**CENTRE FOR NANO AND SOFT MATTER SCIENCES, JALAHALLI, BENGALURU**

No.CeNS/2015-16/Tender/008 14 August 2015

**INVITATION TO TENDER**

The Director, Centre for Nano and Soft Matter Sciences, Bengaluru invites Sealed Tenders for the supply, installation and commissioning of the following Scientific equipment

**MICRO RAMAN SPECTROMETER**

The Tender Form (Annexure I to V) is annexed to this letter. Interested parties may submit tenders for either of the items or for both the items, if they so desire and are eligible to do so. However, a separate tender form shall be submitted for each item, along with relevant Fees and Earnest Money Deposit (EMD). The other terms and conditions may be clearly noted before submission of the tender(s).

The tender form in Annexure II may duly be completed and submitted in a **sealed outer cover**, containing two **separate sealed envelopes**, clearly marked as **“Techno-Commercial Bid (Annexure III)”** and **“Price Bid (Annexure IV)”**, for identification.

The tender shall be addressed to **The Director, Centre for Nano and Soft Matter Sciences, P.B.No. 1329, Prof. U.R.Rao Road, Jalahalli, Bengaluru – 560 013** marked with our tender reference number, due date and due time with stamp. The completed tender bids must reach this office in the combined sealed cover on or before **15.30 Hrs. of 8 SEPTEMBER 2015,** through Speed Post / Courier / Registered Post**.**

Yours faithfully,

**Sd/-**

Administrative Officer

Encl: as above.

**Annexure – I**

**GENERAL INSTRUCTIONS**

1. **Definitions :**
   1. The terms ‘Purchaser’ shall mean the Director, Centre for Nano and Soft Matter Sciences, Bengaluru-560 013.
   2. The term ‘Supplier’ shall mean the person, firm or company with whom or with which the order for the supply of Items/Equipment is placed.
   3. The terms ‘Purchase Order’ shall mean the communication signed on behalf of the Purchaser by an officer duly authorized intimating the acceptance on behalf the Purchaser on the terms and conditions mentioned or referred to in the said communications accepting the tender or offer of the supplier for supply of Items/Equipment.
2. **Delivery of tender:** The offer in response to the tender invitation shall be made in two separate envelopes, the first envelope containing Annexure III along with Compliance Statement. The second envelope shall contain only Annexure IV. The two envelopes shall be superscribed with “**Techno-Commercial Bid**”and “**Price Bid**”respectively**.**  The two envelopes may be put in one outer cover, sealed and addressed to **DIRECTOR, Centre for Nano and Soft Matter Sciences, P.B.No.1329, Prof. U.R.Rao Road, Jalahalli, Bengaluru – 560 013.** The tender reference number, due date and due time should be clearly mentioned on the outer cover.

Each tender should be accompanied by Tender Application Fee of Rs.500/- and Earnest Money Deposit (EMD) equivalent to ***three per cent*** of bid value. The application fee and EMD may be combined in a single Demand Draft drawn in favor of “The Director, Centre for Nano and Soft Matter Sciences”, payable at Bengaluru.

1. **Receipt of tender:** The tender must reach this office by 15.30 hours on the due date. Late and delayed Tenders will be liable to be rejected.
2. **Validity of the offer:** (a) The quotation should be valid for a minimum period of 120 days from the date of opening of tender. If the day up to which the offer is to remain open is declared a closed holiday, the offer shall remain open for acceptance till the next working day.

(b) Quotations qualified by vague and indefinite expressions such as ‘Subject to immediate acceptance’, ‘subject to prior sale’ or any other riders will not be considered.

1. **Opening of tenders**: The firm shall be at liberty to authorize a representative to be present at the opening of the tender at the time and date as specified in the schedule. The name and address of the representative who would be attending the opening of the tender on behalf of the firm should be indicated in the tender or a proper letter of authority be produced before the meeting.
2. **Right of acceptance**: This office does not pledge itself and reserves to itself the right of accepting the whole or any part of tender or portion of the quantity offered and the firm shall supply the same at the rate quoted. In case any MOQ (Minimum Order Quantity or MOU (Minimum Order Unit) is applicable, the same should be mentioned specifically.
3. No correspondence /discussions /visits whatsoever will be entertained on the subject unless specifically called by this office after opening the tenders for technical discussions/ price negotiations. Any violation of this will render the quotations invalid and the firm is liable to be blacklisted.
4. The Purchaser reserves the right to call for techno-commercial/price negotiations. The firm should depute competent representative for such discussion / negotiations whenever called for and he shall be competent to take on the spot decisions.
5. The firm may give any of their commercial terms, if required in their techno-commercial offer only, and price quotation should contain only price.
6. Office stamps of tenderers must be affixed below their signatures.
7. Corrections, if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amounts quoted in words and figures, amount quoted in words shall prevail.
8. The firm shall provide Banking information for payment or any other purpose
9. **Delayed supplies:** In case of delayed supplies, liquidated damages at the rate of 0.5 percent per week or part thereof of delay with a maximum of 5 percent of the value of supply order/contract will be levied.
10. **Extension of delivery time:** As soon as it is apparent that supply dates cannot be adhered to, an application shall be sent by the Supplier to the Purchaser. If failure, on the part of the Supplier to deliver the Items/Equipment in proper time shall have arisen from any cause which the Purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final he may allow such additional time as he considers it to be justified by the circumstances of the case). In case of Letter of Credit the banking charges for the LOC amendment will be on suppliers account.
11. **Guarantee and replacement:** The Supplier shall guarantee that the Items/Equipment supplied shall comply fully with the specifications laid down, for material workmanship and performance. The Guarantee should be as mentioned in the specification.
12. **Acceptance of items/equipment:**
13. Items supplied are subject to inspection and acceptance and the supplier should collect/replace the rejected items at his cost and risk.
14. The Items/Equipment shall be tendered by the Supplier for inspection at such places as may be specified by the purchaser at the Suppliers own risk, expenses and cost.
15. It is expressly agreed that the acceptance of Items/Equipment is subject to final approval by the Purchaser, whose decision shall be final.
16. **Banking charges:** All banking charges applicable outside India will be on suppliers account.
17. Please note that faxed/email quotations shall not be accepted under any circumstances.

**Annexure II**

TENDER FORM

Tender Ref. No.

To

The Director,

Centre for Nano and Soft Matter Sciences

P.B.No. 1329, Prof. U.R.Rao Road

Jalahalli

Bengaluru-560 013

I/We agree to furnish required supplies/services as detailed in the Techno-Commercial Bid or such portions thereof as you may specify in the Acceptance of Tender/Supply Order at the prices given in the Price Bid in accordance with the General Terms and Conditions governing the contract/supply order enclosed hereto duly accepted on receipt of order for the same.

I/We agree to hold this offer open until \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and shall be bound to supply/commission/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 an intimation from you regarding acceptance of this tender/receipt of supply order.

I/We have understood the specifications and have drawn up the Techno-Commercial Bid in accordance with the requirements and have accordingly submitted the Price Bid.

I/We understand that the Director, CNSMS has the powers to reject any or all offers without assigning any reasons. It is also understood that the offers may be accepted either in whole or in part.

The details of remittance of Tender Application Fee and EMD are as under:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Details** | | **Amount**  **Rs.** | **Demand Draft No. & Date** | **Bank** | **Branch** |
| 1. Tender Application Fee | | 500.00 |  |  |  |
| 1. Earnest Money Deposit:   (Equivalent to ***three per cent*** of bid value). |  |

Date: Signature and Seal of Supplier

Name & Address

**Annexure III**

**TECHNO-COMMERCIAL BID**

1. Tender Ref. No. : CeNS/2015-16/Tender/008 dated 14.08.2015
2. Name of Tenderer:

1. Due date & due time : 8 SEPTEMBER 2015 @ 15.30 hours
2. Opening date & time : 9 SEPTEMBER 2015 @ 15.30 hours
3. The tender shall remain valid for acceptance for 120 days, from the date of tender opening.
4. Amount of EMD – Rs.\_\_\_\_\_\_\_\_\_\_\_ Demand Draft No. dtd.
5. Amount of Tender fee – Rs.\_\_\_\_\_\_\_ Bank Branch
6. Schedule of requirements:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** | **Description** | **Quantity** | **Destination** | **Technical Specifications** |
|  |  |  | **CIF Bengaluru, INDIA** |  |

**CONDITIONS FOR TECHNO-COMMERCIAL BID**

**TECHNICAL**

1. a) All available Technical Literature(s), Catalogue(s) and other data in support of the specifications and details of the item(s) should be furnished along with the offer.

b) Approximate net and gross weight of the items offered shall be indicated in the offer. If dimensional details are available the same should indicated in the offer.

c) Insurance against all the transit and handling risks on a ‘WAREHOUSE to WAREHOUSE’ basis for a sum equivalent to 110% of C & F Cost shall be separately indicated.

d) SPECIFICATIONS:

Items/Equipment offered should strictly conform to our specifications. Deviation, if any should be clearly indicated by the Supplier in their quotation. The Supplier should also indicate the Make/type No. of the stores offered and provide catalogue(s), Technical literature(s) and sample(s), wherever necessary along with the quotations. Test certificates wherever necessary should be forwarded along with the supplies. Whenever options are called for in our specifications, the Supplier should address all such options. Wherever specifically mentioned by us the Supplier could suggest changes to specifications with appropriate response for the same.

1. Any firm representing the actual supplier should submit authorized dealership certificate in original from the principal company.
2. Full details of supplies of the same equipment(s) made to users in India, if any shall be enclosed.
3. Full details of facility of service after sales available in India for the period covered by warranty and thereafter shall be furnished.
4. A complete set of instruction and operation manual should be supplied at the time of installation.
5. Final performance should be guaranteed at the site.
6. Compliance Statement for the point-wise specifications in the format (Annexure-V) should **mandatorily** be enclosed.
7. The Centre reserves the right to make its own assessment on any of the technical details provided and decide on the suitability of the equipment offered.

**COMMERCIAL**

1. **Terms of payment:** The normal payment terms are: 90% through Letter of Credit with usance period of 30 days on proof of arrival of consignment. The balance 10% payment will be released after expiry of the applicable Warranty period.

The balance 10% may also be considered for payment soon after delivery, if, a Performance Bank Guarantee for an equivalent amount (10% of the Invoice value), having validity up to three months from the date of expiry of the applicable Warranty period, is submitted soon after installation and commissioning the equipment.

1. **Mode of payment:** Shall be through Letter of Credit, through our Bankers. Advance payments will **not** be considered. Complete details such as the bank account number/IFSC/SWIFT/Bank Address, etc. shall be provided along with the price bid.
2. Duties, Taxes where legally leviable and intended to be claimed should be distinctly shown in the Tender.
3. **Duty Exemption:** Please note that the Purchaser is eligible for concessional Customs Duty, under the Govt. of India Notification **No. 11/280/1993-TU-V dated 11 August 2014.**
4. **Delivery period:** Delivery is the essence of the contract. The supplier should adhere to delivery schedule as indicated in the Purchase order, failing which Clause 7 of Annexure-I shall be enforced.
5. **Delivery term**s: Options should be indicated in the Price-Bid for **CIF (Bengaluru Airport)** basis delivery with relevant charges.
6. Mode of dispatch : Air /Sea
7. In case Items/Equipment offered requires maintenance after the expiry of the warranty, the approximate charges for comprehensive as well as on-call basis maintenance should be indicated. Details of availability of local support should also be given.
8. **Packing, forwarding and insurance:** The supplier will be responsible for the stores being sufficiently and properly packed for transport by sea or air, to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packing shall be done by and at the expenses of the supplier. The Purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Supplier and the Purchaser shall pay only for such Items/Equipment as are actually received in good condition, in accordance with contract.
9. **Test certificate:** Wherever required, Test Certificate should be sent along with the relevant dispatch documents.
10. Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.

**Annexure – IV**

**PRICE BID**

1. Tender Ref. No. : CeNS/2015-16/Tender/008 dated 14.08.2015
2. Name of tenderer :

1. Due date & due time : 8 SEPTEMBER 2015 @ 15.30 hours
2. Opening date & time : 9 SEPTEMBER 2015 @ 15.30 hours
3. The tender shall remain valid for acceptance for 120 days, from the date of tender opening.
4. Rates for items given in Techno-commercial offer at Schedule of Requirements are as follows. (Adhering to the Format given below is a pre-requisite for considering the quotations):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl.No.** | **Description** | **Product / Catalogue No.** | **Qty.** | **Unit Price** | **Total Cost** |
|  | Brief description, basic price, without duties / taxes if any, of complete Items/Equipment with all accessories |  |  |  |  |
|  | Duties / Taxes |  |  |  |  |
|  | Packing & Forwarding |  |  |  |  |
|  | Freight & Insurance |  |  |  |  |
|  | Handling charges, if any |  |  |  |  |
|  | Any other (please specify) |  |  |  |  |
|  | Total cost (in figures & words)  **CIF BENGALURU** |  |  |  |  |

**OTHER CONDITIONS FOR PRICE BID**

1. The price should be indicated on unit basis only. No unilateral revision in price will be admissible.
2. In case any of the subheads are included in the total cost, the same should be specified. Any exemption of duties / taxes / any other should be indicated. The Centre is eligible for concessional Customs Duty, under the Govt. of India Notification No. 11/280/1993-TU-V dated 11 August 2014.
3. Any optional item indicated in techno-commercial bids must be priced separately.
4. Currency in which the price is quoted must clearly be mentioned.

**Annexure – V**

**TECHNICAL SPECIFICATIONS FOR A**

**MICRO RAMAN SPECTROMETER**

**[Pl see Point No.7 of conditions for Techno-Commercial bids (Technical) at Pg. 8]**

**Description of the item**: Micro-Raman spectrometer will be used for the characterization and Raman imaging of carbon based materials such as graphene, carbon nanotubes and their composites and also for surface enhanced scattering studies of molecules using nanoparticle substrates. The equipment should be a highly efficient, fully automated Raman spectrometer coupled to a confocal microscope and 532 nm Laser. The detailed specifications are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| Sl.No. | **Description** | | **Requirements** |
|  | 1.1  1.2  1.3  1.4  1.5 | **Spectrometer**:  Focal Length  Spectral Range    Gratings  Spectral Resolution  Interface | ≥ 20 cm; highly efficient, high throughput and fully automated Raman spectrometer coupled to 532 nm laser and confocal microscope.  100-4000 cm-1; appropriate edge filter for Rayleigh rejection to be provided.  600 and 2400 gr/mm gratings provided on a motorized turret with automated selection of gratings without the need for realignment.  <1.5 cm-1 for 532 nm with 2400 gr/mm grating or better.  USB |
|  | 2.1  2.2  2.3 | **Laser:**  Wavelength and power  Filter wheel  Upgradation | Air cooled solid state laser providing excitation wavelength 532 nm /Green line with ≥20 mW power  Motorized computer controlled neutral density filters for variable laser power from 0.1 to 100 % (min. 6 levels)  The optics should support other wavelengths 633 and 785 nm by coupling for future upgradation |
|  | 3.1  3.2  3.3  3.4  3.5 | **Confocal Microscope:**  Confocality  Light source  Objectives  Resolution  Stage | Upright research grade microscope with motorized computer controlled adjustable confocal pinhole  White light; reflected light illumination  20X, 50X (LWD =~10 mm) and 100 X (dry, optional)  Spatial resolution better than 2 μ and laser spot size= ~1 μ for 100X objective  Motorized XY (mapping) stage; X= 70 mm or more, Y= 50 mm or more; XY step size 100 nm or better, resolution 100 nm or better. Automated positioning of samples for acquisition of Raman maps. Joy stick positioning and external controller to be included.  Variable Z for depth profiling; Min. Z step size 0.1 μ.  With fast data transfer to reduce the time of mapping. |
|  | 4.1  4.2  4.3  4.4 | **Detector:**  CCD  Pixels  Wavelength Range  Efficiency | Peltier cooled colour CCD (< -50°C); multichannel detector with suitable adaptors and electronic interface.  1024 ×256 or better  200-1000 nm  Peak quantum efficiency > 40% |
|  |  | Calibration | A standard Silicon calibration source should be provided |
|  |  | Support computer | Branded desktop PC with following configurations: 3.5 GHz or Intel third or fourth generation core i7 processor, 4GB RAM and expandable, 500 GB hard disk, original Intel motherboard, DVD Rewritable drive, USB ports and network ports, LCD monitor display, Microsoft Windows 7 operating system and MS Office. |
|  |  | Software | Spectroscopic acquisition and data analysis software under windows environment, including spectrometer controls, multichannel data acquisition programs, image capture software for white light image capture and display.  Ability to carry out Raman mapping and related analysis.  Additional Software License for 2 users for Offline Analysis. |
|  |  | Power requirement | As per Indian electrical standards (230V AC, 50 Hz) |
|  |  | Manuals | English manuals for operation of the entire equipment including operation/instruction manual, trouble shooting and operation of accessories. |
|  |  | Maintenance  and service | The supplier should guarantee uninterrupted supply of spares and accessories for a period of 10 years after warranty.  The manufacturer should certify the authorization of the Indian agent and also competence of the Indian agent in respect of post-sales service of the main equipment, third party equipments & its accessories.  The details of the availability of trained service engineers in India must be furnished. |
|  |  | Software Upgradation | The supplier should supply any software for the whole equipment whenever they are upgraded at free of cost. |
|  |  | Warranty | Comprehensive warranty for 3 years from the date of installation. Terms should include spares and labour free of cost. |
|  |  | Installation and Commissioning | Assembly and commissioning should be carried out by the supplier at the site. It is the responsibility of the supplier to integrate the entire system and ensure the functionality.  Training of usage of the equipment and various accessories should be provided by the competent personnel. |
|  |  | Demonstration and  References | The company should have at least 15 installations of Raman microscopes in India. A list of users of the quoted model installed in India should be provided with contact addresses.  During evaluation of the technical bid, the vendor may arrange a demonstration with the quoted model at any site bearing the cost including the travel and other expenses of our representatives.  The demonstration may preferably be done within two weeks. Necessary clearance/ paper work have to be done by the vendor. |
|  |  | Compliance Statement | Supplier should provide **technical compliance including explanations** **without fail** against each point given in the technical specifications for consideration of the offer. |