should be from same manufacturer for better aftersales service and maintenance
- All the system should have CE approval.
- Warranty: Warranty should be minimum 3 years or more

3. Equipment 3:

General:

Specifications:

Soil Tensiometer

Soil Tensioner (Gauge Type) provide a direct measure of the tension at which water is held in soil, and therefore the suction plant roots need to exert to extract water. This instrument comprises a water filled tube which is sealed at one end, with a porous ceramic filter at the other end. The specifications of this filter are such that, when buried in soil, it will allow water to flow freely through it, but not air. Tensiometer is available in standard lengths of 15, 30, 45, 60, 90, 120 cm. General use with row, tree, and field crops. Includes reservoir, air free gauge chamber, and hermetically sealed dial type vacuum gauge with dual scale of millibars (-1000 to 0) and mmHg (-760 to 0) range.



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SPECIAL TERMS & CONDITIONS:

- 1. For Equipment 1:**
Maximum Quoted Price to be less than ₹ 20 L (Twenty Lakhs only) inclusive of all taxes, delivery, and installation charges etc.
- 2. For Equipment 2:**
Maximum Quoted Price to be less than ₹ 3.0 L (Three Lakhs only) inclusive of all taxes, delivery, and installation charges etc.
- 3. For Equipment 3:**
-Maximum Quoted Price to be less than ₹ 0.15 L (Fifteen thousand only) inclusive of all taxes, delivery, and installation charges etc.
- 4. Earnest Money Deposit (EMD) @ 1 % of the Tender Value for each equipment's to be made in the form of Demand Draft (DD) payable to St. Edmund's College, Shillong, State Bank of India, Laitumkrah Branch. The EMD shall be adjusted accordingly during the final payment to the eligible vendor (s).**
- 5. The Eligible vendors must deposit an amount as PERFORMANCE SECURITY DEPOSIT (PSD). The amount is to be finalized during issuance of purchase order to the eligible vendor by the Purchase Committee. The modalities of such refundable deposits shall be made available to the eligible vendor (s).**

GENERAL TERMS & CONDITIONS

The vendor must provide the following:

- 1) Validity:** Quoted rates must be valid for 12 months.
- 2) Rate:** The rate quoted should not exceed the Company price/ M.R.P. /unit and should be quoted on Door Delivery basis and including of all applicable tax. **Tax amount should be clearly indicated separately.**
- 3) Details of the technical features of the offered equipment**
- 4) Standard Technical literature on each of the items offered**
- 5) List of reputed organizations/Institutions, where similar orders have been executed (copies of the purchase/work orders will have to be enclosed)**
- 6) Warranty/Guarantee:** The material is quoted with a minimum Warranty/Guarantee period of 12 months after the date of delivery and acceptance at destination. The rates should be quoted in Indian Rupee/unit. Details of nature and maximum period of warranty offered by the vendor must be clearly mentioned.
- 7) Delivery:** The stated delivery of items to St. Edmund's College, Shillong, will have to be done within maximum of 30 days from the date of issue of the Purchase Order. All aspects of safe delivery shall be the



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exclusive responsibility of the vendor. If the firm fails to deliver the goods within the stipulated time, the purchase order may get cancelled.

8) **The bidder must clearly mention the following:**

- a. *Packing & Forwarding Charge, if any.*
- b. *Annual Maintenance Contract (AMC) rate (after expiry of warranty period) is to be clearly indicated – preferably in both comprehensive and non-comprehensive terms, failing which the offer may not be considered even if it turns out to be at the lowest price.*
- c. *Installation & commissioning charge (including Service Tax), to be shown item-wise extra, if any.*

9) Any loss or damage of items before/during delivery would be borne by the supplier only.

10) **Dealership Certificate:** Dealer certificate need to be enclosed along with Quotation, if any.

11) **GST Certificates:** TIN/TAN/PAN/GST number clearly will have to be indicated with the quotation to be submitted.

12) **PAN/ AADHAR Card for individuals**

13) **BANK DETAILS (A CANCELLED SIGNED CHQ) for individuals/ firms**

14) Advance payment is not admissible, and payment will be made only after complete installation of the items by the supplier to our full satisfaction and bills may be submitted in triplicate. If required, the Purchase Committee may seek the approval of the Sanctioning Authority i.e., NRL, Assam before making the payment. **The payment will be made through electronic bank transfer.**

15) The College Purchase Committee (PC) will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the best price

16) The College Purchase Committee (PC) reserves the right to modify/cancel the requirements.

17) The College Purchase Committee (PC) reserves the right to accept or reject any or all the quotations without assigning any reason.

18) The Sanctioning Authority i.e. NRL, Assam may terminate the sanction granted to the college and the process of procuring the items in such an eventuality shall be treated as cancelled.

NOTE: The bid documents are not transferable

(Chairman)

(Purchase Committee)



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To
The Chairman,
College Purchase Committee
St. Edmund's College,
Laitumkhrah, Shillong-793003

Sub: Quotation for the supply of _____

Sir,

I/We have the honour to submit herewith the Quotation for the above mentioned work and am/are willing to execute the same at the rate quoted in Annexure 1 for favour of your kind consideration

My/Our GST registration No. is _____ of _____

I /We have gone through the detailed quotation document and undertake to execute the work if allotted to me / us as per terms and conditions laid down therein and at the rate quoted by me/us as in Annexure-II.

I/We also pledge to execute the work myself/ourselves without subletting to others.

Encl: Quotation documents (Financial & Technical) in original and self-attested copies of certificate as required

Yours faithfully

Signature of the Bidder with Seal

Dated: _____

Place: _____

Address: _____
