School of Life Sciences Central University of Haryana, Mahendergarh-Haryana

Sealed Tenders (Technical and Financial) are invited for the following scientific equipments (printed overleaf) so as to reach the undersigned latest by 18 March, 2019 (till 2:00PM).

Instructions to Suppliers:

Two types of quotations are to be submitted: Technical and Financial

Technical Quotations should contain all details of technical specifications of the equipment including manufacture and model details along with commercial terms and Conditions, warranty and delivery schedule. The quote should be valid for a minimum of 120 days from the due date.

Pictures of the actual model of the instrument must be attached showing manufactured balance with similar specifications as above with logo or name of the company on the equipment.

Authorization certificates from the Principal manufacturer, if any, must be provided.

Proprietary certificate for any proprietary or patented item must be provided, if any.

Unique features of the equipment maybe highlighted along with their applications and advantages over other available models.

A user list of at least 10-20 users of the model quoted (who have installed and used the instrument successfully for considerable period) with institute name / e-mail IDs or phone nos. should also be appended.

Please include point-wise technical compliance statement and attach original technical literature/brochure in support of the claims. Alternatively, the website of the principal manufacturer should also show similar specifications.

Financial Quotations should contain price of the equipment, discount if any, packaging and forwarding charges, Air Freight and insurance charges, and any other applicable charges. The price quoted should be either CIP, New Delhi or F.O.R destination against customs duty exemption certificates provided by the buyer and inclusive of standard installation.

The supplier should seal both the quotations in separate covers. Both these sealed covers are to be put in a separate bigger envelope, which also be sealed and superscripted.

Institute reserves the right to order equipment with better quality and suitability over lower price and to accept or reject any or all quotations without assigning reasons thereof.

The Institute also reserves the right to request for free demonstration of the quoted items for technical acceptability as per the tender specifications at the user's location.

The tender may also be cancelled without providing reasons.

(Prof. Satish Kumar

le ?. A lyonly de

Detail of Tender Fee and EMD

S. No.	Instrument	EMD
1	Ultra Pure Water Filtration Unit (01)	14000/-
2.	Multimode Plate reader(01)	30000/-
3.	Laboratory Fermenter(01)	12000/-

Tender Fee (Rs.500/-) and EMD separately in the form of Demand Drafts in favor of "Central University of Haryana" payable at Mahendergarh.

Instruments	Specifications
Ultra Pure Water Filtration Unit	 Specifications: Two stage water purification system capable of producing Type-I and Type-II wate directly from tap water though reverse osmosis. Electro-deionisation. UV irradiation technologies. The feed water acceptance should be less than 2000 micro Siemens/cm, free chlorine less than 3 ppm & Fouling Index less than 12 or better without any additional Local RO requirement. A suitable Pre-filtration unit should be supplied with 3 consecutive filters of 10 micron 5-micron and 1-micron filters with inbuilt Booster pump of 100 GPD with less than 50 DB noise level. First stage system for Type 2 water: Inbuilt Pre-treatment cartridge with activated carbon Reverse osmosis membrane should be able to reject >95% of ions and organics. System should have Electro Deionization module to eliminate the frequent replacement of costly DI resins. Flow rate: 10 L/hr or better, (fons organics removal up to 99% or better, Resistivity: > 5 MΩ.em @ 25°C: TOC <30 ppb; Slicate content >99.9 % Retention). System should have 254 nm UV lamp to remove the bacterial count in store water. Should be provided with a poly ethylene made reservoir of minimum 25 Litres capacity with auto cut-off Tank level sensor with dispensing tap. The reservoir should be from OEM of main system. Bohuld produce unductivity/resistivity, Alert & alarm for cartridge replacement For Second stage system Type I water: Should produce ultrapure water of Resistivity with minimum parameters like: 18.2 MOhm em at 250°C. Conductivity: 0.050x/s/cm at 250°C. TOC <5 ppb. Pyrogen Level (EU/mL) < 0.001, RNases (ng/mL) < 0.01, DNases (pg/uL) < 4, Bacteria (efu/mL) < 0.1. Flow rate: minimum 15 Lit/min. Automatic recirculation feature for consistent purity of water in both type II & Type I The system should have DI – cartridge with mixture of activated carbon and mixed ion exchange beads to reduce Ionic and organic levels. System should

41/3/19

le 1.3.19 lujo-lus 1.3.19 lujo-lus 1/2/12

	 7 Should have more than 100 installations in last 5 years for the same model quoted. User data with telephone E Mail to be provided. 8 Should be supplied with one spare UV lamp and one set spare cartridges for all units 9 To be provided with a branded voltage stabilizer 5 KV with time delay. 10. All features must be supported with literature available on the web. 11. Warranty of 2 Year.
Multimode Plate reader	 Modes: Absorbance, Fluorescence Intensity, Luminescence and Time Resolved Fluorescence. Range Absorbance: 230 – 830nm (Monochromator with 1nm increment). Fluorescence Intensity: 250 – 700nm (Double grating monochromator Top and Bottom optics Imm increment). Luminescence: 300 – 700nm. Time resolved fluorescence: 200 – 700nm. Light Source: Xenon Flash Lamp. Microplate types: 6, 12, 24, 48, 96 and 384-well plates, PCR plates, Quartz Cuvette (Biocell) and compatible with Multi-Volume Plate with 2 μL Microspots Reading speed: 96: 11 seconds 384: 22 seconds Temperature control: RT to 45°C, with temp gradient to prevent condensation on lid while running kinetics with closed lid Shaking: Yes, user programmable. Top and Bottom optics adjustment: Automated Pathlength correction facility automatic software for data reduction and calculation. Software: Should be reader control. advanced data analysis and flexible Excel export in one software gakage. Reading Modes: Endpoint. Kinetics & spectrum. and 1) onfield upgradable to injector for flash luminescence 3) onfield upgradable to injector for flash luminescence 3) onfield upgradable for gas controller to do cell study 4) you can add filters anytime in machine for higher sensitivity(hybrid system) The system should be supplied with a Suitable branded desktop with i3 processor and color Laser printer.
Laboratory fermenter	 Mode of operation: Fermenter should have a diagnostic mode, where all the systems parameters can be individually checked by the user like probes, pumps, motors, sensors, calibration, reading, by pressing keys on the control panel and observing fermenter response time. Modular Size and spare parts: System should be compact in nature with optional modules that can ordered separately with the basic unit or can be incorporated in future. Modules like chiller system, feed-harvest system, pH control with autoclavable pH probe, DO control with autoclavable DO probe, software, foam control, etc. Controller: 24-bit programmable microprocessor controller USER INTERFACING with LCD Display: 16 key feather touch multicoloured keypad for entering separate keys for setting values, entering calibration modes with 20x4 alpha-numeric LCD with simultaneous display of set and actual values of controlled parameters. Control Panel: Panel should be powder coated MS with keypad, LCD and system on-off switch Construction: Borosilicate double glass vessels of total volume 7 L with working volume of 5 L. D/H ratio of vessel is 1:2 to 1: 3 depending on volume. Design temperature is 150°C HEAD PLATE: Stainless Steel 316L head plate is supplied with sufficient number of ports. Contact parts should be made up of SS316L. All ports should be designed to prevent contamination cross-over. Fitting of ports, sensors, tubings, motor should be convenient. O-rings to be provided as per pharma grade silicone
MATISIN	Le P. 3.19. Lyon Ly John John John

MATISIN

 Ports: Should be provided on head plate and vessels made of SS 316L for pl sensor, DO sensor, foam sensor, temperature thermowell sensor, air sparger, a
exhaust, agitation motor, heater, acid, base/alkali, anti-foam, inoculum feed
harvest, etc. Contact parts are made from SS316L grade.
STIRRING & AGITATION:
Material Stainless Steel 316L stirring rod with options for Rushton type
impellers, propellor type stirrer blade or any user defined option.
Seal: Mechanical seal with PTFE (Teflon) bush and rust-proof statiliess steel
bearing and o-rings in pharma grade silicone.
 Motor: PMDC / AC motor, 12V, 80W, high starting torque.
Control : AlgorithmPID control
• Sensor: Magnetic gear tooth sensor.
• Range: 100-1200 RPM
 Display:Digital display of simultaneous set and actual RPMs on 20x4 backlit
LCD.
TEMPERATURE
Material:Heating finger made from SS316L for contact heating. For cooling,
chiller unit with forced water or air circulation should be provided with the
system. TEM based solid state coolers can also be provided.
 Control Algorithm: PID control for regulating temperature.
Sensor: Platinum RTD dipped in SS316L thermowell.
• Heating Range: 5°C above room temperature to 60°C. Increments of 0.1°C.
• Cooling Range: With cooling system: 10°C to 60°C.
• Accuracy: Measurement and control accuracy of 0.1°C.
• Display: Digital display of set and actual temperature on 20x4 backlit LCD.
pH Sensor
Sensor: Autoclavable gel-filled glass pH electrode, sterilizable at 15 psi.
Control Algorithm: PID control.
Control System: Peristaltic pumps dispense acid or alkali/base, automatically
depending on set and actual pH.
• Range Measurement: range is 0 pH to 14 pH, increments of 0.1pH.
Control Range : 2 pH to 12 pH
• Accuracy: Measurement and control accuracy of +/- 0.1pH.
• Display: Digital display of set and actual pH on 20x4 backlit LCD.
• Datalogging: Software for datalogging and archiving controlled parameters.
 Datalogging: Software for datalogging and archiving controlled parameters. Display: Displaying controlled parameters in a set of graphs on PC/laptop
 Serial / USB: Connection between PC/laptop and fermenter using RS232.
FOAM
Sensor SS316L conductivity probe for foam sensing.
 Control SystemPeristaltic pumps dispense anti-foam agent.
Following mentioned items are to be quoted for future up gradation: AERATION AND DISSOLVED OXYGEN (PO2)
Sensor Autoclavable galvanic DO probe, sterilizable at 15 psi.
 Control SystemControls dissolved oxygen by sparging air or gas. 0-15 LPM
 Control system controls dissolved oxygen by sparging all of gas. 0-15 LPW rotameters with needle valves are provided on front to control flow of air into
unit.
Range: Up to 100%, in increments of 1%.
 Display:Digital display of set and actual values on 20x4 backlit LCD. Filters() 22 um PTEE membrane inlat and exhaust inline filters to unsent to the set of the
• Filters0.22 um PTFE membrane inlet and exhaust inline filters to prevent
 Filters0.22 um PTFE membrane inlet and exhaust inline filters to prevent contamination. Filters are autoclavable to about 20 times.
• Filters0.22 um PTFE membrane inlet and exhaust inline filters to prevent

Whythe

le 3.19

Lijon is Salit

 Sparger:Ring or straight sparger with inline filter and flexible silicone pipes.
PERISTALTIC PUMPS
 Two peristaltic pumps are included with pH module.
• One with Harvest / Feed module.
One with Foam control module.
STERILIZATION
 Glass Vessels: Sterilizing inside autoclaves up to a pressure of 15 psi and 121°C.
 SS Vessels: In-situ sterilization with optional steam generator and solenoid valves.

17/1/2/19

E. 3.19.

1/3/19

Terms and Condition:

i.

- 1. Force Majeure: The supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- For purpose of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- ii. If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
 - 2. Risk Purchase Clause: In the event of the failure of supply of the items/equipments within the stipulated delivery schedule, the purchaser shall have all the rights to purchase the item/equipment from other source on the total risk of the supplier under risk purchase clause.
 - 3. Packing Instructions: Each package should be marked on three sides with proper paint/indelible ink, the following:
 - i. Item Nomenclature
 - ii. Order/Contract No.
 - iii. Country of origin of goods
 - iv. Supplier's name and address
 - v. Consignee details
 - vi. Packing list reference number
 - 4. Delivery and Documents: Delivery of the goods should be made within a maximum period of 12 weeks from the date of placement of purchase order. Within 24 hours of shipment, the supplier shall notify to the purchaser and the insurance company in writing or by fax/email the full details of the shipment including contract number, railway receipt number / AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the Purchaser with a copy to the insurance company:
 - i. Four copies of the Supplier invoice showing contract number, goods' description, quantity
 - ii. Unit price, total amount
 - iii. Acknowledgement of receipt of goods from the consignee(s) by the transporter
 - iv. Insurance Certificate, if applicable
 - v. Manufacturer's/Supplier's warranty certificate
 - vi. Inspection certificate issued by the nominated inspection agency, if any
 - vii. Supplier's factory inspection report, and
 - viii. Certificate of origin
 - ix. Four copies of the packing list identifying the contents of each package.

The above documents should be received by the Purchaser at least one week before arrival of the Goods (Except where the Goods have been delivered directly to the consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

5. Delayed Delivery: If the delivery is not made within the due date for any reason, the University will have the right to impose penalty @ 1% per week and the maximum deduction would be 10% of the contract value/price.

Mh 1/3/19

le + .3.19

Lupon 41

1

6. Notices: For the purpose of all notices, the following shall be the address of the Purchaser and Supplier. Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by FAX/email and confirmed in writing to the other party's address. A notice shall be effective when delivered or on the notice's effective date, whichever is later.

Purchaser: Dean, School of Life Sciences

Central University of Haryana, Mahendergarh, Haryana, 123031

Supplier: _____

Resolution of Disputes: The dispute resolution mechanism to be applied shall be as follows:

- i. In case of any dispute or difference arising between the Purchaser and a domestic Supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Registrar, Central University of Haryana (CUH) Mahendergarh and if he is unable or unwilling to act, to some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
- ii. In the case of a dispute between the Purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provisions of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with the provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration rules.
- iii. The venue of the arbitration shall be the place from where the order is issued.
- 7. Jurisdiction & Applicable Law: Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within Mahendergarh, Haryana. The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction i.e. Mahendergarh, Haryana, India.
- 8. Defective Equipment: If any of the equipments supplied by the Supplier is found to be not in accordance with the un-merchantable or refurbished, substandard, description/specification or otherwise faulty, the University will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipments have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before Installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from University at the cost and risk of supplier including all other charges. In extreme cases, black-listing of firm can be done on the recommendations of the Registrar.
- 9. Right to use Defective goods: If after delivery, acceptance and Installation within the guarantee and warranty period, the operation or the use of goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectification of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.
- 10. Supplier Integrity: The supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

My 1/3/19

le 1.3.19 lijalis

2

11. Site Preparation: The supplier shall inform to the University about the site preparation, if any, needed for the Installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment which the University should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter.

The supplier shall visit the University and see the site where the equipment is to be installed and may offer advice and render assistance to the University in the preparation of the site and other pre-installation requirements.

- 12. Installation & Demonstration: The equipment or machinery has to be installed or commissioned by the successful bidder within 30 days from the date of receipt of the item at CUH. In case of any mishappening/damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site the supplier has to replace it with new equipment/supplies immediately at his/her own risk. Supplier will settle his claim with the insurance company as per his convenience. CUH will not be liable to any type of losses in any form. The supplier is also required to do the demonstration of the equipment within one month of the arrival at the CUH site of installation; otherwise the penalty clause will be the same as per the supply materials.
 - 13. Training of Personnel: The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the University premises, immediately after completing the installation of the equipment for a minimum period of one week at the supplier's cost.
 - 14. Manuals and Drawings:
 - i. Before the goods and equipments are taken over by the Purchaser, the supplier shall supply to the Purchaser operation and maintenance manuals. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the equipment as stated in the specifications.
 - ii. The manual should be in ruling language (English) in such form and numbers as stated in the contract.
 - iii. Unless otherwise agreed, the goods/equipments shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.
 - 15. Downtime: During the warranty period not more than 5% downtime will be permissible. For every day exceeding permissible downtime, penalty of 1/365 of the 5% FOB value will be imposed. Downtime will be counted from the date and time of the filing of complaint with in the business hours.
 - 16. Spare Parts: The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured/distributed by the supplier.
 - i. Such spare parts as the Purchaser may elect to purchase from the Supplier providing that this election shall not relieve the supplier of any warranty obligation under the contract; and
 - ii. In the event of termination of production of spare parts.
 - iii. Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - iv. Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

Supplier shall carry sufficient inventories to assure ex-stock supply of consumables spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in case within six months of the placement of the order.

6. P. 3.19 Rujonly 1.3.19 1/3/19 3

- 17. Application specialist: The supplier should mention the availability and names of the Application specialist and Service Engineers in the nearest regional office.
- 18. Insurance: For delivery of goods at the purchaser's premises, the insurance shall be obtained by the supplier of an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destination) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. In case of orders placed on FOB basis the purchaser shall arrange Insurance.
 - 19. Warranty:
 - 1. The supplier shall give 12 moths or as specified in equipment specification on-site comprehensive warranty / guarantee which will commence from the date of the satisfactory installation/ commissioning of the equipment at the CUH against the defect of any manufacturing, workmanship and poor quality of the components. The supplier shall, in addition comply with the performance and /or consumption guarantee specified under the contract. If for reasons attributable to the supplier, these guarantees are not attained in whole or in part, the supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the contract at its own cost and expense and to carry out further performance tests.
 - ii. The purchaser shall promptly notify to the supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the supplier shall immediately within 2 days arrange or repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 2 days. If the supplier having been notified fails to remedy the defects within 2 days, the purchaser may proceed to take such remedial action, as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.
 - 20. Governing Language: The contract shall be written in English language. English language version of the contract shall govern its interpretation. All correspondence and other documents pertaining to the contract, which are exchanged by the parts, shall be written in the same
 - Agency Commission: Agency commission if any will be paid to the Indian agent in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances.
 - 22. **Performance Security:** The supplier shall be required to submit the performance security in the form of irrevocable bank guarantee by any nationalized bank for an amount equal to the 8% of the total quoted price within 20 days from the date of receipt of the purchase order and should be valid for a period of 60 days beyond the date of completion of guarantee/ warranty period.
 - 23. Payment: Payment will be made via Wire Transfer/RTGS within 30 days of the successful installation of equipment.
 - Termination for Default/Risk Purchase Clause: The purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default serve to Supplier, terminate the Contract in whole or part:
 - If the supplier fails to deliver any or all of the Goods within the stipulated period(s) specified in the order, or within any extension thereof granted by the purchaser; or
 - ii. If the supplier fails to perform any other obligation(s) under the contract.
 - iii. If the supplier, in the judgement of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

Le \$.3.19 (1) 1/2/19



For the Purpose of this Clause:

- a. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
- b. "Fraudulent practice" means a misrepresentation of facts in order to influence procurement process or the execution of a contract to the detriment of the Purchaser and includes collusive practice among bidders (prior to or after tender bid submission) designed to establish bid prices at artificial non-competitive levers and to deprive the Purchaser of the benefits of free and open competition.

In the event of Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

25. Compliancy Certificate: This certificate must be provided indicating conformity to the technical specifications.