

DEPARTMENT OF MICROBIOLOGY
(DST-FIST & UGC-SAP SUPPORTED DEPT.)
PANJAB UNIVERSITY, SECTOR-14, CHANDIGARH



TENDER DOCUMENT FOR THE PURCHASE OF:

- i) FERMENTATION FACILITY
- ii) SOLID STATE FERMENTER

UNDER THE DBT RESEARCH PROJECT SANCTIONED TO
PROF. S.K. SONI

Last Date and Time for receipt of Tenders:	05 th JULY, 2014; till 4:00 pm
Date & Time of opening of Technical bids:	07 th JULY, 2014 at 3.00 pm
Date & Time of opening of the Commercial bids:	Date & time will be intimated

Tender Fee Rs.1000/-

Sealed Tenders in duplicate are invited for the supply of two facilities/ equipments: i) Fermentation facility, ii) Solid state fermenter, along with their utilities, as mentioned in the tender specifications in two separate bids i.e. Technical Bid and Commercial Bid (Price Bid), separately for each equipment. Technical bids should contain all technical details of the product along with literature /catalogues/quality certificates/customer list/EMD /tender fee and copies of VAT registration/SSI Certificate and copies of the balance sheets for three years, order copies for the past three years and supply terms and conditions etc. in sealed envelope clearly marked as technical bid. Failing with this the tenders are liable to be rejected. Commercial bid should contain the information about the prices only both in words and figures in sealed envelopes clearly marked commercial bid, tender no. and due date. Buyer has the right to accept or reject any tender without assigning any reason. Tenders should be accompanied by demand draft of Rs. 1000/- towards tenders cost, in favor of the Registrar, Panjab University, Chandigarh. Each tender shall also be accompanied by the earnest money, equivalent to 2% of the estimated cost of each equipment, in the form of demand drafts, in favour of Prof. S.K. Soni.

TERMS AND CONDITIONS

Prof. S.K. Soni, Principal Investigator (PI), DBT project, Department of Microbiology, PU, Chandigarh is interested in the procurement, installation and commissioning of i) Fermentation Facility and ii) Solid state fermenter, along with their utilities/ accessories as per the prescribed technical specifications (Annexure A) so as to reach PI as per following schedule:

- (a) Last Date and Time for receipt of bids: 05th July, 2014, 4.00 pm
- (b) Date & Time of opening of technical bids: 07th July, 2014, 3.00 pm
- (c) Date & Time of opening of Price bids: To be intimated later on.

In case the date of opening of the bids fall on the day which is declared public holiday, these shall be opened on the following day at the same time.

- (i) Only manufacturers or their authorized distributors/agents are eligible to submit the bids. All offers other than those from the manufacturers should be supported by an authority letter from the manufacturers or attested copy there of authorizing the firm to tender on their behalf.
- (ii) Supplier must have the ISO9001:2008 and CE Certification and should comply with ASTM standards
- (iii) The tenderer must be a manufacturer or his authorized agent, for the subject goods, and should have successfully executed contracts for similar and/or identical goods in the past.
- (iv) The Company/ Firm must have similar experience of minimum three years with an annual average turnover of 2 Crores for last three years. Three years balance sheet to be provided with technical bid.
- (v) The company should not be blacklisted by any organizations/Institutes of India
- (vi) The tenderer shall give a list of institutions/universities/research labs in India where their similar fermenters have been installed along with their contact numbers with the technical bid. The University reserves the right to inspect such institutions/labs and see actual performance of such equipment.
- (vii) The detailed technical specifications are available for each item in Annexure A.
- (viii) Technical specifications are intended to be descriptive and not restrictive. The bidder may substitute alternative standards, in its bids, provided they are demonstrated to be equivalent or superior substitutes and are to the purchaser's satisfaction.
- (ix) That the substitutions are substantially equivalent or superior to those designated in that Technical Specifications
- (x) Clarifications, if any could be sought from Prof. S.K. Soni, Principal Investigator, DBT project, Department of Microbiology, Panjab University, Chandigarh in writing within the stipulated last date of submission of the tender.

GUARANTEE/WARRANTY

- (a) Equipment should have 60 MONTHS (FIVE YEARS) warranty from the date of installation.
- (b) The tenderer should guarantee the entire equipment against defects of manufacture, workmanship and poor quality of components during the first 2 years but will

continue to provide free maintenance/ service during the remaining warranty period and will charge only the cost of replacement parts/ components, if any.

- (c) The guarantee shall be for the entire equipment and work conducted under the contract. During the guarantee period of 2 years the replacement of any part(s) of the equipment or rectification of defect of works shall be free of cost.
- (d) During the warranty period of 5 years, the firm/supplier has to send their service engineer for routine maintenance and supervision of the equipment, at least, for one day every month with prior information.

BID GUARANTEE AND SECURITY:

The tenderer is required to furnish Bid Guarantee and Security, as per Annexure 'D' or should keep 5% of the total payment pending with the PI, Department of Microbiology, PU, Chandigarh till the satisfactory performance of the equipment for at least 3 months after the installation as per section 5 of the detailed instructions.

CONVERSION TO SINGLE CURRENCY:

To facilitate evaluation and comparison, the purchaser will convert all bid prices expressed in the amounts in various currencies in which the bid price is payable, to the Indian rupees at the RC selling market rate of exchange established by the State Bank of India, Chandigarh for similar transactions as on the last date of submission of tenders.

MERGER / ACQUISITION OF FOREIGN PRINCIPAL:

In case of merger of Foreign Principal with another Firm or acquisition of Foreign Principals by another firm, it shall be obligatory for the New Entity so formed after the merger or the Acquiring Firm, as the case may be to take over all the duties and obligations/liabilities of the Foreign Principals and the New Entity / Acquiring Firm would ipso facto become liable for all acts of commission or omission on the part of original Foreign Principals.

CHANGE OF INDIAN AGENT:

In case the Foreign Principal changes the Indian Agent then it shall be obligatory for Foreign Principal to automatically transfer all the duties and obligations to the new Indian Agent, failing which the Foreign Principal would ipso facto become liable for all acts of commission or omission on the part of new Indian Agent.

DETAILED INSTRUCTIONS FOR SUBMISSION OF TENDER:

1. Only Manufacturers or their Authorized Distributors/ Agents are entitled to submit the Proforma Invoices.
2. The tender shall be prepared and submitted as per Para 21 of the existing instructions.
3. A person signing the tender form or any other document forming part of the contract on behalf of another shall be deemed to warranty that he has authority to bind such others and if on enquiry it appears that the person so signing had no

authority to do so, the purchaser, may, without prejudice to other civil and criminal remedies against the contract, hold the signatory liable for all costs and damages and forfeit Earnest Money.

3.1. Rates and Service charges should not be quoted in the Technical bid.

3.2. All pages of the Technical Bid/Commercial (Price) Bid shall be page numbered.

4. Tenders/Proforma Invoices not accompanied by detailed information as required, are liable to be rejected.

5. EARNEST MONEY DEPOSIT, PERFORMANCE BANK GUARANTEE AND PAYMENT TERMS

5.1. The tenders for each equipment must be accompanied with Earnest Money of @ 2% of estimated cost in the form of Demand Draft in the name of Prof. S.K. Soni, PI, Department of Microbiology, Panjab University, Chandigarh. Earnest Money in any other form will not be accepted.

5.2. Bids not accompanied by Earnest Money as stated above or less than the amount stipulated above shall be summarily rejected.

5.3. In case, the item(s) is/are to be imported for supply, irrevocable letter of credit will be opened with the Bank. In case the shipping documents viz-invoice, packing list, airway bill (AWB), delivery-note, etc are supplied late by the firm, the demurrage levied, if any, by the Airport authorities will be borne by the firm. The successful tenderer for the imported equipment shall be required to furnish a Contract Performance Guarantee Bond in the shape of Bank Guarantee (as per Annexure-D) or FDR/TDR (pledged in favour of Prof. S.K. Soni (PI), Department of Microbiology, Panjab University, Chandigarh along with the undertaking as at Annexure-D1) for an amount equivalent to 5% of the value of the Fermentation facility/ Solid state fermenter towards the execution of the agreement and the warranty. The Bank Guarantee or FDR/TDR should be valid for a period of atleast three months after the installation. The Bank Guarantee for 5% of the value shall be submitted immediately but not later than 7 days after the placement of the Supply Order failing which the order will be liable to be cancelled and the earnest money forfeited.

5.4. In case the equipment is supplied indigenously no advance payment or payment against proforma invoice will be made. 95% payment will be made after receipt, inspection, installation/testing of the equipment and certification by Prof. S.K. Soni, PI, DBT Project, Department of Microbiology, PU, Chandigarh. The balance 5% payment will be released after satisfactory performance of atleast for 3 months after the installation of the equipment.

5.5. The PI would return the earnest money mentioned in Para 5 (1) above to the successful tendering firm on the submission of the Bank Guarantee as mentioned in Para 5.3 above. In case of indigenously supplied equipment, the tenderer should agree for 95% release of payment after the installation and testing of the equipment, the earnest money will be returned along with 95%

payment after the installation and testing of the equipment.

6. The PI does not pledge itself to accept the lowest, or any tender, and reserves to itself the right of acceptance of the whole or any part of the tender, or portion of the quantity offered, and the tenderers shall be required to supply the same at the rate quoted. The PI reserves to itself the right to accept or reject art; or all the tenders without assigning any reason thereof.

CUSTOM CLEARANCE:

The equipment requiring import from abroad will be imported under the OGL scheme, for which tenderer will ensure before shipment takes place, that the equipment, in question, can be imported under the said scheme.

- i) The equipment will be got cleared from the Custom by the tenderer at their own cost, demurrage charges if any, will be borne by the tenderer.
- ii) It will be the responsibility of the tenderer to pursue any claims with the customs authorities/Insurance company /cargo operators and transporters, as may arise, at any stage.
- iii) The N.M.I.C. (Not Manufactured in India Certificate), the CDEC (Custom Duty Exemption Certificate) and all other documents required for custom clearance will be provided by the PI.

7. INSURANCE

- 7.1. The manufacturers will ensure that the equipment is properly insured for the full C.I.F. value to cover the transit up to site of installation and the further period of storage etc. up to end of the period of installation as agreed upon. If the installation is delayed beyond the agreed date of satisfactory installation, commissioning and handing over of the equipment, then in that event any transit and storage damages which come to light after such delays, shall be at the risk and cost of the tenderers. The Tenderers/Indian Agent shall provide to the PI, after due inspection, a detailed list of any loss or damage to the stores that may have occurred so as to enable the purchaser to file appropriate claims with the Insurance company. However, it shall be the responsibility of the PI to prepare, lodge and pursue any claims that may arise with the Insurance Company. The manufacturers shall provide all assistance in pursuing any such insurance claims expeditiously. The manufacturers shall make free replacement, if required, in lieu of damaged/lost items, etc. regardless of the fact whether the claim is settled by the underwriters or not. The manufacturers' liability shall be restricted to making free replacements/rectifications and any local expenses such as custom duty/clearance, etc. connected with such replacements.
- 7.2. It should be noted that if, in consideration of offer of earlier delivery, the contract is placed with a higher tenderer in preference to the lowest acceptable offer, and in case of failure to complete supplies in terms of such contract within the date of delivery specified and incorporated in the contract, the tenderer will be liable to pay to the PI the difference between the contract rate

and that of the lowest acceptable tender on the basis of the final prices FOB destination including all elements of freight, sales tax, local taxes, duties and other incidentals. This is in addition to and without prejudice to other rights of the PI to recover all other losses and damages resulting from delayed supplies, cancellation of contract and risk purchases required to be made in case of failure to supply the stores.

8. GUARANTEE/WARRANTY

8.1. Equipment should have 60 MONTHS (FIVE YEARS) warranty from the date of installation. The guarantee against defects of manufacture / workmanship and poor quality of components for the entire equipment and the work conducted under the contract shall be for a period of 24 months (2 years) from the date of satisfactory installation, commissioning and handing over the equipment at site. The term satisfactory commissioning and handing over wherever used in terms of tender and Agreement will mean satisfactory and faultless functioning of the equipment for 30 days, and of works conducted there with covered under the contract in working order. During the guarantee period, the replacement of any part of the equipment or rectification of defects of works will be free of cost. Further, the defective parts/equipment shall be returned by the purchaser to the Indian Agent after making replacement. However, the supplier will continue to provide free maintenance/ service during the remaining warranty period and will charge only the cost of replacement parts/ components, if any.

8.2. The tenderer will be required to furnish guarantee/warranty as under:

- a. The tenderer should submit a written guarantee/warranty from the manufacturers stating that the equipment being offered is the latest model as per specifications and that spares for the equipment will be available for a period of at least 5 years after the warranty period. The manufacturer will also give the assurance that it will keep the Institute informed of any up-date of the equipment over a period of next 5 years and undertake to provide the same to the Institute.
- b. Guarantee/warranty that they will supply regularly any items of spare parts requisitioned by the purchaser for satisfactory operation of the equipment till the life span, to be decided mutually of the equipment, if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price or an agreed percentage of profit on the landed cost.
- c. Guarantee/warranty to the effect that before going out of production of spare parts, the manufacturers and/or tenderers will give adequate advance notice to the purchaser of the equipment so that the latter may undertake to procure the balance of the life time requirements of spare parts.
- d. The guarantee/warranty to the effect that the manufacturers will make available to the PI, the blue-prints and drawings of the spare parts if and when required in connection with the equipment.

8.3. The tenderer shall furnish the following warranty/ guarantee in case the contract is placed on him :

- a. The tenderer hereby declares that the instrument supplied to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and particulars contained/mentioned in the clauses here of and the tenderer hereby guarantee/ warranty that the said instrument conform to the description and quality aforesaid. The purchaser will be entitled to reject the said instrument thereof as may be discovered not to conform to the said description and quality. Such rejection of instrument will be at the seller's risks and all the provisions herein contained relating to rejection of goods, etc. shall apply. The contractor/seller, shall, if called upon to do so, replace within a period of fourteen days or such further period as may be extended from time to time by the purchaser at his discretion, on an application made thereof by the tenderer, the instrument thereof as rejected by the purchaser. In such an event, the above mentioned warranty/guarantee period of the entire equipment shall be extended by the time taken for these replacements. Otherwise the tenderer shall pay to the purchasers such damage as may arise by reason of breach of the conditions herein contained. Nothing herein contained shall prejudice any other right of the purchaser in that behalf.
- b. Tenderers should state categorically whether they have fully trained technical staff for installation/commissioning of the equipment and efficient after sales service.
- c. Tenderers should categorically confirm that they will give free "After sales services" during guarantee/ warranty period as stipulated above from the date of installation, satisfactory commissioning and handing over of the project/equipment. Warranty for a period less than as stipulated above or with conditions may render, the tender invalid.
- c. It is required that the tenderer will supply all the operating and service manuals along with blue-prints and drawings including circuit diagrams of the equipment supplied as well as its components.

9. MODE OF DESPATCH, DELIVERY AND COMMISSIONING OF EQUIPMENT:

The imported equipment with all its accessories should be despatched by air to Delhi duly insured, freight and insurance charges pre-paid. The tenderer is required to undertake to deliver, install, commission and handover the equipment within the stipulated period. The installation of the equipment shall be completed and handed over within the time schedule given in the tender. This stipulated period should be strictly adhered to for implementation.

10. SUBMISSION OF PBG/AGREEMENT AND DAMAGES FOR DELAY IN SUPPLIES/ INSTALLATION

- 10.1. The supplier shall ensure submission of duly executed agreement and the desired Performance Bank Guarantee immediately on issue of Supply Order but not later than 7 days of issuing of supply order, failing which and without

prejudice to its remedy under the contract the Supply Order shall stand cancelled. If Agreement/PBG is not supplied within the stipulated period, action under Para 5 above will be applicable and EMD shall be forfeited.

- 10.2. If the supplier fails to deliver instrument or to perform the services within the time period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5 percent (0.5%) of the contract price for each week of delay or part thereof until actual delivery or performance, upto a maximum deduction of ten percent (10%) of the contract price. Once the maximum is reached, the purchaser may consider termination of the contract. The acceptance of the equipment will be based on demonstration of the satisfactory working of all modes of the equipment as tested by the PI. The Certificate will be issued by the PI for the satisfactory completion of the supply; installation and commissioning of the equipment in format given in Annexure-‘F’. The suppliers will inform the purchaser in writing intimating the reasons for delay in supplying and for installing the equipment. The purchaser in his sole discretion may consider a reduction/waiver of the penalty for a period to be stipulated in writing. The material, etc. required for demonstration of satisfactory functioning of the equipment shall be arranged by the suppliers.

11. CONTRACT:

The successful bidder will be required to enter into an Agreement (please see Annexure-‘C’) with the Institute on a non-judicial paper of Rs. 30.00 for the supply and satisfactory installation of the equipment as defined above as per specifications and terms and conditions listed in the document and agreed upon.

The whole system will be operated by the company engineers/experts for 30 days i.e. till satisfactory installation and cover Clause 10(i)

12. TRAINING OF PERSONNEL:

The successful tenderer will be required to undertake to provide at his cost technical training for personnel involved in the use of the equipment at site at University immediately after its installation. For this purpose, the company experts shall be required to operate and train the PI at site at University for a minimum period of one month at the company’s cost.

13. SUPPLY, INSTALLATION AND COMMISSIONING OF THE EQUIPMENT:

The supply, installation and commissioning of the equipment shall be as per terms and conditions given in this document and those given in the Agreement (Annexure-‘C’) to be signed by the successful tenderer. The scope of work includes the installation and satisfactory commissioning of the equipment by the firm and training of personnel.

14. Tenderers are required to quote for C.I.F. up to New Delhi Airport for items to be imported. Also Quote CIF Chandigarh including insurance and freight from

New Delhi Airport to Panjab University, Chandigarh.

15. PACKING AND MARKING:

Best trade packing suitable for safe Rail/Road/Air transit shall be used subject to packing and marking being acceptable to the Inspecting Authority.

16. If any part of the equipment goes defective on account of inherent fault in the machine or in any component of the equipment and needing replacement shall be replaced by the supplier during the contract period free of cost i.e. to say any defect caused in a part of the machine on account of non-maintenance of the main machine during the contract period shall be attributable to the supplier and the cost of replacement thereof shall be borne by them.

17. LATEST HOUR FOR RECEIPT OF TENDERS

Your tender must reach the office of the Department of Microbiology, Panjab University, Chandigarh either through registered post or courier not later than 4.00 pm on the due date for receipt of the tender. Tenders delivered personally by hand will not be accepted.

18. OPENING OF TENDERS

The technical bids shall be opened at 3 pm on the due date of opening of the tender. You are at liberty to be present, in person or through your authorized representative, at the opening of the tender at the time and date as specified in the tender notice. The name and address of the representative who would be attending the opening of the tender on behalf of tenderer should be indicated in statement to be furnished along with the technical bids. The representative should carry due authorization from the tenderer. Centre in its discretion may not allow any representative, who does not earn authorization for being present in bid opening. In the event of the day of receipt and opening of tender being a holiday for the University, then due date of receipt/opening of the tender will be the following working day at the same hour.

19. PERIOD FOR WHICH THE OFFER WILL REMAIN OPEN

The tendering firms should keep their offers valid for acceptance for a period of 120 days from the date of opening of the technical bids. If the firms are unable to keep their offers open for the above said period, they should specifically state the period for which their offers would remain open but they must realize that such a provision may result in the rejection of their offers, provided, however, that in the event that the day up to which the offer is to remain the offer shall remain open for the following day.

20. PAYMENT TERMS:

Given in the attached Annexure C

21. PREPARATION AND DELIVERY OF TENDER:

This document and other Annexures comprising the Tender documents viz. Annexure 'A' (Detailed technical specifications), Annexure 'B' (General Questionnaire), Annexure-'C' (Agreement containing terms and conditions), Annexure 'D' (format of Bank Guarantee), Annexure D1 (Undertaking in case of Bank Guarantee is being submitted in form of FDR/TDR), Annexure 'E' (authorization letter), and Annexure 'F' (certificate of successful completion of equipment), Annexure 'G' (Proforma for Performance Statement) should be returned intact alongwith the Technical bid.

Each page of this tender document and Annexures 'A to G', duly signed by the tenderer, should be returned intact along with the Technical bid.

21.1.

- a. No tender will be considered until and unless all documents are properly signed.
- b. The tender is liable to be ignored if complete information is not given therein.
- c. All corrections must be signed by the tenderers in full.
- d. The offers should be typed or written in ink. Offers in pencil shall be ignored.
- e. Any tender which is not made out in the proper form or is received late after 16.00 hours on the due date shall not be considered.
- f. Offers with any price variation clauses shall not be accepted.
- g. Any conditional tender or any deviation from the terms and conditions of the Tender notice shall render the tender liable to rejection.
- h. Tender qualified by such vague and indefinite expressions as 'subject to immediate acceptance', subject to prior sale shall not be considered.
- i. Telegraphic/Telex/Fax offers shall not be accepted.

21.2. Only manufacturers or their authorized distributors/Agents are entitled to submit their tenders in accordance with the technical specifications as per Annexure "A". All offers other than those from the manufacturers should be supported by an Authority letter from the manufacturer authorizing the firm to tender on their behalf.

21.3. In the case of partnership firms where no authority to refer disputes concerning the business of the partnership to arbitration has been conferred on any sole partnership, the tenders and all other related documents must be signed by every partner of the firm.

21.4. DELIVERY OF TENDERS:

Tenderers should submit their tenders in three parts

- (a) Technical Bid
- (b) Price Bid &
- (c) Earnest Money ; (each part in separate sealed cover)

- EMD, Technical Bids and Price Bids should be placed in separate sealed covers and superscribed as EMD, Technical Bid, and price bid respectively for_____ (give tender numbers and names of item (s) due date and time).
- The separately sealed bids along with the earnest money should be put in another envelope which will form the main cover. This main cover shall be kept in another cover and submitted addressed to the Prof. S.K. Soni,

Principal Investigator, DBT Project, Department of Microbiology, P.U.,
Chandigarh, the outermost cover

ANNEXURE A
TECHNICAL SPECIFICATIONS FOR THE EQUIPMENTS/ FACILITIES
(To be returned with the Technical Bid)

1. FERMENTATION FACILITY:

Comprising TWO stirred tank Fermenters of 20 and 100 L capacities having common in-situ sterilization facility with various accessories including:

PLC with Touch Screen HMI-10" and having SCADA software. The Fermenters should have total capacity of 20 and 100 Ltrs. with working volume of 15.0 L and 75.0 L respectively and provided with all the utilities such as Steam generator, Water Chiller/Circulator, Air Compressor, storage tanks, blender, seedling Fermenter, steam explosion reactor, water deionization plant and UF module etc. as per following specifications:

FERMENTER DESIGN:

- Vessels should be Fully SS316 with SS304 jacket for circulation of chilled water and H: D Ratio: 2.5:1
- Drive should be Top driven with Dry mechanical seal. The agitator should be able to provide variable speed from 20-1200 rpm. It should have Dual Ruston impellers with six number blades and four baffles.
- System should be Programmable Logic Controller based with SCADA Software.
- The temperature should be PID control to control the fermentation temperature within 4 to 60°C and measured with RTD Pt 100 sensor.
- Systems should have automatic sterilization with Temperature Range up to 140°C and timer from 0 to 99 minutes.
- pH should be measured through US, FDA approved sterilizable gel filled pH Sensor and be in the range of 0-14 pH. Peristaltic pumps for automated control for addition of Aid/base to be provided for PH control.
- Foam level control having Time Proportionate control with SS316L Conductive Type probe with peristaltic pump.
- DO₂ Sensor-US FDA approved Polarographic Type having SS Housing and sterilizable type should be provided for measurement of Dissolved Oxygen within 0-100% range.
- Additional side port should have dia. of 90mm fitted with removable sight glass to be used as light source as well as addition of solid waste material in vessel.
- Sampling Port should have (inside the vessel) 100 micron size mesh of SS316 removable type.
- Harvest port (fitted with 100 micron size mesh of SS316 inside the vessel, removable type) should be provided at the bottom with valve and steam connection.

Please specify the thickness of the vessel sheet and thickness of the top and bottom flange of the both vessels and all make of the bought out parts used in the Fermenter like valves, pumps, motor, PLC and filters etc. in its technical specifications). System should be designed to test at 150°C.

UTILITIES & ACCESSORIES

- I. ELECTRIC BOILER of 40 to 50Kg/hr fitted with Auto cutoff system and with Pressure gauges. Should have Auto level water sensor along with pump. Pls also mention the thickness of the SS tank and the overall dimensions of the boiler. Boiler should be able to meet the steam and pressure requirements to be used in the steam explosion application. (Please specify the maximum temperature and steam pressure it can generate to meet both applications of sterilization of Fermenter and Steam Explosion device).
- II. For cooling a CHILLER having circulation facility and with suitable storage capacity to control the temperature between 5°C to below Ambient. The contact parts should be SS304. (Please mention the tank storage capacity and cooling rate).
- III. For aeration an AIR COMPRESSOR (Oil free) fitted with Auto Cut-off with Flow Rate 1500LPM and having storage tank of 500 L.
- IV. Two Number Compatible STORAGE TANKS having 500 L Capacity to store the Product media to be provided with valves and fittings complete.
- V. One S. Steel BLENDER for crushing of municipal solid waste and having 100L Storage capacity.
- VI. One SEEDLING FERMENTOR, autoclavable type of 3 L glass vessel capacity and SS 316 L top flange with single mechanical seal or equivalent system, complete with pH Temperature and agitation control with touch screen display and data communication software, acid /base bottlers with filters and tubing etc.
- VII. One STEAM EXPLOSION REACTOR of 3-5 L batch capacity for municipal solid waste handling application to be supplied complete with suitable cyclone chamber and workable with existing boiler of above Fermenters having temperature range of steam at 250°C.
- VIII. One water DEIONIZATION PLANT to process the raw water for preparation of media and having flow rate of 100 to 125L/h to be supplied.
- IX. One ULTRAFILTRATION MODULE for Down stream process application of fermented broth with UF/NF membranes of 10KD/30KD/50KD and 100 KD as well as 0.45 Micron for cell harvesting, with suitable pre-clarification/pre-filtration module attached to it. Give spare membranes sufficient to run the unit for the warrantee period of 5years

The Fermenter should include all necessary fixtures/port/openings/pipes for air, media, inoculums, acid/alkali, antifoam, temperature sensor, sterilizable type pH sensors, Sterilizable Type DO Sensor harvesting valve, pumps etc.

NECESSARY COMPLIANCES:

Equipment should have Five Years warrantee from the date of installation. The tenderer should guarantee the entire equipment against defects of manufacture, workmanship and poor quality of components during the first 2 years. During the warranty period supplier has to send their service engineer for routine maintenance and supervision of fermentation facility at least for one day every month with prior information. Supplier must have the ISO9001:2008 and CE Certification and should comply with ASTM standards.

The Company/ Firm must have similar experience of minimum three years with an annual average turnover of 2 Crores for last three years. Three years balance sheet and customer list

having similar type Fermenters with their contact nos. to be provided with technical bid.

The tenderer will have to give an affidavit declaring that i) the company has not been black listed by any organization, ii) the company will abide by the terms and conditions of the warranty period of Five years, iii) the company makes a commitment for sending its service engineer at least for one day every month during the warranty period of 5 years for routine maintenance and supervision of the facility, iv) the company has at least 3 years experience in dealing/ manufacturing similar types of equipments, v) the company has an annual average turnover of 2 Crores during the last 3 years(2010-11/2011-12/2012-13), vi) the failure to abide by the terms of conditions of the warranty and giving a false information in the bid may lead to the cancellation of the bid as well as blacklisting the company for any future purchase at Punjab University.

2. SOLID STATE FERMENTER

A tray type Solid state Fermenter equipped with multiple trays capable of housing 20 kg substrate (dry basis) with in-situ sterilization facility. The Fermenter should be Microcontroller based having Touch Screen Display and Control for Temperature, Humidity and Sterilization as per following specifications.

Fermenter should have SS316 Interior and having GI Powder coated Exterior.

No. of Trays	20 Nos.
No. of Rows	4 Nos.
No. of Trays per Row	5 Nos.
Size of Each Tray	300 mm (W) × 900mm (D) × 75mm (H)
Total Internal Size of Fermenter	1440 mm (W) × 1000 mm (D) × 750mm (H)
Total External Size of Fermenter	1600 mm (W) × 1200 mm (D) × 1400 mm (H)
MOC of Trays	SS316 and having mesh at the bottom
Temperature range:	5-60°C
Humidity range:	40 to 95%

- The system should have PID control for Temperature and have cooling as well as heating mechanism. With temperature Range 5-60°C and accuracy of $\pm 0.4^\circ\text{C}$.
- The Fermenter should have inbuilt Heater for maintaining the Temperature above ambient and CFC Free Refrigeration system for maintaining the Temperature below Ambient.
- Air circulation fans to be provided to maintain the Uniform Temperature inside the Fermenter.
- Unit should be equipped with Automatic Humidity controller to maintain the desired Humidity levels inside the Fermenter with Mist Spray within a range of. 40 to 95%
- Unit should be equipped with spargers for supplying air in every tray in every row
- The Fermenter trays are to be sterilized using steam inside for which a suitable steam boiler to be provided with Fermenter. Air flow control and sparging with rotameter. Exhaust fitted with 0.22 micron filter on the top of it.

UTILITIES & ACCESSORIES

- I) ELECTRIC BOILER of 40 to 50Kg/hr fitted with Auto cutoff system and with Pressure gauges. Should have Auto level water sensor along with pump. Please mention the thickness of the SS tank and the overall dimensions of the boiler.

- Boiler should be able to meet the steam and pressure requirements to be used in the application of sterilization of solid state Fermenter.
- II) AIR COMPRESSOR (Oil Free) for aeration, fitted with Auto Cut-off with Flow Rate 1500LPM and having storage tank of 500 L and fitted with air filters for sterilizing the air.
 - III) HUMIDIFIER with mist sprays capability to maintain the desired Humidity levels inside the Fermenter.
 - IV) INOCULUM MAKER with orbital shaking facility capable to hold 25 Erlenmeyer flasks of 250 ml capacity with i) temperature control below & above ambient (5-60°C) ii) rpm control (20-200 rpm), iii) LCD display for temperature and rpm, auto illumination facility with timer and extra process trays (2nos).

NECESSARY COMPLIANCES:

Equipment should have Five Years warrantee from the date of installation. The tenderer should guarantee the entire equipment against defects of manufacture, workmanship and poor quality of components during the first 2 years. During the warranty period supplier has to send their service engineer for routine maintenance and supervision of fermentation facility at least for one day every month with prior information. Supplier must have the ISO9001:2008 and CE Certification and should comply with ASTM standards. The Company/ Firm must have similar field of minimum three years with an annual average turnover of 2 Crores for last three years. Three years balance sheet and customer list having similar type of Fermenters with their contact nos. to be provided with technical bid.

The Company/ Firm must have similar experience of minimum three years with an annual average turnover of 2 Crores for last three years. Three years balance sheet and customer list having similar type Fermenters with their contact nos. to be provided with technical bid.

The tenderer will have to give an affidavit declaring that i) the company has not been black listed by any organization, ii) the company will abide by the terms and conditions of the warranty period of Five years, iii) the company makes a commitment for sending its service engineer at least for one day every month during the warranty period of 5 years for routine maintenance and supervision of the facility, iv) the company has at least 3 years experience in dealing/ manufacturing similar types of equipments, v) the company has an annual average turnover of 2 Crores during the last 3 years (2010-11/2011-12/2012-13), vi) the failure to abide by the terms of conditions of the warranty and giving a false information in the bid may lead to the cancellation of the bid as well as blacklisting the company for any future purchase at Punjab University.

GENERAL TERMS AND CONDITIONS:

- Power installation and circuitry should be compatible to India.
- System should be brand new and must be certified by the company.
- Satisfactory service and performance certificate should be provided from two customers from Government Institute. If the system has been launched/procured new the above certificates can be provided of similar and top end products.
- Address of service centers in India should be provided.
- Suppliers must supply along with the quotation:

- a. A detailed compliance statement in tabular form giving particulars as per specifications given in the tender document
- b. Literature/brochures/manual in support of compliance statement. The relevant sentences/paragraph in the literature that support the specifications should be highlighted and numbered according to the numbering of the specifications in the tender
- c. A detailed description of the technical support they will be able to provide in Chandigarh for installation, service and maintenance of each of the components of the system.

ANNEXURE B
(To be returned, fully complete, with the Technical Bid)
GENERAL QUESTIONNAIRE

- i. This Annexure must accompany the Technical Bid.
- ii. The tenderers must give specific answers against each of the following questions.
- iii. Equivocal or evasive replies will render the tender liable to be ignored.

QUESTIONS:

- 1) Name and address of manufacturer:-
- 2) Station/Place of manufacturer:-
- 3) Whether the tendering firm is/are:-
 - a. Manufacturer
 - b. Manufacturer's authorized agents
 - c. Holders of stock of the stores tendered for.
- 4) If stores offered are manufactured in India, please state whether all the raw materials, components etc. used in their manufacture are also produced in India. If not, give details of materials, components etc. that are imported and their break-up of the indigenous and imported components together with their value and proportion it bears to the total value of the stores.
- 5) State whether raw materials are held in stock in India sufficient for the manufacture of the stores.
- 6) Please state specifically whether the price tendered by you is to the best of your knowledge and belief, not more than the price permissible for you to charge a private purchaser for the same class and description of goods under the provisions of any law for the time being in force and not more than the prices you would charge from other Govt. Depts./Institutions in India. If not, state the reasons as well as the margin of profit included.
- 7) Please indicate the following:-
 - a. The precise relationship between the Foreign Manufacturers/Principals and their Indian Agents/Associates.
 - b. The mutual interest which the Manufacturer/ Principals and their Indian Agents/ Associates have in the business of each other.
- 8) Business name and construction of tendering firm. Is the firm registered under:
 - a. The Indian Companies Act, 1956.
 - b. The Indian Partnership Act, 1932 (please give the name of partner).

- c. Any other act.
- d. If the firm is not registered/proprietorship please give the name(s) and address of the owner(s)

- 9) a) Do you agree to various clauses of Para of the Agreement (Annexure 'C') regarding Arbitration.
- b. i) In case of partnership firms, whether registered under Indian partnership Act, 1932.
- ii. In case the answer to question at 9(a) by the partnership firms be in the affirmative please state further:
- iii. Whether in the partnership Agreement, authority to refer disputes concerning the business of the partnership to arbitration has been conferred on the partner who has signed the tender
- iv. If the answer(s) to question 9(b) (iii) is in the negative, whether there is any general power of attorney executed by all the partners of the firm authorizing the partner who has signed the tender to refer disputes concerning business of the partnership to arbitration
- c. If the answers to either 9(b) (iii) or 9(b)(iv) is in the affirmative, please, furnish a copy of either the partnership Agreement or the general power of attorney, as the case may be.

NOTE: Please attach to the technical bid a copy of the Partnership Agreement or the General Power of Attorney on either of which reliance is placed for authority of partner or the partner signing the tender to refer disputes to arbitration. The copy should be attested by a NOTARY PUBLIC or its execution should be admitted by an affidavit drawn on properly stamped paper by all the partners.

- 10) Indicate clearly the guaranteed delivery/commissioning and handing over period.
- 11) Please state clearly the period for which your offer will be valid for acceptance beyond the date of opening of the Technical Bids (please see note below):

IMPORTANT NOTE: Tendering firms are requested to keep their offers valid for acceptance for a period of 90 days from the date of opening of the Technical Bids. If the firm is unable to keep its offer open for the specified period of 90 days, then they should specifically state the period for which their offers would remain open but they must realize that such a provision may result in the rejection of their offers.

- 12) Please furnish the following Details-

Indian Agent
Income Tax Permanent Account Number:

ANNEXURE C

(To be returned with the Technical Bid)

Terms and Conditions of the Agreement to be executed by successful Tenderers.

1. This Agreement regarding the supply, installation and maintenance of _____ made this day and Two thousand _____ by and between Panjab University, Chandigarh represented by Prof. S.K. Soni, PI, DBT Project, Department of Microbiology (herein after referred to as the First Party) and M/s _____ and their agents _____ (hereinafter referred to as the Second /Third Party respectively) which expression shall unless specifically excluded by or repugnant to the context include their Heirs, Executors, Administrator, Legal Representatives and Assignees. The Second Party may nominate their agent if they so desire and inform the First Party in writing about such appointment. It is further stipulated that notwithstanding anything else in this agreement, the Second Party shall inform the First Party in writing about the change of such agency. Further, the new agency shall remain bound by the present Agreement irrespective of any arrangement written or otherwise between the Second Party and its agents to which agreed that this Agreement will be binding on all parties collectively and separately.
2. THE AGREEMENT:
 - 2.1. This Agreement concerns the supply installation and commissioning of equipment on turnkey basis to be supplied by the Second Party / Third Party according to Supply Order(s) No. _____ Dated _____ and their Proforma Invoice No _____ dated _____ a copy of which is appended (Annexure _____). Further, the equipment is to be installed by the Second Party / Third Party at the designated premises of the first party according to the schedule agreed upon as stated below.
 - 2.2. The Second Party / Third Party agree to supply, install and commission the entire equipment within the period of _____ days in case of imported items and _____ days in other cases after placing the supply order.
 - 2.3. MODE OF DESPATCH
The equipment with all its accessories should be dispatched, duly insured upto Chandigarh, freight and insurance charges prepaid.
 - 2.4. The Second / Third Party shall ensure submission of performance Bank Guarantee and duly executed Agreement, for the equipment to be imported, immediately but not later than seven days after issue of Supply Order failing which and without prejudice to its remedy under the contract, the Supply Order shall stand cancelled, except when specific extension is granted by the head of the Institute. In case the equipment is supplied indigenously the tenderer should agree to the condition that 95% payment will be made after receipt, inspection, installation/testing of the equipment while the balance 5% payment will be released after satisfactory performance of atleast for 3 months after the installation of the equipment. If the PBG and Agreement is not supplied, as called for within the stipulated period, the Supply Order shall be liable to be cancelled and EMD forfeited.

- a. Further, the equipment will be supplied, installed, commissioned and handed over to the First Party in complete working order within a total period as specified above.

If the supplier fails to deliver any or all of the goods or perform the services within the time period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5 % of the contract price for each week of delay or part thereof until actual delivery or performance, upto a maximum deduction of 10% (ten percent) of the contract price. Once the maximum is reached, the purchaser may consider termination of the contract by which the supplies or their satisfactory installation, commissioning and handing over is delayed. The Second Party / Third Party will inform the First Party in writing, intimating the reasons for delay in supplying, commissioning and handing over of the equipment in satisfactory working order. The First Party at its sole discretion may consider a reduction or waiving of the penalty for a period to be stipulated in writing.

- 2.5. The system operational efficiency and concepts would be fully demonstrated after job completion by the Second/Third Party for which nothing extra shall be payable by the Institute. The materials etc. required for demonstration of satisfactory functioning of the equipment shall be arranged by the Second /Third Party.
 - 2.6. Thorough inspection of the equipment system will be carried out by the First Party only on completion of the entire job of installation and commissioning of the equipment. The acceptance of the equipment will be based on demonstration of the satisfactory working of all modes of the equipment as tested by the Inspecting Authority.
 - 2.7. This Agreement comes into effect from the date of issue of supply order in favour of Second/Third Party. The Agreement will remain valid for a period till the rights and liabilities of the parties are finally disposed off.
 - 2.8. On expiry of the initial period of 2 years, this Agreement may be renewed for a further period by mutual Agreement between the parties in writing. However, notwithstanding anything else stated here, the Second Party undertakes to continue to provide service and required spare parts at an agreed price for the entire life of the equipment. Further, the Second Party undertakes to provide all the circuit diagrams of the entire equipment, including all its accessories, in the event the particular model is phased out of production. It further agrees to provide and sell to the First Party all spare parts that may be needed for the remaining life of the equipment.
3. **PRICES:**
 - 3.1. Prices of the equipment(s) is/are _____ with the break-up for freight & insurance, agency commission, installation charges payable at actual as below:

4. PAYMENT TERMS:

- 4.1. FOB value shall be paid through irrevocable Letter of Credit established in favour of the foreign supplier through State Bank of India, Panjab University, Chandigarh on a bank in the supplier's country, on submission to the bank of the documents specified in the Letter of Credit and further following documents
- Foreign supplier's certificate that the amounts shown in the invoice are correct in terms of the contract and that all the terms and conditions of the contract have been complied with.
 - Foreign supplier's certificate confirming that the original documents have been dispatched to the port consignee in accordance with the contract, and
 - Any other document specified in the notification of award or the contract.

or

The payment shall be released on the basis of certificate by the respective user department of successful installation of the equipment.

- 4.2. The Indian Agency Commission of Rs. _____ will be paid to the Third Party and has been included in the total value of the equipment.
- 4.3. The PI shall make all reasonable and due efforts to pay the Indian Agency Commission to the Third Party at the earliest possible after satisfactory installation/commissioning and handing over of the system in good working condition and meeting any other requirements for payment of the Agency Commission. The rate of exchange applicable for covering Agency commission into equivalent Indian Rupees shall be the TT selling rate prevalent on the date of releasing the documents at the time of shipment by the bankers. The Indian Agency Commission will be paid in Indian Currency (Rupees) to the Third Party.
- 4.4. The equipment will be installed by the Second Party or the Third Party; at the designated premises of the First Party.
- 4.5. The octroi exemption certificate, if required, shall be provided by the First Party.
- 4.6. It is agreed that increase in price on account of any statutory increase or fresh imposition of customs duty, sales tax or on account of any other tax or duty leviable in respect of the stores specified in the accepted tender which takes place after the date of delivery installation, commissioning and handing over period stipulated in the contract, shall not be admissible on such of the said stores as are delivered after the stipulated date of delivery and completion. This is subject to Force Majeure clause.
- 4.7. It is agreed that notwithstanding anything stipulated in the contract for increase in price on any other grounds, such increase which takes place after the date of the delivery and completion stipulated in the contract shall not be admissible on such of the said stores as are delivered after the expiry of the delivery and completion period stipulated in the contract.

- 4.8. But, nevertheless, the Institute shall be entitled to the benefit of any decrease in price on account of reduction in or remission of custom duty, excise duty or sales tax or any other tax or duty or on accounts of any other grounds, which takes place before the date of actual delivery of the goods.

5. IMPORT FORMALITIES AND CUSTOMS CLEARANCE:

- 5.1. The equipment requiring import from abroad will be imported under the OGL scheme, for which Second Party / Third Party will ensure, before shipment takes place, that the equipment in question can be imported under the said scheme.
- 5.2. It will be the responsibility of the Third Party to get the customs clearance of the equipment duty free where this dispensation is available. It will also be the responsibility of the Third Party to pursue any claims with the customs authorities/insurance company, cargo operators and transporters as may arise at any stage.
- 5.3. The N.M.I.C. (Not Manufactured in India Certificate) and the C.D.E.C. (Custom Duty Exemption Certificate), if required, will be provided by the First Party. However, the Second Party / Third Party will effect the shipment only after seeking confirmation regarding availability of the above from the First Party. Delays on this account will not count towards any penalty clauses in this Agreement.
- 5.4. The First Party shall indicate in the Supply Order whether any custom duty/excise duty exemption is available. The First Party shall make available such custom / excise duty exemption certificate. However, it shall be the responsibility of the Second / Third Party, before despatching the consignment to ensure that such exemption certificates have become available with the First Party. Failure on this part of Second / Third party; will render them liable to pay all demurrage charges which become payable.

6. INSURANCE

- 6.1. The Second Party will ensure that the equipment is properly insured for the full C. I. F. value to cover the transit upto site of installation (At user's premises) and to cover the further storage period etc. upto and of the period of satisfactory installation as agreed upon. If the installation is delayed beyond the agreed date of satisfactory installation, commissioning and handing over of the unit then in that event any transit and storage damages which come to light after such delays shall be at the risks and cost of the Second/Third Party. The Second Party/Third Party will provide to the First Party, after due inspection, a detailed list of any loss or damage that may have occurred so as to enable the First Party to file the appropriate claims that may arise with the insurance company(ies). The second/Third Party undertakes to provide all assistance in pursuing any such insurance claims expeditiously. In lieu of damaged/lost items etc. regardless of the fact whether the claim is settled by the underwriters or not, the Second Party's liability is restricted to making free replacement/rectifications and any local expenses such as Customs Duty Clearance etc. connected with such replacements shall be borne by the First Party.

7. It should be noted that if, in consideration of offer of earlier delivery, the contract is placed with a higher tenderer in preference to the lowest acceptable offer, the tenderer will be liable to pay to the Institute the difference between the contract rate and that of the lowest acceptable tender on the basis of the final price for destination, including all elements of freight, sales tax, local taxes, duties and other incidentals, in case of failure to complete supplies in terms of such contract within the date of delivery specified and incorporated in the contract. This is in addition to and without prejudice to other rights of the Institute to recover all other losses and damages resulting from delayed supplies and of cancellation and risk purchase in case of failure to supply the stores.

8. GUARANTEE/WARRANTY:

- 8.1. The Guarantee shall be for a period of first 2 (TWO) years while the Warranty will be for a total of 5 (FIVE) years.
- 8.2. The suppliers and the tenderer should guarantee the entire equipment against defects of manufacture, workmanship and poor quality of components during the first 2 years
- 8.3. The guarantee against defects of manufacture, workmanship and poor quality of components shall be for the entire equipment and work conducted under the contract. During the guarantee period of 2 years the replacement of any part(s) of the equipment or rectification of defect of works shall be free of cost.
- 8.4. The supplier will continue to provide free maintenance/ service during the remaining warranty period and will charge only the cost of replacement parts/ components, if any.

8.4. UPTIME GUARANTEE

The firm will be required to give warranty/guarantee that during warranty period the equipment(s), including accessories, will be maintained in good working condition for a period of 347 days out of a period of 365 days (i.e. 95% uptime). If the machine is out of order for more than 5 hours during any day, it shall be considered as one day down time. The essential period to shut down the installation, entirely or partially shall also be included in the downtime if it exceeds 2 days, while calculating the 95% guaranteed uptime. No deduction or advantage of any kind on account of Sundays, half days on Saturdays, Public/Govt. holidays observed by the Institute shall be allowed from the total down time permissible as defined above, The equipment will thus be required to be maintained in satisfactory working conditions for a minimum of 347 days in each period of 365 days which defines the 95% guaranteed uptime required to be maintained in each such period of 365 days. This guaranteed uptime shall be calculated for each block of 365 days.

- 8.5. The Second Party/Third Party will be required to pay a penalty of Rs. 2,000/- per day in case the number of days of downtime in each period of 365 days is more than the downtime permissible during warranty period which is to be calculated as defined above and the delay for not bringing the equipment in functioning order is in any way directly, even partially, attributable to the firm. The penalty will apply only for the number of days in excess of the permissible downtime as defined above.

- 8.6. The Second Party/Third Party guarantee that the equipment being offered is the

latest model and that spares for the equipment will be available for a period of at least 10 years (life span). The Second Party/Third Party also guarantee that they will keep the Institute informed of any up-date of the equipment over a period of next 3 years after warrantee and undertake to provide the same to the Institute.

- 8.7. The Second/Third Party guarantee/warranty that they will supply regularly any items of spare parts requisitioned by the purchaser for satisfactory operation of the equipment till the life span (to be mutually decided) of the equipment if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price or an agreed percentage of profit on the landed cost.
- 8.8. The Second/Third Party guarantee that before going out of production of spare parts, the Second Party/Third Party will give adequate advance notice of at least six months to the First Party so that the First Party may undertake to procure the balance of the life time requirements of spare parts.
- 8.9. The Second/Third Party guarantee that they will make available to the First Party the blue prints and drawings of the spare parts as and when required in connection with the equipment.
- 8.10. The Second/Third Party guarantee that the goods/articles supplied to the First Party under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and particulars contained/ mentioned in the clauses here of and the Second/Third Party hereby guarantee that the said goods/stores/articles conform to the description and quality aforesaid. The First Party will be entitled to reject the said goods/stores/articles or such portion thereof as may be discovered not to conform to the said description and quality. On such rejection, the goods/ stores/articles will be at the seller's risk and all the provisions herein contained relating to rejection of goods etc. shall apply. The Second Party / Third Party shall, if called upon to do so, replace within a period of fourteen days or such further period as may be extended from time to time by the First Party at his discretion, on an application made thereof by the Second Party/Third Party, the goods/stores/articles or such portion thereof as rejected by the first Party. In such an event, the above mentioned warranty /guarantee period of the entire equipment shall be extended by the time taken for these replacements. Otherwise, the second/Third Party shall pay to the First Party such demurrages as may arise by reason of breach of the conditions herein contained. Nothing herein contained shall prejudice any other right of the First Party in that behalf.
- 8.11. The Second Party / Third Party will submit a Performance Bond / Bank Guarantee (PBG) for 5% of the value of the equipment amounting to Rs. _____ towards the execution of the agreement till the expiry of 3 months satisfactory performance of the equipment after the installation of the equipment. After receipt of said bank guarantee, the First Party will return the EMD already submitted by the Second Party / Third Party as earnest money. On expiry of the 3 months satisfactory performance period after installation, the PBG will be returned by the First Party to the Second Party / Third Party but only after the latter parties have submitted a fresh Bank Guarantee for Rs. _____ valid till the expiry of the period of the service contract.

9. TRAINING OF PERSONNEL

The successful tenderer will be required to undertake to provide at his cost technical training for personnel involved in the use of the equipment at site at P.U. Chandigarh immediately after its installation. For this purpose the company experts shall be required to operate and train the personnel at Panjab University, Chandigarh at the company's cost to the satisfaction of user department.

10. The Second Party/Third Party hereby agree to make available at all times at Chandigarh, at their cost, a Resident Engineer who is suitably trained for effective, preventive and prompt maintenance of the equipment during the period of guarantee/warranty of 24 months or extended period of warranty and the service contract period.

11. INSTALLATION AND SATISFACTORY COMMISSIONING OF THE EQUIPMENT:

- 11.1. The scope of work includes the satisfactory installation and satisfactory commissioning of the equipment by the Second / Third Party. The term satisfactory installation and commissioning and handing over wherever used in this contract/Agreement will mean satisfactory and faultless functioning of the equipment for 30 days and of works conducted thereunder covered under the contract in working order. The Second Party / Third Party shall in consultation with the first Party, furnish at no extra cost to the First Party within 15 days of the Supply Order, the full details of all works required to be carried out by the Institute in connection with the completion of the work within the stipulated period.

- 11.2. In case the equipment is not installed and/or put in working condition to the full satisfaction of First Party within the period stipulated in the Agreement or within such time as may be extended in writing by the First Party, or the equipment does not function properly during the period of one year from the date of its installation the First Party shall be entitled to return the equipment and seek the refund of the amount paid and the interest accrued thereon/demurrages borne by it from the Second/Third Party jointly and severally.

12. MAINTENANCE OF THE EQUIPMENT DURING SERVICE CONTRACT PERIOD:

- 12.1. It shall be the responsibility of the Second Party / Third Party to keep the equipment including its accessories, covered under this Agreement in good working condition during the entire service contract period of five years, which will start with the expiry of the guarantee period as stipulated in Para 8.1 or extended period as the case may be from the date of installation of the equipment. During the service contract period, the equipment, including accessories, will be maintained in good working condition for a period of 347 days out of a period of 365 days (i.e. 95% uptime). If the machine is out of order for more than 5 hours during the period 8.00 AM to 5.00 PM on any day, it shall be considered as one day downtime. The essential period to shut down the installation entirely or partially shall also be included in the down time if it exceeds 2 days while calculating the 95% guaranteed

uptime. No deduction or advantage of any kind on account of Sundays, half days on Saturdays. Public/Govt. holidays observed by the Institute shall be allowed from the total downtime permissible as defined above. The equipment will thus be required to be maintained in satisfactory working conditions for a minimum of 347 days in each period of 365 days which defines the 95% guaranteed uptime required to be maintained in each such period of 365 days. The firm will be required to pay a penalty of Rs. 2,000/- per day in case the number of days of downtime in each period of 365 days is more than the downtime permissible which is to be calculated as defined above and the delay for not bringing the equipment in functioning order is in any way directly, even partially, attributable to the firm. The penalty will apply only for the number of days in excess of the permissible downtime as defined above.

- (a) During the guarantee/ warranty the time taken by the First Party in providing the spares till the functioning of the unit will not be calculated as downtime. But the period of guarantee / warranty will be extended equivalent to period the unit remains out of order. The Second Party has to submit the Proforma Invoice for the import of spares within 4 days. Extra period than this will be counted as down time.
- (b) During the guarantee/warranty period the time taken by the Second Party for putting the unit in working order more than 5 days will be considered as downtime, the guarantee/warranty will be extended accordingly.

12.2. However, 5 days time will be allowed to procure the spares, in case the same has to be imported and this period of 5 days will not be counted as down time.

12.3. The Second Party will furnish a Bank Guarantee as stipulated in Para 8.11 of the Agreement.

13. SPARES:

13.1. SPARES PARTS DURING GUARANTEE/WARRANTY PERIOD:

All spare parts required during the guarantee/warranty period of the equipment as defined in Clause 8 for the satisfactory maintenance, running and upkeep of the equipment shall be provided by the Second/Third Party at its cost, expenses and care.

All such defective parts/components replaced by the Second/Third Party during the guarantee period and warranty period shall be the property of the Second/Third Party.

13.2. During the warranty period, after the first two years of guarantee, replacement of parts/components that may be needing replacement shall be made available by the First Party to the Third Party at the First Party's own expense. Replacements may be the property of First Party.

14. SERVICE CHARTS AND PAYMENT DURING SERVICE CONTRACT PERIOD.

The maintenance service charges will become effective automatically after the expiry of the guarantee/warranty period as stipulated in Para 8.11 of the Agreement from the date of satisfactory installation and commissioning and handing over of the complete equipment including all accessories.

15. FORCE.MAJEURE :

Any failure of omission or commission to carry out the provisions of this contract by the supplier shall not give rise to any claim by any party, one against the other, if such failure of omission or commission arises from an act of God, which shall include all acts of natural calamities such as fire, flood, earthquake, hurricane, or any pestilence or from civil strikes, compliance with any statute and/or regulations of the Government, lockouts and strikes, riots, embargoes or from any political or other reasons beyond the supplier's control including war (whether declared or not), Civil War or state of insurrection, provided that notice of the occurrence of any event by either party to the other shall be given within two weeks from the date of occurrence of such an event which could be attributed to Force Majeure conditions.

16. ARBITRATION:

- 16.1. If at any time, any question, dispute or difference whatever shall arise between the two parties upon or in relation to or in connection with this Agreement, either of the parties may give to the other notice in writing of the existence of such a question, dispute or difference and the same shall be referred to two Arbitrators one to be nominated by the First Party and the other to be nominated by the Second Party/Third Party. Such a notice of the existence of any question, dispute or difference in connection with the Agreement shall be served by either party within one year of the beginning of such dispute failing which all rights and claims under this Agreement shall be deemed to have been forfeited and absolutely barred.

Before proceeding with the reference, the Arbitrators shall appoint/nominate an Umpire. In the event of the Arbitrators not agreeing in their award, the Umpire appointed by them shall enter upon the reference and his award shall be binding on the parties. The venue of the arbitration shall be at Chandigarh (India). The Arbitrators/Umpire shall give a reasoned award.

- 16.2. The provisions of the Indian Arbitration Act in force and of rules framed there under and any statutory modifications thereof shall be deemed to apply and be incorporated in this Agreement.
- 16.3. Upon even or any such reference, the cost of any incidentals to the reference and award(s) respectively shall be at the discretion of the Arbitrators or in the event of their not agreeing, of the Umpire appointed by them who may determine the amount thereof or direct the same to be fixed as between solicitors and client or as between parties and shall direct by whom and in what manner the same shall be borne and paid.

17. JURISDICTION:

The courts at Chandigarh alone will have the jurisdiction to try any matter, dispute or reference between the parties arising out of this Agreement/Contract. It is specifically agreed that no court outside and other than Chandigarh court shall have jurisdiction in the matter.

ANNEXURE 'D'
(To be returned with the Technical Bids) PERFORMANCE BOND
(BANK GUARANTEE)

In consideration for Prof. S.K. Soni (PI), Department of Microbiology , Panjab University, Chandigarh (hereinafter called the purchaser) having agreed to release the 100% payment of net price as and per terms conditions of a concluded Contract No. dated _____ (hereinafter called 'the contract') for supply of Fermentation Facility/ Solid State Fermenter (hereinafter called the goods and services) to Messrs _____ hereinafter called 'the supplier') on submission of a Bank Guarantee to the satisfaction of the purchaser for the due performance of the said contract.

We, _____ (hereinafter called 'the Bank ") at the request of the supplier do, as a primary obliger and not merely as surety, hereby irrevocably, unconditionally and absolutely undertake against any loss or damage caused or suffered by the purchaser by reason of any failure of the supplier to perform or omission or negligence to perform any part of its obligations to the satisfaction of the purchaser in terms of the contract.

We, the Bank, do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the purchaser stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the purchaser by reason of any breach by the said supplier of any of the terms and conditions contained in a said contract or by reason of the supplier's failure or omission or negligence to perform the said contract or any part thereof. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this guarantee, which shall not be considered as satisfied by any intermediate payment or satisfaction of any part of or obligation hereunder. However, our liability under this Guarantee shall be restricted to an amount not exceeding 5% of the value of item.

We, the Bank, undertake to pay to the purchaser any amount so demanded by the purchaser, notwithstanding,

- a. any dispute or difference between the purchaser and the supplier or any other person or between the supplier or any person or am suit or proceeding pending before any court or tribunal or arbitrator relating thereto or
- b. the invalidity, irregularity or unenforceability of the contract or
- c. any other circumstances which might otherwise constitute discharge of this guarantee, including any act or omission or commission on the part of the purchaser to enforce the obligations by the supplier or any other person for any reason whatsoever.

We, the Bank, further agree that the Guarantee herein contained shall be continued one and remain in full force and effect during the period that would be taken for the performance of the said contract and that it shall continue to be enforceable till all the dues of the purchaser under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the office of Prof. S.K. Soni (PI), Department of Microbiology, Panjab University, Chandigarh that the terms and conditions of the said contract have been fully and promptly carried out by the said supplier and accordingly discharges this Guarantee.

We, the Bank, hereby agree and undertake that any claim which the Bank may have against the supplier shall be subject to and subordinate to the prior payment and performance in full of all the obligations of the bank hereunder and the bank will not, without prior written consent of the purchaser, exercise any legal rights or remedies of any kind in respect of any such payment or performance so long as the obligations of the bank hereunder remain owing and outstanding, regardless of the insolvency, liquidation or bankruptcy of the supplier or otherwise howsoever. We, the Bank, will not counter claim or set off against its liabilities to the purchaser hereunder any sum outstanding to the credit of the purchaser with it.

We, the Bank, further agree with the purchaser that the purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by the said supplier from time to time or to postpone for any time or from time to time and of the powers exercisable by the purchaser against the said supplier and forbear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier or for any forbearance, act or omission on the part of the purchaser or any indulgence by the purchaser to the said supplier or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This guarantee will not be discharged due to the change in the constitution of the Bank or the supplier.

We, the Bank, lastly undertake not to revoke this Guarantee during its currency Except with the previous consent of the purchaser in writing.

The disputes relating to this Bank Guarantee shall be resolved as per the terms and conditions of the contract.

Place

Date

Signature and seal of the Bank

ANNEXURE 'D1'

(Undertaking from the Supplier on a Non-Judicial Stamp Paper of Rs 5/- duly attested by Notary) (To be returned with the Technical Bids)

PERFORMANCE BOND/ GUARANTEE

In consideration for the Prof. S.K. Soni (PI), Department of Microbiology, Panjab University, Chandigarh (hereinafter called the purchaser) having agreed to release the 100% payment of net price as per terms and conditions of a concluded Contract No. _____ dated _____ (hereinafter called 'the contract') for supply of Fermentation Facility/ Solid State Fermenter (hereinafter called the goods and services) to us i.e. Messrs _____ (hereinafter called 'the supplier') on submission of a Performance Bond to the satisfaction of the purchaser for the due performance of the said contract.

We, Messrs _____ (hereinafter called the Supplier) hereby submit the FDR/TDR No. _____ issued by _____ (Name of the Bank) for Rs 10% of value of item pledged in favour of Prof. S.K. Soni (PI), Department of Microbiology, Panjab University, Chandigarh as Performance Guarantee amount and hereby irrevocably, unconditionally and absolutely undertake against any loss or damage caused or suffered by the purchaser by reason of any failure of the supplier to perform or omission or negligence to perform any part of its obligations to the satisfaction of the purchaser in terms of the contract.

We, the Supplier, do hereby authorize Prof. S.K. Soni (PI), Department of Microbiology, Panjab University, Chandigarh to forfeit this Performance Guarantee amount/undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the purchaser stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the purchaser by reason of any breach by us of any of the terms and conditions contained in a said contract or by reason of our failure or omission or negligence to perform the said contract or any part thereof.

We, the Supplier, undertake to pay to the purchaser any amount so demanded by the purchaser, notwithstanding,

- a) any dispute or difference between the purchaser and the supplier or any other person or between the supplier or any person or any suit or proceeding pending before any court or tribunal or arbitrator relating thereto, or
- b) the invalidity, irregularity or unenforceability of the contract, or
- c) any other circumstances which might otherwise constitute discharge of this guarantee, including any act or omission or commission on the part of the purchaser to enforce the obligations by the supplier or any other person for any reason whatsoever.

We, the Supplier, further agree that the Performance Bond/Guarantee herein contained shall be continued one and remain in full force and effect during the period that would be taken for the performance of the said contract and that it shall continue to be enforceable till all the dues of the purchaser under or by virtue of the said contract have been fully paid

and its claims satisfied or discharged or till the office of the Chairperson/Director/Coordinator of the respective Department/Centre/Institute, Panjab University, Chandigarh certifies that the terms and conditions of the said contract have been fully and promptly carried out by us and accordingly discharges this Performance Bond / Guarantee.

We, the Supplier, further agree with the purchaser that the purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by us from time to time or to postpone for any time or from time to time and of the powers exercisable by the purchaser against us and forbear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to us or for any forbearance, act or omission on the part of the purchaser or any indulgence by the purchaser to us or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This Performance Bond / Guarantee will not be discharged due to the change in the constitution of the Supplier.

We, the Supplier, lastly undertakes not to revoke this Performance Bond / Guarantee except with the previous consent of the purchaser in writing,

The disputes relating to this Bank Performance Bond / Guarantee shall be resolved as per the terms and conditions of the contract.

Place
Date

Signature and seal of the Supplier

ANNEXURE 'E'
MANUFACTURERS AUTHORIZATION FORM

To
Prof. S.K. Soni (PI),
Department of Microbiology
Panjab University
Chandigarh-160014

Dear Sir,

Tender No.

We, _____ who are established and reputable manufacturers of Fermentation Facility/ Solid State Fermenter, having factories at _____ and _____, hereby authorise Messrs. _____ [name and address of agents] to negotiate and conclude the contract with you against Tender No. _____ for the above goods manufactured by us.

We shall remain responsible for the tender / Agreement negotiated by the said M/s _____, jointly and severely.

No company or firm or individual other than Messrs _____ is authorised to bid, negotiate and conclude the contract in regard to this business against this specific IFB as also for all business in the entire territory or India.

An agency commission of ____% included in the gross ex-works price is payable to Messrs _____.

We hereby extend our full guarantee and warranty as per general terms and conditions of contract for the goods offered for supply against this invitation for bid by the above firm.

Our other responsibilities include:

- i. _____
- ii. _____

(here specify in detail manufacturer's responsibilities)

The services to be rendered by M/S _____ are as under:

- i. _____
- ii. _____

(here specify the services to be rendered by the agent)

In case duties of the agent are changed or agent is changed it shall be obligatory on us to automatically transfer all the duties and obligations to the new Indian Agent failing which we will ipso-facto become liable for all acts of commission or omission on the part of new Indian agent.

Yours faithfully,

[Name)
for and on behalf of Messrs _____
[name of manufacturers].

Note : This letter of authorization should be on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer A copy of notarized power of attorney should also be furnished

ANNEXURE 'F'
PROFORMA OF CERTIFICATE FOR ISSUE
BY THE PURCHASER AFTER SUCCESSFUL COMMISSIONING OF EQUIPMENT
No. _____ Date _____

To
Messrs _____

Subject: Certificate of installation/commissioning of equipment/plant and its satisfactory and faultless functioning for 30 days after installation/commissioning.

1) This is to certify that the equipment as detailed below has been received in good condition along with all the standard and special accessories and a set of spares (subject to remarks in para no. 02 below) in accordance with the contract/technical specifications. The same has been installed and commissioned.

- a. Contract No./Supply Order No. _____ Dated _____
- b. Description of the equipment(s)/plant(s)
- c. Name of equipment.
- d. Bill of lading/air way bill/railway receipt/woods consignment note no. _____ dated _____
- e. Date of installation/commissioning
- f. Date of completion of 30 days satisfactory and faultless functioning of equipment.

2) Details of accessories/spares not yet supplied and recoveries to be made on that account:

Sl. No.	Description of item	Quantity	Amount to be recovered

3) The proving test has been done to our entire satisfaction and operators have been trained to operate the equipment(s)/plant(s).

4) This will be without prejudice to the recoveries/penalties/LD which becomes payable due to omission or commission on the part of the Second and Third Party as per the Agreement, Supply Order and LOC.

Explanatory notes for filling up the certificate:

Signature
Name
Designation with stamp

- a. He has supervised the commissioning of the equipment in time, i.e. within the time specified in the contract.
- b. Training of personnel has been done by the supplier as specified in the contract.
- c. It should always be kept in mind that satisfactory installation and commissioning means satisfactory and faultless functioning of the equipment for 30 days and of works conducted there under covered under the contract in working order.

ANNEXURE 'G'

Proforma for performance statement (for the period of last three years)

Tender No. : Date and time of opening :

Name and address of the tenderer

Order placed by (address of purchaser)	Order number and date	Description of The equipment	Value of order (Rs.)	Date of completion of contract	Remarks indicating reasons for delay, if any	Have the goods been functioning satisfactorily (attach documentary proof)
1.	2.	3.	4.	5.	6.	7.

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