

BHARATHIAR UNIVERSITY : COIMBATORE 641 046

TENDER NOTICE

No. C7 / 20275 /2017

Date: 24.10.2017

Sealed Tenders are invited by the Registrar, Bharathiar University, Coimbatore 641 046 **up to 3.00 P.M on 10.11.2017. (Separate Technical bid and Commercial bid)** from the **reputed ISO Certified Firms** for the supply of Raman Spectrometer for the Dept.of Physics.

<p>TENDER COST : Rs.15,750/- EMD : Rs.90,000/- LAST DATE FOR SUBMISSION OF TENDERS: 10.11.2017 up to 3.00P.M. TECHNICAL BIDS OPENING DATE : 10.11.2017 at 4.00 P.M.</p>
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For Tender document and details of Terms & Conditions and be downloaded from our website www.b-u.ac.in and www.tenders.tn.gov.in between 24.10.2017 to 10.11.2017.

REGISTRAR i/c
BHARATHIAR UNIVERSITY

BHARATHIAR UNIVERSITY –COIMBATORE 641 046

**TENDER CONDITIONS AND INSTRUCTIONS FOR THE SUPPLY OF
RAMAN SPECTROMETER**

1. Sealed Tenders will be received by the **Registrar, Bharathiar University**, up to **3.00 p.m. on 10.11.2017** for the supply of **Raman Spectrometer for the Dept.of Physics under CPEPA Program** as specified in the schedule (Appendix).
2. Tender should be addressed to the Registrar, Bharathiar University and should be only in sealed covers by Registered post/ or in person. Tenders received in ordinary covers without seal will not be considered.
3. The tender cover with **Ref.No. should be superscribed as “Tender for the supply of Raman Spectrometer under CPEPA Program, Dept.of Physics “** The covers received without such superscription will be rejected summarily. All covers containing the tender should be sealed. Separate sealed covers should be used for technical and price bid and please be superscribed on the cover

4 Technical Bids only will be opened on 10.11.2017 at 4.00 p.m. by the Registrar or his/her nominee in the presence of the tenderers or their representatives who may be present at the time of opening. The representatives of the tendering firms who are attending during opening of the tenders should bring a letter of authorization from the tendering firms, which they represent to identify their bonafied.

The price bids will be opened after technical evaluation . Date of opening of Price Bids will be intimated later .

4. Tender shall be accompanied with the **requisite tender fee of Rs.15,750/- and EMD of Rs.90,000/- in the form of DD drawn in one of the Nationalised Banks in the name of “Registrar, Bharathiar University” payable at Coimbatore. Cheques and Bank Guarantees will not be accepted**

Tenders without EMD shall be summarily rejected. EMD will not carry any interest. If tenderers specifically exempted by the Government from the payment of earnest money deposit /tender cost necessary certificate should be enclosed for exemption otherwise it will be liable for rejection.

6. Tenders received late will be returned to the tenderer unopened.
- 7.a) The tender should contain particulars like the name and address of the Tenderers, Net rate including GST , transportation, delivery, installation and commissioning of the above equipments .
 - b) **The rates will be kept firm for 180 days from the date of the opening of the Tenders in acceptance.**
 - c) The rate should be quoted both in words and figures with detailed technical specification , make and model Any scoring or overwriting should be attested by the tenders with full signature. The rate quoted should be firm and should not be subject to any variation clauses.
 - d) University shall not pay increase in duties, taxes and surcharges on account of any revision by the Government at the time of supply and installation.
 - f) Supply shall be as per the specifications mentioned in the Appendix and according at the time of supply .

- g) The tender should quote as per the tender specifications of the equipment only. Option shall be given separately
 - h) The tender form (Annexure I & II) should be completed in all respects. Wherever the information is not relevant to your bid, the space should be appropriately filled with 'NA or NIL'. No space shall be left blank. All the crucial documents should be signed and enclosed otherwise the tenders are likely to be rejected.
 - i) If the given space is insufficient to give required information, additional sheets may be added. Each such additional page shall be numbered consecutively and shall bear our tender reference number and signature of bidder or his/her authorized agent.
9. The tender shall be valid for a period of 180 days from the date of opening. If the tender validity is less than 180 days the tender will be rejected as non-responsive tender. Tenderer should not withdraw his tender after the tenders are opened. In case the tender is withdrawn after it opened, the EMD will be forfeited and black listed.
10. The EMD of the unsuccessful tenders will be refunded immediately after the tenders are disposed of by the competent authority.
11. Successful tenderer shall execute an agreement for the fulfillment of contract in the stamp paper in the model form. The conditions stipulated in the form should be strictly adhered to and violation of any of the conditions will entail termination of the contract without prejudice to be right of the University and to recover any consequential loss from the successful tenderer.
12. Successful tenderer shall remit a **Security deposit 6.5% to the order value**. Security Deposit will be refunded at the end of warranty period subject to the satisfaction of the University. The EMD may be adjusted towards Security deposit payable.
13. If the tenderer failed to act up to the tender or backs out when his tender accepted, security deposit will also be forfeited to department.
- 14.a) The material should be supplied strictly in accordance with the specifications given in the Appendix and should fulfill the successful tests carried out by the Competent Authority of the University. The supply and installation should be made as per the delivery schedule to be sent by the Registrar along with the exact location of the work. The guarantee period shall take effect from the date of installation. Successful tenderer shall be liable to change any defective part during the warranty period. In either case the damaged or defective items will have to be taken back at supplier's cost and risk.
15. The commissioning and installation should be completed within the stipulated period mentioned in the supply order. If the supply is not made within the period, the supply order will be cancelled and the EMD & Security deposit will be forfeited.
16. The warranty period will commence from the date of installation. Tenderer shall provide an undertaking at the time of submitting the tender for replacement of any components during the warranty period.
17. The materials quoted shall conform to ISI standard. The make of the materials shall be mentioned in the tender.
18. Any dispute arising out of this contract shall be settled only at the court having jurisdiction of Coimbatore.
19. The authority competent to accept the tender reserves the right to reject or accept any tender without assigning any reasons thereof.
20. Regarding the acceptance of supply with reference to the specification and quality of materials supplied, the decision of Registrar shall be final.

21. **Price:**

- a) **Imported equipments:** The Price shall be quoted in Currency for CIF Chennai /CIP Chennai / FOR Coimbatore. If the equipment is imported but quoted in INR please quote the basic price inclusive of duties/taxes if applicable as per Govt.rules. If necessary, the required certificate will be provided along with the supply order .
- b)**Indigenous equipments** : Quote the price in INR inclusive of GST and warranty. separate charges for warranty will not be considered at any cost , should mention the valid GST Registration/ Numbers along with the copy of the registration Certificate.

22 The University is registered with DSIR and eligible for exemption towards customs duty as per the Government Notification No: 51/ 96 Customs Dt.23.7.1996.and Central excise duty as per Government Notification No.10/97 Central Excise Dt: 1.3.1997.

23 i)The customs duty after providing duty exemption certificates if applicable as per customs tariff for the said equipments shall be paid by the local supplier /Clearing agent at the time of Customs clearance which will be reimbursed subject to the condition on submission of original customs bills to the University after delivering the equipment to the department concerned. Necessary documents will be provided after receipt of original invoice/Cargo Arrival/Shipment notice from the Principal Supplier.

ii) The Customs clearance , transportation and delivery charges up to the University have to be borne by the firm's account.

24.**PAYMENT :**

a) If the quoted price in currency . The payment will be made by irrevocable Letter of Credit (LC) / advance FDD(only copy) in favor of the Principal Supplier /Currency Wire Transfer to the Principal Supplier only after supply and installation of the equipment .
Advance Currency Wire transfer is not applicable

b)If the quoted price in INR, the payment will be made after supply and installation. No advance payment will be made .

25.Loss or Damage: External damages or shortages that are prima facie the results of rough handling in transit or due to defective packing will be intimated within a fortnight from the date of receipt of the material, Internal defects, damages of any internal parts that cannot ordinary be exhibited on superficial inspection though due to bad handling in transit or defective packing will be intimated within two months from the date of receipt of the stores. In either case the damaged or defective stores will have to be taken back at supplier's cost and risk.

26Guarantee: The Supplier shall undertake to repair free of charge or replace any defective part of the equipment supplied due to defective or faulty design or bad workmanship during a period of three years from the date of commissioning of the equipment.

27 Leaflets and Descriptive Literature: Full descriptive particulars and manuals of the equipment offered should accompany the tender. Information regarding the country of manufacturer or origin of materials in the manufacture of articles should be furnished.

28. Tests: Manufacturer's certificate for the routine tests specified in the BSS of the test issue or as per manufacturer's standard practice should be forwarded in duplicate. The materials will be rejected, if the test results are not satisfactory.

29 **.Penalty Clause:** The delivery should be guaranteed by you under the penalty clause mentioned hereunder:

“Should delivery be delayed by strike, lockouts, fire accidents or any cause whatsoever, beyond the reasonable control of the contractor and whether such delay or impediment occurs before or after the time or extended time for dispatch or completion, a reasonable extension time shall be granted.

If the contractor fails in due performance of this contract, within the time fixed by the contractor the extension thereof, the contractor is liable at discretion of the purchaser to a penalty of 4% per month of the contract value of such portion only of materials as cannot, in consequence of the delay, be used during each month between the appointed or extended time as the case may be and the actual time of acceptance, and such penalty shall be in full satisfaction of the contractor's liability for the delay but shall not in any case exceed 25 % of the contract value of such portion of the materials.

30. Additional Documents required for pre bid qualification

- ISO Certificate
- Number of years standing in the business.
- Average turnover in the last three years.
- Backup facility for the warranty period .
- GST Number along with the copy of the registration Certificate
- PAN Number along with the copy of PAN
- Company Profile.
- Copy of the supply order and installation record at reputed institutions / organizations and sufficient service back-up in Tamil Nadu / South India
- Customer Satisfaction Certificate from any of the institutions/organization is to be attached with the Technical Bid And Price Bid.
- Any other relevant details in support of the items specified.

31. Only bids of prequalified bidders will be considered for technical evaluation. The bidders who are disqualified in the Technical evaluation, the Commercial bid will not be considered.

32. Price bid evaluation will be done for imported inclusive of the customs duty /Customs clearance and other charges. For indigenous inclusive of all GST, warranty and other charges etc.

33. The University will not offer any explanation to those tenderers whose technical bid has not been found acceptable by the technical evaluation committee .

34. Tenders will be considered only from the ISO certified Manufacturers / authorized distributors with sound technical and financial capabilities.

35. The University's general rules for the supply of the materials and works will apply on this purchase also.

36. Training at University Campus at free of charge .

37. Tender shall be submitted with brief description, make and model number, technical specifications etc. along with catalogue/manual.

38. No communications from any tenderer adding to/adhering or explaining any terms of the tender will be considered prior to the submission or after opening of the tenders by the competent authority

39. In case of any modifications in specifications/terms and conditions/ any clarifications to the bid document it will be hosted in our website only and bidders are requested to log on to our website from time to time regularly for any amendment and no separate corrigendum will be issued in this regard.

40. The tender shall be submitted subject to and agreeing the above conditions duly attested and certified.

SIGNATURE OF THE TENDERER

SCHEDULE

RAMAN SPECTROMETER Qty.req.1No.

A fully automated and fully integrated computer controlled confocal Raman spectrometer with the capabilities of recording Raman spectrum, Raman Imaging and Photo-luminescence (PL) measurements on all kind of solids (crystalline and ceramics), glassy, polymer, thin films and liquids of micro and macros samples, should be supplied. The spectrometer should be inclusive of confocal microscope with objectives, detector, Lasers, optics and other necessary accessories for all components of the machine, along with computers & software for data acquisition and data analysis.

- i. **Measurement Range:** The Raman Spectrometer should be able to produce Raman spectra in the range of 50 cm^{-1} to 3500 cm^{-1}
- ii. **Spectral Range:** the spectral range should be 200 nm to 2100 nm without chromatic aberration and with high through put optics covering the entire spectral range.
- iii. **Spectral resolution:** it should be $\leq 0.5 \text{ cm}^{-1}/\text{pixel}$
- iv. **Spatial resolution:** Laser diameter must be smaller than 1 micron or better (lateral) and 2 micron or better (axial) to yield best confocal performance. The system should preferably be optimized for 100x objective lens measurement.
- v. **Laser:** A 532 nm diode laser with power $\geq 100 \text{ mW}$ and a 785 nm diode laser with power $\geq 100 \text{ mW}$ with necessary cooling options for each laser should be supplied. All lasers should have narrow band width and stable frequency output. Laser should be coupled directly (no fiber based coupling). Suitable Polarizer and analyzer for doing the Raman Polarization measurements must be provided.
- vi. **Microscope:** A stable research grade open space confocal microscope (specify the brand) with removable bottom stage must be provided. The microscope should have true confocal ability with a continuous adjustable confocal pinhole from few microns to 1-2 mm and it should be software controlled. A USB color TV camera should be provided for viewing samples under white light and laser illumination and the sample images should be recordable using programmed software. The following objectives to cover the entire spectral range should be supplied and must be Plan-achromatic detachable objective-lenses. The required objective lenses are,
 - a) Normal function: Magnification 5X, 5x (NA = 0.4, WD = 1.3 mm), 10x (NA = 0.25, WD = 10.6 mm), 100x (NA = 0.9, WD = 0.21 mm)
 - b) Long working distance (WD) objectives 50x (NA = 0.50, WD = 10.6 mm)
- vii. **Motorized Sample Stage:** A software controlled Motorized XYZ sample positioning stage capable of autofocus and mapping applications should be provided. The minimum step size for the XYZ travel should be in the range of 10 nm to 100 nm in all XYZ directions. Specify the maximum sample load for the stage.

- viii. **Gratings: Holographic gratings 1800 and 600 gr/mm should be supplied in such a way that they are mounted on a motorized turret driven by software, in order to vary spectral resolution. The gratings should be quickly and easily interchanged without realignment.**
- ix. **Filters:** A filter wheel with 9 or more computer controlled neutral density filters for decreasing laser power on sample (0.01% to 100%) must be provided. Laser line filters should be provided if required for specific excitation laser.
- x. **Detectors:** A thermoelectrically cooled Multichannel CCD detector having 1024x256 pixel or better must be provided and it should cover the spectral range of 200-1000 nm. The chip size should be a minimum of 1 inch for maximum wavelength coverage and fast spectral measurement and Quantum efficiency should be >30% (visible and IR wavelengths). Appropriate certificates must be provided for the efficiencies.
- xi. **Data acquisition and software:** Appropriate interfacing for data transfer preferably with windows based user friendly software and hardware must be provided. Software should be compatible with Windows and should be supplied with computer dongle permitting the control of the instrument, data acquisition, and data manipulation including Raman and Photoluminescence and Macro programming capabilities. The software should have advanced chemo-metric and Macro programming capabilities. A latest windows operating system based computer with latest configuration, along with TFT monitor should be supplied for the operation of Raman spectrometer.
- xii. **Warranty:** should be a minimum of two years from the date of installation. Also quote AMC for three years.
- xiii. **Other requirements:**
- (1) All sample handling tool-kits/consumables should be provided. Wherever, consumables and other items required to handle the system while operating all measurement options, must be quoted separately with enough quantity.
 - (2) Raman system with Ultraviolet laser compatible optics is preferable.
 - (3) Quote temperature controlling options for the sample stage as optional.
 - (4) Future upgradation to couple the supplied Raman spectrometer with Atomic force microscope should be done at our university premises.
 - (5) The complete system should be compatible to 220-230 VAC 50Hz, single phase power supply.
 - (6) The data sheet and specifications for the quoted model should be available in the Principal's website.
 - (7) A list of institutes (with contact details) in India where the similar equipment (with all options in this tender) has been sold or is under operation should be provided.
 - (8) The vendor should have more than five installations in working condition for the quoted model in India.
 - (9) Enclose a minimum of two recent purchase orders for the quoted model
 - (10) Provide a list of publications in high impact journals, with use of the quoted model

(11) The vendor should have more than two certified service personal to undertakethe service of the quoted model. Provide the service personal name and contact details along with appropriate training certificate.

(12) The vendor must provide a certificate from any five end users of the quoted model stating the following points, (i) date of installation, (ii) any issues arisen till date and (iii) the time taken by the vendor to respond and resolve the issue. If it is working fine for the past five years, provide a certificate for the same from the end user.

(13) Provide appropriate certificates wherever required, for example, spectral range, spectral resolution, measurement range, laser output power, detector efficiency, detector range and optical accessories. All the certified values should be demonstrated at our laboratory during the time of installation.

(14) The instrument should be delivered at our university campus at free of cost.

(15) The installation should be done at free of cost and training must be provided at our university premises at free of cost.

SIGNATURE OF THE TENDERER

ANNEXURE – I

TECHNICAL BID

Tender reference No: _____

1. Name and address of Bidder
2. The details of EMD
Amount of EMD Rs. _____, DD No. _____ dt
Bank: _____
3. Due Date of bid :
4. The bid shall remain valid for acceptance for 180 days, from the date of tender opening.
5. Schedule of Requirements:

Sl. No	Brief description of stores			Qty Required	Qty Offered	Delivery	Unit price (Rs)	Total Cost (Rs)
						At Bharathiar University Coimbatore	To be filled in Annex:II	
(i)	GST		%		-	-		
(ii)	Wararanty -							
(ii)	Other charges, if any				-	-		
Grand total cost in Rs.								
Total cost (in words) _____ Rupees.								

Note: (1) All columns must be filled up.

(2) Adhering to the format given above is a pre- requisite for considering your bid.

(3) Please indicate applicability.

I/certify that I/We have completely read and understood and agree to all the terms & conditions given in Part II.

Date : _____ Signature of Bidder : _____

Office Stamp _____ Signing as : _____

:Mobile No. _____ Fax No. _____ Name in block letters : _____
e mail _____

ANNEXURE: II
PRICE BID

Tender reference No: _____

1. Name and address of Bidder
2. The details of EMD
Amount of EMD Rs. _____, DD No. _____ dt
Bank: _____
3. Due Date of bid :
4. The bid shall remain valid for acceptance for 180 days, from the date of tender opening.
5. Rates for items given in Techno-commercial offer at Schedule of requirements are as follows:

SINo	Brief description of stores			QtyOffered	Delivery	Unit price	Total Cost
					At Bharathiar University Coimbatore		
(i)	GST		%	-	-		
(ii)	Other charges, if any			-	-		
Grand total							
Total cost (in words) _____ Rupees.							

- NOTE :**(1) All columns must be filled up.
(2) Adhering to the format given above is a pre- requisite for considering your bid.
(3) Please indicate applicability.

Date : _____ **Signature of Bidder :** _____
Office Stamp _____ **Signing as :** _____
_____ **Name in block letters :** _____
Tele No. _____ **Fax No.** _____ **e mail** _____

LETTER OF ACCEPTANCE

To

**THE REGISTRAR
BHARATHIAR UNIVERSITY
COIMBATORE – 641 046**

I/We agree to furnish required supplies /services as detailed in the Tender schedule or such portions thereof as you may specify in the Acceptance of Tender in accordance with the General Terms and Conditions governing the contract / supply order enclosed hereto duly accepted on receipt of the order for the same.

I /We agree to hold this offer open until_____and shall be bound to supply / omission /erect the equipment and dispatch the same within the specified period.

I/ We agree to supply and commission /erect the equipment and complete the whole of the work and hand over to the purchaser within the period of weeks. From the date of receipt of intimation from you regarding acceptance of this tender / receipt of supply order.

**Signature of the bidder
With office stamp
Name & Address**

**Station
Date:**