



**GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR**  
( A Central University established by the Central Universities Act, 2009 No. 25 of 2009)  
Website: [www.ggu.ac.in](http://www.ggu.ac.in) Phone: 07752-260342, 260381 FAX: 07752-260154, 260148

Notice No: ATI/Store/788/2012

**NOTICE INVITING EXPRESSION OF INTEREST CUM BID**

Date: 21.12.12

Guru Ghasidas Vishwavidyalaya invites Expression of Interest (EOI) from reputed Original Equipment Manufacturing Company or their authorized partners/agents/distributors to get registered with the University for supply of various laboratory equipments/instruments/accessories to the department of Chemical Engineering & Pure & Applied Physics and submit bids in two parts (Part A – Technical and Part B – Financial) for supply, installation & commissioning of the items listed in Schedule-I in EOI cum Bid document.

1. For vendor registration form and EOI cum Bid document please visit university website [www.ggu.ac.in](http://www.ggu.ac.in)
2. The duly filled Vendor registration form along with required documents and registration fees of Rs. 1100/- in the form of DD in favour of Registrar, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) may be submitted to Asst. Registrar (Stores), Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) by Speed post/Registered post/Courier by 11.01.2013 (3:00 p.m.) superscribed the envelope "REGISTRATION OF VENDOR". Registration is must for bidding.
3. Bids in two parts (Part A – Technical and Part B – Financial) for supply, installation & commissioning of the items listed in Schedule-I in EOI cum Bid notice can be submitted to Asst. Registrar (Stores), Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) by Speed post/Registered post/Courier by 11.01.2013 (3:00 p.m)
4. Those vendors who are already registered with the University need not to submit the Vendor registration form again. List of registered vendors is available in the website.

Registrar



# गुरु घासीदास विश्वविद्यालय, बिलासपुर (छ0ग0)

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Dated..... ITEM NO.....CATEGORY.....".
4. Those vendors who are already registered with the University need not to submit the Vendor registration form again. List of registered vendors is available in the website
5. The list of items with specifications is given in Schedule-I. Items are grouped in various categories (department wise). One bidder can submit max. one bid for each category i.e. if any bidder wants to bid for more than one item in any category he should submit one composite bid of those items for that category. Item Nos. & category should be mentioned clearly on the each bidding envelopes.
6. Completed bid along with all the documents must reach the, Asst. Registrar (Stores), Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur – 495009 (C.G.) on or before 11.01.2013 (3:00 p.m.) through Speed post/Registered post/Courier Service only. Each Bid should be superscribed with "BID FOR EOI ..... Dated..... ITEM NO.....CATEGORY.....".
7. Technical Bids will be opened on 11.01.2013 (4:00 p.m.) at Conference Hall, Administrative Block, Guru Ghasidas University, Bilaspur.
8. Date of opening financial bids will be intimate later on at the university website [www.ggu.ac.in](http://www.ggu.ac.in)
9. **Two Bid System:** Vendor will place the "Technical Bid" and "Financial Bid" in the separate sealed covers. Thereafter, both the envelopes should be placed in a big envelope duly sealed and superscribed "BID FOR EOI ..... Dated..... ITEM NO.....CATEGORY.....".

The University is not responsible for non receipt of tenders within the specified date and time due to any reason including postal holidays or delays

**Envelope I (Technical Bid):** The vendor must submit the following documents in Envelope-I (Technical Bid):

- d) Detailed technical specifications and literature/manuals of the goods/services to be supplied.
- e) Technical compliance statement with deviation, if any
- f) Authorized partner/dealer/distributor certificate from the original manufacturer.

**Envelope II (Financial Bid):**

The vendor must submit the Price Bid information mentioning all taxes/duties FOR University campus, Bilaspur. The price should be quoted in words and in figures, without any errors, erasures or alterations. Unit price of each product and accessories should be quoted separately. Maximum educational discount for University as could be offered should also be mentioned.

10. **Offer validity period:** The offer should hold good for a period of 120 days from the closing date of the tender. Any offer falling short of the validity period is liable for rejection. ▸
11. **Performance Guarantee:** Performance Security for an amount of 5% of the order value may be furnished in the form of an Account payee Demand Draft, Fixed Deposit Receipt from a Commercial bank or Bank Guarantee from a Commercial bank in an acceptable form by the successful bidder. Performance Guarantee is to be furnished within 21 days after notification of the award and it should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the vendor, including warranty obligations.
12. The Cost of the equipment should be inclusive of all taxes and statutory levies. Labour / installation charges, packing, insurance, freight etc. should be mentioned separately (inclusive of all taxes liveable on them). For imported goods price to be quoted CIF Kolkata and in case of local firms they should quote FOR Guru Ghasidas University Campus, Bilaspur. Unit price of each product and accessories should be quoted separately. Maximum educational discount for University as could be offered should also be mentioned. The University is **exempted from payment of custom and excise duty** on Scientific and technical equipment/instruments by DSIR, Govt. of India. Necessary certificate will be issued on demand.
13. University reserves the right to carry out a technical inspection and performance evaluation (benchmarking) of the offers made by shortlisted vendors. The shortlisted vendors may be asked to come and give out presentation / demonstration.
14. **No commitment to accept lowest or any bid:** University shall be under no obligation to accept the lowest or any other offer received in response to this tender notice and shall be entitled to reject any or all offers including those received late or incomplete offers without assigning any reason what so ever. University reserves the right to make any changes in the terms and conditions of the bid. University will not be obliged to meet and have discussion with any vendor, and or to listen to any representations.
15. **Shortlisting of Vendors:** University will create a shortlist technically qualifying vendors and the financial bid of only these vendors will be opened. University reserves the right to decide whether the items being quoted are as per the requirement of the University and are of standard/leading brands in the market. University reserves the right to decide which offer best suits the requirement of the university. Further, after opening financial bids of the short listed tenders, if there is a discrepancy between word and figure, the amount indicated in words will prevail.

16. **Warranty:** The vendor shall provide comprehensive on-site Warranty for the system/equipment supplied against the work order for a min. period of 1 year from the date of installation and commissioning of the system/equipment. This would cover the hardware, hardware components, system software, equipment and accessories supplied by the vendor at the place of installation.
17. **Delivery period:** For imported goods the complete delivery, installation & commissioning of both the equipments/instruments should be made within 12 weeks from the date of issue of order. For indigenous goods it is 8 weeks.
18. **Resolution of disputes:** University and the vendor shall make every effort to resolve amicably, by direct informal negotiations, any disagreement or dispute arising between them under or in connection with the contract. If after thirty days from the commencement of such informal negotiations, University and the vendor have been unable to resolve amicably a resolution by formal arbitration the Vice-Chancellor of University shall appoint a sole Arbitrator of the dispute who will not be related to the vendor and whose decision shall be final and binding.
19. **Jurisdiction :** All disputes will be subject to Bilaspur jurisdiction only.
20. **Custom Clearing:** After arrival of the goods at Kolkata Airport/Seaport, Indian agent or Indian subsidiary of the principal firm is solely responsible for getting the material clearance from customs. University will provide all custom documents for custom clearance on the demand of agent. Transportation from Kolkata to Guru Ghasidas University campus is also the responsibility of authorized agent. All charges/ expenses incurred in this process will be reimbursed to firm after submitting the bill along with documentary proof in original. Please note that the freight forwarder or clearing agent should be approved from IATA . **NO DEMURRAGE / WHARFAGE CHARGES WILL BE PAYABLE BY THE UNIVERSITY UNDER ANY CIRCUMSTANCES. NO ADVANCE PAYMENT WILL BE PAYABLE FOR CUSTOM CLERANCE/ FREIGHT / INSURANCE ETC**
21. The vendor should adhere with all seriousness to the time schedule provided by the University. The **Liquidated Damage** will be applicable at the rate of 0.5% per week. The purchaser has the right to cancel the purchase order when LD accumulates to 10 %.
22. The quantity indicated in the **Schedule-I** is tentative. University reserves the right to increase or decrease the quantity or delete some or all of items depending on the needs of the University without assigning any reasons.
23. The bids will be opened on due date and time indicated in presence of the bidders if any present on the occasion, if the date of the opening is declared holiday the bids will be opened on next working day.
24. For imported goods, the payment will be made through Letter of Credit. No advance payment will be made. Payment will be made after the receipt, inspection and installation/testing of the goods.
25. University reserves the rights of accepting in full or part/not accepting the tenders without assigning any reason.
26. Any addition/deletion/modification of this tender made before the due date of the tender will be displayed in university website only.

## Category - I

## Chemical Engg.

## 1. Computer Controlled Sieve Tray Distillation column

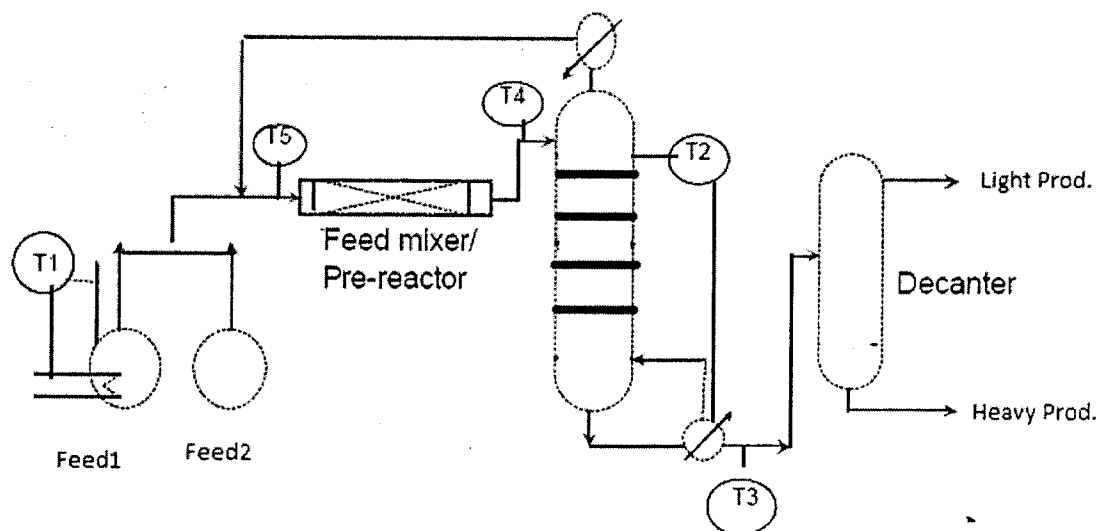
Distillation Column	Glass Column, ID- 25 mm
No Of Trays	10
Feed Point	Variable (Between 1-6 <sup>th</sup> tray )
Rotameter	4 No.
Operating Temperature Range	Rt-200 <sup>o</sup> C
Temperature Indicator	0-200 <sup>o</sup> C (5 No.)
Controller	Feed Back (PID-2 No.)
Reboiler and Feed Tank	Round Bottom Flask With Heating Mantle
Pumps	Peristaltic Pump (3 No, 0.5-8 ml/min)
Decanter	70*300 (Dia.*Length) With Adjustable Feed Point
Condenser	Water Cooled Glass Condenser
Piping	PVC/SS
Mixer	Static Mixer (3ml)

## Computer Configuration

Hard Disc	320GB
RAM	2GB
Processor	Core2Duo
Monitor	LCD-17"
Printer	Laser Printer
Computer System should be compatible with the Distillation Column Unit.	



## Seive Tray Distillation Column



### 2 (i) Plate and frame filter press

Type	Chamber Filter press open filter discharge
Plate Size	140mm x 20mm
No. of Plates	5 pcs
Max. Filtration Pressure	1.7 bar
Plate Material	Clear Acrylic
Filter Cloth	Nylon
Feed Pump	
Type	Diaphragm Pump
Volts	24 VDC
Amp	3.5 Amps
Max. Head	4.1 bar
Max. Flow Rate	8.0 LPM
Temperature Sensor Type	RTD sensor, Class A
Filtrate Flow Meter Type	Turbine flow meter
Range	0.5-2.5 LPM
Pressure Sensor Range	0-4.0 bar
Turbidity Sensor	
Rating:	100-240VAC, 47-63Hz
Measurement Range	0-1000NTU
Light Source	Infrared (850nm LED)
Operating temperature	0-50degC

### 2 (ii) Multilicense Software Packages for filtration unit operation

Authenticated multilicense software packages have to be provided by approved firm

### 3. Solid-Liquid Extraction Unit

Material Of Construction	Borosilicate Glass
Column Diameter	50mm
Column Length	500mm
Leaching bag	35 mm (dia.) * 300 mm (length), Which Is One Sided Closed.
Solvent Feed Pump	15 LPM
Solvent Feed Vessel	Capacity - 20 liter, MOC -SS,
Piping	SS
Heater	1.5 kW With Thermostat Controlled



Category-II

Sl. No.	Name of the Equipment
1	High temperature vacuum tube furnace with MoSiO <sub>2</sub> Heating elements (75x150-200mm) body covered by S:S with rotary pump, gas control panel with gas flow control and RS-232 interface
2	<p><b>Nano station</b> (for thin film electrical measurements) consisting of</p> <p><b>Base unit</b> of Ni-plated brass with all electrical, cooling water and gas connections, 4 gas connection stems, quick-connects( brass) for 1/8 copper tubing, 1 enclosing tube alumina ( 40 mm diameter), 1 Alumina sample support tube assembly for disk sample with diameter selectable among 10, 12, 16, 20 and 24 mm, 1 standard alumina spring load assembly, 1 spare set of long alumina bars for spring load, 3 hot zone gas tube: two straight of alumina and one bent of silica, 1 Pt/ Pt10Rh thermocouple assembly for disk setups, 2 general purpose electrode nets with contact pair of Pt, 2 electrode "hand" contact outer 2-wire assemblies of Pt/ alumina with Pt net, 1 inner "hand" electrode contact 2-wire assembly of Pt/ alumina with Pt net, 1 Guard-reference-ring electrode assembly of Pt/ alumina, 2 general purpose electrode nets of Pt, 2 gold sealing rings, 4 single coax/BNC cables (2m), 1 Thermocouple compensation cable(3m), 1 simple bench top mountings stand set, Transport and storage case(aluminium), User manual, set of various small parts: various tools, spare Viton O-rings, steel bar for base unit fixture, alumina pacer rings, Outer transportation glass tube, alumina support plates, cooling water hose fitting with PVC hose, 1 alumina cap for thermocouples, spare rings ( soft and stiff), spare female feedthrough mini contracts, extra silicone hose for gas supply tubes, 8 YSZ test samples( disk)with two Pt electrodes or alternate equivalent assembly.</p> <p><b>Tube furnace</b> Single Zone vertical Tube Furnace with adjustable stand (Heated length: 300mm, Furnace bore: 45mm, Maximum temperature:1200<sup>0</sup>C, Maximum cont. temperature 1150<sup>0</sup>C), Heating elements: Via resistance wire elements wound on to a ceramic work tube which should be integral part of furnace, Insulation: Low thermal mass insulation throughout for maximum thermal efficiency and stability, Outer case of zinc coated steel finished with epoxy powder paint. An outer mesh cover which allows natural air cooling for maximum operator safety and comfort, Temperature control: eurotherm or equivalent (with El-Bisync protocol), Temperature sensors: Type 'N' thermocouple, Power control: Solid State Relays, Power Supply: 240 volts single phase, Energy rating: 1.7 KW (nominal), Location of controls: In the control box remote from furnace on 2 meters of connecting cable, An adjustable stand which can enable the furnace to be lowered on the cell. Furnace stand dimensions should be such that height from the top of its base plate to bottom of furnace opening when the furnace is lifted to top position is 80 cm.</p> <p><b>Gas Mixer</b> Electronic Flow Controller with Display and Control of Gas flow rate Range: 0 – 1000 SCCM for Carrier Gas, Pump for Vacuum / Purging of the Sensor Chamber with Auto Calibration facility (The system equipped with the Detectors for</p>



	<p>Detection of Carbon Dioxide, Nitrous Oxide and Oxygen in PPM level from the Generated Gas steam), Stainless Steel Chamber for Mix the Gases before passing through the Detectors and Sensors, Electronic Pressure Controller for Auxiliary gas-1 with Range of 0-500MI/Min., Electronic Pressure Controller for Auxiliary gas-2 with Range of 0-500MI/Min., Electronic Pressure Controller for Auxiliary gas-3 with Range of 0-500MI/Min., 10 Liter Water Capacity Carbon Steel Cylinder filled with Calibration Gases 1000-2000 PPM (User Specified) Carbon Dioxide, Nitrous Oxide and Oxygen for Performance test of the Detector and System Calibration.</p> <p>Note: Arrangement for connections to Keithely electrometer (for measurements of electrical parameters for thin films and solid pellets) should be provided.</p> <p><b>Essential Spares</b></p> <p>Alumina sample support Tubes assembly, 20x15mm disk, Spring load part, alumina long bar including 2.3 mm holes in both ends and Pt/ alumina locking parts, Spring load part, steel spring set(10), Gas tube, outer bent, silica, 4mm OD, TCD/D-S Pt/ Pt10Rh thermocouple assembly for disk setups, General purpose electrode net (20mmO)with contact pairs of Pt., Pt net, 20mmO, Feedthrough repair kit incl. 3 feedthrough assemblies.</p>
3	LAN connected proxy server with 25 Nodes and UPS

