INVITATION FOR QUOTATION

TEQIP-II/2015/CH1G02/Shopping/100 **21-Aug-2015**

To,

Sub: Invitation for Quotations for supply of Goods

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	**Brief Description**	**Quantity**	**Delivery Period(In days)**	**Place of Delivery**	**Installation Requirement (if any)**
1	Computer controlled Sieve Distillation Column with data logging system	1	40 days	Dr SS Bhatnagar University Institute of Chemical Engg and Tech, Panjab University, Chandigarh	Will be done at the site
2	Experimental water cooling tower	1	40 days	Dr SS Bhatnagar University Institute of Chemical Engg and Tech, Panjab University, Chandigarh	Will be done at the site
3	Forced draft tray dryer	1	40 days	Dr SS Bhatnagar University Institute of Chemical Engg and Tech, Panjab	Will be done at the site

				University, Chandigarh	
4	Natural draft tray dryer	1	40 days	Dr SS Bhatnagar University Institute of Chemical Engg and Tech, Panjab University, Chandigarh	Will be done at the site
5	Rotary Drier	1	40 days	Dr SS Bhatnagar University Institute of Chemical Engg and Tech, Panjab University, Chandigarh	Will be done at the site
6	Solid Liquid Extraction Unit	1	40 days	Dr SS Bhatnagar University Institute of Chemical Engg and Tech, Panjab University, Chandigarh	Will be done at the site

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase II** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.
3. Quotation,

   3.1 The contract shall be for the full quantity as described above.

   3.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.

   3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.

   3.4 Applicable taxes shall be quoted separately for all items.

   3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.

   3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.

5. Quotation shall remain valid for a period not less than **55** days after the last date of quotation submission.
6. Evaluation of Quotations,

   The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

   6.1 are properly signed ; and

   6.2 confirm to the terms and conditions, and specifications.
7. The Quotations would be evaluated for all items together.
8. Award of contract:

   The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

   8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

   8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
9. Payment shall be made in Indian Rupees as follows:

   Delivery and Installation - 90% of total cost

   Satisfactory Acceptance - 10% of total cost

10. All supplied items are under warranty of **36** months from the date of successful acceptance of items.
11. You are requested to provide your offer latest by **02:30** hours on **17-Sep-2015 .**
12. Detailed specifications of the items are at Annexure I.
13. Training Clause (if any) **The bidder will provide training of the specified equipment at the time of installation without any additional cost.**

14. Testing/Installation Clause (if any) **The bidder will install the equipment's at the specified site without any additional cost.**
15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
16. Sealed quotation with proper **TEQIP quotation number** written on the envelope which is to be submitted/ delivered at the address mentioned below,

    The Chairman,

    TEQIP-II,

    Dr.S.S.Bhatnagar University Institute of Chemical Engineering and Technology,

    Panjab University,

    Chandigarh – 160 014
17. We look forward to receiving your quotation and thank you for your interest in this project.

(Authorized Signatory)

Name & Designation

Annexure I

Sr. No	Item Name	Specifications
1	Computer controlled Sieve Distillation Column with data logging system	Distillation Column : Material Stainless Steel, Diameter : 100±10 mm, Seven Sieve Trays Pressure Gauge : Bourdon Type (0-2 kgf/cm2), LC : 0.1 kgf/cm2 Specification For Pressure Gage: Bourdon Type (Qty. 1No.) Pressure regulator: 0-2kg/cm² Range: 1 – 2 kg/cm2 Unit of measurement: kPa, kg/cm2 Dial Size: 150 mm in Aluminium white background, black markings Window: safety glass (shatter proof/toughened glass) Accuracy: ? 1 % FSD Material: SS 316 Mounting: to suit the equipment Zero Adjustment: Micrometer pointer Rotameter : For cooling water flow rate measurement (0-5 Lt/min) with valve inline for controlling the flow Steam Generator : Made of Stainless Steel to produce steam of 3 kg/cm2, provided with Pressure Gauge & Level Indicator, Safety Valve & Insulated with Ceramic Wool & Cladding with Aluminium Foil Reflux Divider : Provision to change R/D Ratio automatically Condenser : Shell & Tube Type made of Stainless Steel Bottom Product Tank : Made of Stainless Steel (Capacity : 5-7 Lt) Distillate Tank : Made of Stainless Steel (Capacity : 5-7 Lt) Heaters : Nichrome Wire Heater Temperature Sensor : RTD PT-100 Type Control Panel Comprises of : Digital Temp. Controller : 0-200o C, For Steam Reboiler Digital Temperature Indicator : 0-200o C, with Multi-channel Switch with Standard make on/off switch, Mains Indicator etc. Electricity Supply : 1 Phase, 220 V AC, 6 KW Piping : SS, PVC Computer System: Pentium IV with DVD drive, windows 7, MS Office preloaded, data acquisition card. NOTE: 1. A good quality duly powder coated MS stand of suitable working height to support all the parts 2. Complete instruction manual in ENGLISH is to be provided for all the equipments describing the equipment and the experimental procedure along with a sample set of results 3. All Electrical fittings should be ISI Mark

2	Experimental water cooling tower	Technical details : Tower : Material Stainless Steel Size - Cross-Section (150x 150) mm, Height 750mm Packing : Expanded wire mesh. Air Circulation : By forced draft fan, arrangement is done to vary air flow rate. Air Flow Measurement : By Differential Pressure transmitter with orifice. Water Flow Measurement : By flow transmitter. Hot Water Tank : Material Stainless Steel, Double wall, insulated with ceramic fibre wool Hot water circulation : Magnetic Pump Heater : Nichrome wire heater Temperature measurement : By Temperature transmitter (4-20 mA)- 6 Nos. Control panel comprising of : Digital Temp. Controller : PID Controller, (0-199.9°C), For hot water tank With Standard make On/Off switch, Mains Indicator & fuse etc. Computer System: Pentium IV with DVD drive, windows 7, MS Office preloaded, data acquisition card. An ENGLISH instruction manual consisting of experimental procedures, block diagram etc. will be provided along with the Apparatus The whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint. Utilities required: Water Supply Floor Drain. Electricity Supply : 1 Phase, 220 V AC, 3 kW. Floor area of 1.2 m x 1m. Computer System: Pentium IV with DVD Drive, Windows 7, MS-Office pre-loaded. One USB slot required in PC for DATA ACQUISITION CARD
3	Forced draft tray dryer	Technical details : Drying Chamber : Insulated double wall chamber, Size (20 x 20 x 25) cm Weighing Balance : Digital (0-1000gm) of ± 1 gm resolution. Hot Air Circulation : By forced draft fan, Arrangement is done to vary the air flow rate. Heating Chamber : Compatible capacity. Heater : Nichrome wire heater. Control panel comprises of : Digital Temp. Indicator : 0-199.9° C (with multi-channel switch) Temperature Sensors : RTD PT – 100 Type Standard make on/off switch, Mains Indicator etc. An ENGLISH instruction manual consisting of experimental

		procedures, block diagram etc. will be provided along with the Apparatus The whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint. Utilities required : Electricity Supply: 1 Phase, 220 V AC, 2.5 kW. Wet Solid. Floor area 0.75 m x 2 m.
4	Natural draft tray dryer	Technical details: Drying Chamber Material : Stainless Steel Size : (30 x 30 x 30) cm insulated by Ceramic wool and housed in a MS Chamber. Maximum Temperature : 120°C. Heater : Nichrome wire heater Weighing Balance : Digital, 0-1000gm. of ± 1 gm resolution. Temp. Sensor : RTD PT-100 type Control panel comprises of : Digital Temp. Controller : 0-199.9°C (For Drying Chamber) With Standard make on/off switch, Mains Indicator etc. An ENGLISH instruction manual consisting of experimental procedures, block diagram etc. will be provided along with the Apparatus The whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint. Utilities required: Electricity Supply: 1 Phase, 220 V AC, 2 kW. Drying Solids. Table for setup support
5	Rotary Drier	Technical details : Drying Shell : Material Stainless Steel, Length 1.5 m, Dia 110 mm. Feed Hopper : Material Stainless Steel , Compatible Capacity Product Receiver : Material Stainless Steel, Compatible Capacity. Rotating Action : Using motor coupled with a Reduction Gear Box. Hot Air Circulation : By forced draft fan, Arrangement is done to vary the air flow rate. Heating Chamber : Compatible capacity Heater : Nichrome wire heater Temperature Sensors : RTD PT-100 type. Control panel comprises of : Digital Temp. Controller : 0-199.9°C (For Hot Air) Standard make on/off switch, Mains Indicator etc. An ENGLISH instruction manual consisting of experimental procedures, block diagram etc. will be provided along with the Apparatus The whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint.

		Utilities required: Electricity Supply : 1 Phase, 220 V AC, 4 kW. Wet Solid. Floor space of 1.5m x 2m.
6	Solid Liquid Extraction Unit	Extraction Column : Material Borosilicate Glass (Qty. : 1 in no. + 1 spare) fitted with SS Mesh to support the Solid upto 10 Kg , Diameter : 80±5 mm, Height : 500±10 mm (approx) Solvent Flow Measurement : Rotameter (0-3 Lt/min) Solvent Tank : Made of Stainless Steel (Capacity : 30-35 Ltrs) Solvent Receiver : Made of Stainless Steel with Compatible Capacity Piping : SS, PVC Heater : Nichrome Wire Heater with Variac Temperature Sensor: RTD PT-100 Type with standard make ON/OFF switch, Mains Indicator etc. Digital Temperature Indicator : 0-150 ?C (for Feed Tank),LC : 0.1 ?C Solvent Circulation : Magnetic Pump made of Polypropylene to Circulate Solvent NOTE: 1. A good quality duly powder coated MS stand of suitable working height to support all the parts 2. Complete instruction manual in ENGLISH is to be provided for all the equipments describing the equipment and the experimental procedure along with a sample set of results 3. All Electrical fittings should be ISI Mark 4. Provision of flow regulating valve (wherever required)

FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To:

_____

_____

Sl. No.	Description of goods (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. ———————— (Amount in figures) (Rupees ————————amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of ——————— months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No: _____