



GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)

(A Central University established by the Central Universities Act, 2009)
Ph: 08982497233, +91-07752-260477, www.ggu.ac.in

Ref: Physics/LTE/39/2014

Date: 24.11.2014

To,

.....
.....
.....

Subject: limited Tender Enquiry

Sir,

Please submit your competitive rates for supply & installation of the following article as mentioned

below in the prescribed proforma Annexure-I to the **Dr. Pradip Das (Principal Investigator)**, Dept. of Pure and Applied Physics, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur - 495009 (C.G.) on or before 15.12.2014 (3:00 p.m.) through Speed post/Registered post only. Received tenders will be opened on 15.12.2014, 05:00 p.m. at the above address. Tenders received after due date & time will not be considered. Any non compliance from prescribed specifications shall lead to cancellation of tenders.

Item No	Item	Parameter	Specifications	Quantity
01	DC CURRENT SOURCE	Functions	Provide for Delta Mode Resistance; Differential Conductance; Pulse measurements.	1
		Range	2 nA – 100 mA.	
		Programming Resolution	100 fA – 10 uA.	
		Accuracy	0.4% + 2pA. TO 0.1%+50uA.	
		Output Resistance / Capacitance	>10 T Ohms / <100pF (2nA; 20nA).	
		Voltage Compliance.	100mV – 105V Programmable	
		Output Power.	11 W.	
		Program Memory	Upto 64K	
		Output.	3- Lug Triax Connector.	
Hardware Architecture.	Should provide for Guarded measurement. Common mode Voltage 250 V RMS. IEEE-488.2 & RS232 Interface; Ethernet; Digital I/O; External Trigger Input / Output. Safety Interlock capability.			

2	NANOVOLTMETER (Two Channel Nano-Voltmeter.)	Functions	Provide Measurements for: Delta Mode; Differential Conductance; Pulse; Ratio; Temperature; Maths; Analog Output.	1
		Display.	7 1/2 Digits.	
		Range: Channel 1 / Channel 2.	10 mV – 100V / 100 mV – 10V DC	
		Resolution: Channel 1 / Channel 2.	1 nV – 10 uV / 10 nV – 1uV DC	
		Accuracy	+ / - 0.002%.	
		Input Resistance.	>10 G Ohms. (>10M Ohms on 100V range)	
		DC Input Bias Current.	<60 pA (-10 to 5V); <120 pA (5 to 10V) DC	
		Noise @1sec response.	25 nV Pk-Pk. (10mV Range)	
		Noise @100 Ohms Source Resistance.	8 nV Pk-Pk.	
		Program Memory	1024 Readings.	
		Temperature Measurement.	Using Thermocouples type: J;K;N;T;E;R;S;B.	
		Temperature Range	-200 Deg.C upto +1800 Deg.C.	
		Temperature Display.	Deg. C; F; K.	
		Input.	Miniature Limo Connector.	
		Input protection.	150V Pk-Pk.	
		Channel Isolation.	>10 G Ohms.	
		Earth Isolation.	350 V Pk-Pk.; >10G Ohms & <150pF.	
Analog Output	+/-1.2V max.; 1K Ohms; with adjustable gain.			
Triggering.	Should provide for delay upto 99 Hrs.			
Hardware Architecture.	Should provide for Math functions (Rel; Min-Max; Ave; Std.Dev; Pk-Pk; limitTest; mX+b) IEEE-488.2 & RS232 Interface; External Trigger Delay.			
Power requirement	230V AC, +/- 10%; 50Hz- 400Hz.			
0 3	High Temperature Chamber Furnace with programable control & option for gases operation	Chamber volume	1.5 liter Approx	1
		Max. temperature	1550°C	
		Heating time to Tmax.	Not more that 40 Minutes	
		Inner chamber dimensions	Not less than 105 x 115 x 120 mm (wxdxh)	
		Outer dimensions of furnace	Not more than 350 x 310 x 475 mm (wxdxh)	
		Power	Not more than 3.5 kW, Single Phase connection	
		Weight	Not more than 20 kg	

		STANDARD FEATURES	<ul style="list-style-type: none"> • PID based Microprocessor temperature controller with clear, blue-white LCD display with data input by numeric pad. Should have facility for at-least 9 Programs with 40 Steps each; Temperature & time value entry in steps of 1°C & 1 minute respectively; Status messages not as codes but as clear texts. With features start time configurable; Operating hour counter; auto tune function; Temperature variable as °C & °F; kWh meter; Real time clock; Skip-button for segment jump. Should have Interface for monitoring & control software; • High-quality fiber material for furnace Chamber, selected for the high working temperature. • High-quality fiber material for furnace Chamber, selected for the high working temperature. • Should be heated by at least 4 SiC Heating elements placed vertically on sidewalls with ease of replacement of heating rods. • Should have lift up door with hot surface facing away from the operator for ease of operations • Should have switching system with semiconductor relay, power tuned to the SiC rods. • Possibility of equipping the instrument up to 4 gases & should have Protective Gas Connection for inlet / outlet of gases to the furnace. • Double-walled casing for low external temperatures and high stability • GLP & GMP compliant Non-rust Textured Stainless sheet steel casing. 	
4	Quartz Tube (for upto 1100°C) for thermal Analysis	Outer diameter	18mm	40
		Inner diameter	15mm	
		Length	1 m	
5	<99 % Alumina Thermal	OD(mm)	~25mm	80
		Height (mm)	~ 30mm	

	Analysis crucible	Capacity(ml)	~20 ml	
--	-------------------	--------------	--------	--

General terms & conditions of the supply

1. The tenders have been invited under two bid system i.e. Technical Bid and Financial Bid. The interested agencies/firms are advised to submit two separate sealed envelopes superscribing "Technical Bid" and "Financial Bid". Both sealed envelopes should be kept in a third big sealed envelope superscribing "Tender **FOR SUPPLY/INSTALLATION**"
"Ref:/Store/...../2014 Dated 14.10.2014".
2. **Envelope I (Technical Bid):** The vendor must submit the following documents in Envelope-I (Technical Bid):
 - a. Detailed technical specifications and literature/manuals of the goods/services to be supplied.
 - b. Technical compliance statement with deviation, if any
 - c. Authorized partner/dealer/distributor certificate from the original manufacturer.
 - d. Credentials and list of organizations where the vendor supplied similar items in last 3 years.
 - e. Documentary proof in support of PAN , VAT/TIN No. and Service Tax No.

Envelope II (Price Bid):

The vendor must submit the Price Bid information mentioning all taxes/duties FOR University campus, Bilaspur in the prescribed proforma **Annexure-I**. 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.

3. **Make/Brand:** The bidder should mention the make/brand of the quoted article for which he is OEM/authorized distributor/stockist/dealer. The authorization certificate, technical brochure/leaflet etc. should be submitted along with the quotation.
4. The Cost of the equipment/instrument/article 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 CIP 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.
5. **Custom Clearing:** Custom Clearing at Kolkata/New Delhi Airport will be carried out by the University authorized clearing agent.
6. If the items are under DGS&D rate contract, the quoted price should not be more than the DGS &D rate.
7. **Discount, if any:** Special concession/discount applicable for Educational Institutions, if any, must be clearly mentioned at the time of submission of quotation.

8. No packing/forwarding charges will be paid extra.
9. University will not be responsible for any postal delay or non-receipt of the tender.
10. The article must be delivered without any extra cost at the University Institute and will also have to be installed free of cost.
11. 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.
12. **Validity of rate:** The quoted rate should be valid for a minimum period of 90 days.
13. **Delivery period:** The article to be delivered& installed within 30 days from the issue of P.O.
14. **Liquidated Damages:** Any delay in supplying the article from the stipulated date of delivery, will attract LD. Liquidated Damage will be applicable at the rate of 0.5% per week and limited to 10% maximum. The authority reserves the right to cancel the purchase order when LD accumulates to 10%.
15. **Warranty:** One year comprehensive on-site warranty shall be applicable to the supplied goods for all manufacturing defects from the date of satisfactory installation, commissioning, demonstration and acceptance.
16. **Performance Security:** The successful bidder must submit Performance Security of 5% of the ordered value, on the goods/services supplied irrespective of the origin, before the release of payment by Demand Draft or Bankers Cheque or Bank Guarantee from any Nationalized Bank. Otherwise, the **same amount will be deducted** from the billed amount. On satisfactory completion of the warranty period of 1 year (12 months), **Performance Security** will be released free of any interest on demand.
17. **Payment:** 100% payment will be made after supply and installation of ordered quantity of article at our end in good condition. No advance payment request will be entertained.
18. **CST/VAT** will be paid extra, if applicable provided it is made clear in the quotation.
19. Unsealed quotations will be rejected and quotations must reach on or before the due date through Speed post/Registered post / courier only.
20. University reserves the right to accept or reject any quotation without assigning any reason thereof.
21. All disputes will be subject to Bilaspur jurisdiction only.

Dr. Pradip Das
Principal Investigator