# झारखण्ड केन्द्रीय विश्वविद्यालय, राँची CENTRAL UNIVERSITY OF JHARKHAND, RANCHI

(संसदीय अधिनियम के तहत 2009 में स्थापित केन्द्रीय विश्वविद्यालय) (A Central University established by an Act of Parliament in 2009)

#### Ref no. CUJ/ P&S/EE/266/2014

Sealed quotations are invited for the article enclosed in the separate sheet (Annexure-I) subject to the terms and conditions given below:

Dated:23-04-2014

The quotation should be addressed to The Stores Officer Central University of Jharkhand, Ratu-Lohardaga Road, Brambe, Ranchi, 835205 and should reach on or before 15-05-2014 Technical bid will be opened on 16-05-2014 at 3:00 pm.

#### **TERMS AND CONDITIONS**

- 1. Quotations without any erasures and overwriting must be submitted in sealed cover addressed to the Stores Officer, Central University of Jharkhand, Ratu- Lohardaga road, Brambe, Ranchi- 835 205 super-scribed Tender/ Enquiry No. and the due date failing which, quotation may be ignored. Tender/ quotation should be sent through Post/ Courier/ By Hand.
- 2. The rate quoted should be inclusive of all packing, forwarding, sales tax, freight and insurance charges and should remain valid for our acceptance for minimum period of three months from the due date of opening of the quotations. The quotation should be CUJ consignee's site basis i.e. Central University of Jharkhand, Ratu- Lohardaga Road, Brambe, Ranchi.
- 3. Manufacturer's name of company of origin of materials offered must be clearly specified. Complete details of illustrated literatures/ or drawings, in original (not photocopies), if any must accompany all quotations.
- 4. The University will not entertain requests for revision in prices once quoted for whatever reason after the tenders are opened during the period of contract.
- 5. All goods must be delivered at our university at Ratu- Lohardaga Road, Brambe, Ranchi for inspection by our inspecting authority.
- 6. Full payment will be made within 30 days of the receipt and acceptance after inspection of supplies at destination, quotations containing different payment terms are liable to be ignored.
- 7. All goods must be delivered at out university at Ratu- Lohardaga road, Brambe, Ranchi (Stores & Purchase Section) free of cost after confirmed order.
- 8. Only Manufacturer/ Authorized dealer/ firms of repute dealing in the items listed in the quotation having experience in sale and repair/ maintenance, need apply.
- 9. Only latest models of items need to be quoted.

- 10. It should be mentioned specifically whether price quoted includes all taxes and duties. Sales tax and/ or other duties legally leviable and intended to be claimed should be distinctly shown in the tender.
- 11. VAT/CST Registration Number and its validity should be indicated. Documentary evidences be supplied/ attached to the tender documents.
- 12. All rates shall be indicated both in words and figures. Where there is difference between the rates quoted in words and figures, rate quoted in words will prevail.
- 13. The supplier shall make delivery of the items within 30 days from the placement of the purchase order. The purchase order would be placed after assessing the requirement and hence, actual quantity may increase/ decrease.
- 14. The Tender Document for items will be Two- Bid system consisting of Technical Bid and Price Bid. The Tender Document will be submitted item-wise in two separate sealed covers clearly mentioning on the envelope the details of items for which Bid is submitted.
- 15. The price of Tender Document is Rs. 1000/- only (One Thousand rupees only) (non- refundable). The Tender Document price may be attached to the Technical Bid in the form of Bank Draft in favour of "Central University of Jharkhand" payable at Ranchi.
- 16. The Tender Documents comprising of Price- Bid, Technical Bid and Earnest Money Deposit of Rs. 2,30,000 only (Rupees Two Lakh Thirty Thousand only) (refundable) in the form of Bank Draft in favour of "Central University of Jharkhand" payable at Ranchi kept in the separate envelope super- scribed with the name of the same. The Tender Document must be enclosed with Earnest Money Deposit otherwise the tender document will be rejected. All the documents must be enclosed in a bigger size envelope super- scribed with the tender number and item name.
- 17. Only those Manufacturers liable to participate having ISO 9001 and ISO 14001 certification.
- 18. All legal disputes shall be under the jurisdiction of Jharkhand High court, Ranchi.
- 19. The University reserves the right to accept or reject any Bid, without assigning any reason thereof. No correspondence in this regard will be entertained.
- 20. All the participating firms should attach supporting documents in favour of:
  - (a) Have at least 5 years of experience in the field.
  - (b) Have an annual turnover of at least Rs. 50 Lakh per annum for each of the last 3 years (i.e 2010-11, 2011-12 & 2012-13) (Agency should produce a certificate from their Audit Firm in respect of turnover for the mentioned period)
  - (c) Be registered with Directorate of Industries or Small Scale Industries or any other appropriate authorities.
  - (d) Have valid TIN Number for registration under VAT/CST
  - (e) Have PAN for Income Tax. Supporting documents for Income Tax return for the last Two years (i.e 2011-12, 2012-13).

- (f) Documents as proof in respect of Technical bid along with supporting documents.
- (g) Profile and Track Record of the agency. (3 years)
- (h) Copy of signed Balance Sheets of last three years.
- (i) Detailed terms and condition regarding performance/ warranty/ Bank guarantee/ inspection/ LD/ Penalty for delayed supplied will be elaborated in our purchase order.
- 21. Details specification of the equipment annexed as Annexure-I.
- 22. For any queries you may contact our University web site <a href="www.cuj.ac.in">www.cuj.ac.in</a>.

Chairman (Academic Purchase)

### Annexure-I

## **DETAILS OF ARTICLE**

Sl. No.	Description of the Item with specification	Quantity
1.	Biodiesel reactor for production of biodiesel upto 5 lit. Per batch	01
2.	Single cylinder four stroke air cooled petrol engine test rig (conventional) With hydraulic dynamometer with facility of drawing indicator diagram and measuring it's area	01
3.	Single cylinder four stroke water cool diesel engine test rig (conventional type) With facility of drawing indicator diagram. With rope brake dynamometer	01
4.	Computerised four cylinder four stroke petrol engine testing with eddy current dynamometer complete with computer and facility of MORSE TEST	01
5.	Computerised four cylinder four stroke diesel engine test rig with DC Generator and motoring test facility (the bidder must mention the name of the manufacturer of engine)	01
6.	Cut section of petrol Engine with facility of drawing valve timing diagram	01
7.	Somke meter for free and full load acceleration test of engine( diesel and biodiesel)	01
8.	Exhaust gas calorimeter for Heat balance Test	01
9.	Bomb calorimeter (computerised )	01
10.	Battery Charger with duly sheet encloser preferably finished with powder coated  Main Supply 230V AC ±10%, 50 Hz  Battery voltage 6-72 volt  Battery AH-100-400AH  Charging current to be 3-30 A  With heavy duty cycle copper doubler wound transformer and with full wave rectifier  Output voltage and current should be selectable from selector switch  Ammeter and voltmeter are to be provided for instant monitoring. Input AC output DC fuses are to be provided.  Both the input and output terminals should be of very good quality	01
11.	Portable Exhaust Gas Analyser with interface port and PC  The analyser must be able to analyse six gases at the same time. NO <sub>x</sub> and HC residue measurement facility to be provided  It must be capable of analysing exhaust gas from petrol, diesel, CNG and biodiesel	01

13.	Metal Hydride Hydrogen storage canister (10+ liters)  Multi stack PEMFC with arrangement to change the electrolyte membrane  Ammeters for measuring/monitoring the current in each incoming utility line.  Load line and inverter line under different load/power generation conditions  Multiple Battery Storage System  DC/AC Inverter  Electrical loads for residential and transportation fuel cell applications  Desktop experiment station  Fuel Cell system operation and testing tool kit  Fuel cell Toolkit  Fuel Instructor Guide  Comprehensive Student Text and Lab Guide  With RS-232 interface	01
	Electrolyzer-based Hydrogen/Oxygen Generation system (100ml/hour minimum) With pressure regulation for operating safety Hydrogen storage/Delivery System (1 liter minimum) with volume limiter.	
12.	Engine rpm and engine oil temperature measurement facility may be provided with the analyser.  Other special facility provided with may be clearly mentioned.  Single Cylinder Four Stroke Variable Compression Ratio Multifuel computerised Research Engine Test Rig with eddy-current dynamometer. The engine should have a wide range of compression ratio. It must be capable of using petrol, diesel and wide range of bio diesel fuel without any difficulty. Facility of changing compression ratio without stopping the engine to be provided. It should have a self-starter and battery. All necessary instrument for latest development in measuring parameters and measurement technique and all necessary accessories would be provided. The mechanism to set the engine at desirable compression ratio should be indicated. The dynamometer should be sensitive and of very good quality.  FUEL CELL TECHNOLOGY TRAINER  Fuel cells (2, PEM, 30 +Watt) multiple units for series, parallel configurations. Standard Safety/Monitoring	01

16.	Pensky Martin apparatus	01
17.	Cloud and pour point apparatus	01
18.	Vacuum distillation apparatus	01
19.	Aniline point apparatus	01
20.	Conradson apparatus	01
21.	Dean and Stack apparatus	01
22.	Hot air oven	01