

जम्मू केंद्रीय विश्वविद्यालय
Central University of Jammu

Rahya-Suchani (Bagla), District Samba-181143, Jammu (J&K)
Ph: 01923-249 657 & Website: www.cujammu.ac.in

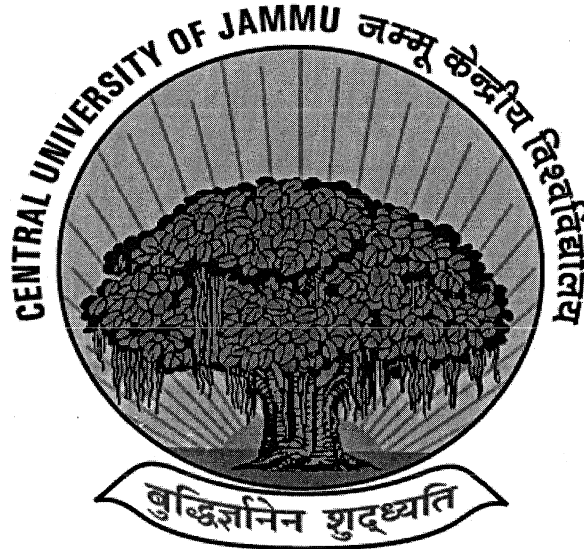
No: CUJ//Proc/Equip-Purchase/2017/05

Date: 04-08-2017

Cost of tender documents: Rs. 1,000/-

Issued to: M/s.

**TENDER DOCUMENTS CUM RATE Contract And Registration Of Firms To Supply
And Install Equipments / Instruments (Heating-Magnetic Stirrer, Combined
Electroluminescence And Photoluminescence System, Double Beam Uv-Visible
Spectrophotometer, Rotary Evaporator & Uv Vis Spectrophotometer) For The Central
Univeristy Of Jammu**



Last date and time to submit the bids : 28.08.2017 by 03.00 p.m.

Date and time of opening of bids at University : 28.08.2017 by 03.30 p.m.
Campus, Rahya-Suchani (Bagla), District
Samba-181143, Jammu (J&K), Tel: 01923 -
249657 ext 206

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Instructions to the bidders

Preface: The Central University of Jammu is presently functioning from two campuses, Administrative Block at Rahya-Suchani (Bagla), District Samba, Jammu and Temporary Academic Block & Hostels at Sainik Colony, Jammu. The University intends to purchase equipments / instruments viz **Heating-Magnetic Stirrer, Combined Electroluminescence and Photoluminescence System, Double Beam UV-Visible Spectrophotometer, Rotary Evaporator & UV Vis Spectrophotometer** from OEM / authorized dealers for the University, likely to be installed at both the campuses.

- 1. Submission of tender:** The sealed tenders are invited for supply and installation of equipments for the CUJ under **two bid system** viz. **Technical bid:** consisting of all technical details along with commercial terms and conditions [*filled in Annexure-I duly signed and stamp, EMD, relevant technical documents & D.D. of Rs.1,000/- (if downloaded tender form is used)*] and **Financial bid** [*indicating item wise price for the items mentioned in the technical bid (Annexure-II)*], in two separate sealed envelopes and should be super scribed as technical and financial bids accordingly. Both the sealed envelopes should be kept in a third envelope on which it should be super scribed **‘Tender for scientific equipments for CUJ’**.
- 2. Quotation of equipments / instruments:** The Bidder may quote for all equipments/ instruments or part of it as mentioned at Annexure-I and should agree to accept the part supply order as per the criteria of lowest quoted bid for each item. Unit prices are to be quoted both in figures and in words. In case of a discrepancy, that quoted in words / least will be taken as valid.
- 3. Opening of bids:** Initially the technical bids will be opened and scrutinized. The firm, who meets the basic requirement as per documents furnished, may be invited for full fledged display / demonstration / to present the samples before opening of financial bid. The University will not bear any cost for presentation of samples. The committee of the University will inspect the samples, may visit the show room / items supplied at other organizations to ascertain the quality. The University may shortlist three to four best quality firms. The financial bid will be opened for those firms who qualify technically and whose sample(s) has been agreed to the satisfaction level of the University. The decision of the University will be final in this regard.
- 4. Selection of firm:** The firm will be selected amongst the shortlisted firm only and the equipments / instruments will be considered on lowest quoted basis item wise. Further, if the committee found that the quality of lowest quoted firm is not satisfactory, the committee may recommend and consider next lowest quoted firm. The decision of the committee will be final in this regard. The short listed tender along with the documents will be submitted to the competent authority and upon approval; the successful bidders will be issued purchase order.
- 5. Alteration in the bid:** The bidder will not be permitted to alter or modify their bids after receipt by the University; however, the firm can withdraw the bid before the closing last date and time of the tender.
- 6. Availability and submission of tender form:** The tender documents can be obtained in person from Procurement Branch, Rahya-Suchani (Bagla), District Samba-181143, Jammu (J&K) (Tel: 01923-249657) on payment of **Rs. 1,000/-** through DD favouring **“Finance Officer, Central University of Jammu”** payable at Jammu during working hours (10:00 to 17:00 hrs). The tender form can be downloaded from University website (www.cujammu.ac.in) and must be submitted along with the cost of tender form of Rs. 1,000/- and EMD. The downloaded tender form without cost of tender form will not be accepted. Last date to submit the tender is **28.08.2017 by 3:00 p.m.** The filled in tender form can be dropped in tender box at the above

address or can be sent through post. The bids will be opened on the same day in presence of the bidders at **3:30 p.m.** or any other date convenient to the University authorities, which shall be intimated separately. Hence, the firm should write their phone numbers and email ID on outside the sealed envelope to pass the information, if required.

7. **Registration:** The firm should be registered with the competent authority to manufacture and supply of equipments / instruments, GST no, Tax clearance certificate and also furnish self attested copies of the following documents:

- (a) Certificate of registration with competent authorities to manufacture and supply of equipments / instruments
- (b) Valid registration with sale tax and service tax authority, if applicable.
- (c) TIN / PAN/GST No
- (d) Valid quality certificate from competent authority (i.e. ISO, ISI etc).
- (e) Tax clearance certificate for the period ending 31.03.2017
- (f) Experience certificate(s)/ Purchase Orders from Govt Organisations & User List
- (g) Annual turnover with CA audited balance sheet for last three financial years (2014-15, 2015-16 & 2016-17) the Firm should not have incurred losses in any of the last three financial years

8. All the columns in financial bid are to be filled in words and figures. The variation in words and figures, if any, the lowest shall be taken into account.

9. In case the successful bidder declines the offer of contract, for whatsoever reason(s), his EMD will be forfeited.

10. The University reserves the right to reject all or any tender in whole, or in part, without assigning any reason thereof.

11. **Cost:** The rates quoted should be inclusive of all taxes, levies, freight, insurance, transportation, installation including accessories etc at the destination. Rates and make of the equipments are to be quoted in the financial bid as per tender document (Annexure-II), else it may not be considered. All the above stated elements of taxes and others are required to be shown separately and distinctly. The University will provide **Custom duty** and **Central Excise duty exemption certificate** in terms of Government notification No 51/96-Customs dated 23-07-1996 and 10/97-Central Excise dated 1-03-1997 respectively. Further, the University will also provide Certificate under SRO 129 of 2012, if applicable, for exemption of **State Entry tax** on scientific instruments.

12. **Office:** The firm should have its office / authorized dealer / workshop / representative within Municipal limit of Jammu / Samba to provide service after sale and to furnish the addresses of service centre with telephone number along with technical bid. The firm not having authorized office / service centre at Jammu will be required to arrange the service / repair after sale and furnish the certificate to this effect.

13. **Supply:** The firm selected will be required to supply the equipments within the six weeks from the date of issue of purchase order.

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14. **Validity of quotation:** All entries in the tender form should be legible and filled clearly. Any overwriting or cutting which is unavoidable shall be signed by the authorized signatory. The bid shall be valid for 90 (ninety) days from the date of opening.

15. Taxes deduction at source as per provision will be made by the University.

Terms and conditions

16. In case the firm fails to supply the desired specification of equipments as per terms and conditions, the University reserves the right to place the order to the next higher bidder or outside agency and the difference of price will be recovered from the defaulter agency who has been awarded the initial order and this will be binding on the bidder.

17. The University does not pledge himself to accept the lowest quoted or any tender and reserve the right to accept the whole or any part of the tender or portion of the quantity offered and bidders shall supply the same / execute the order at the rate quoted by them.

18. **Rejection of tender:** The conditional tender, incomplete in any form, unfilled / unsigned bids, without required documents, EMD and cost of tender form (if downloaded form is used) shall not be accepted and on such bids any query / intimation will not be entertained. The tender documents are not transferable.

19. The committee may consider any bid, if feels that inadvertently certain required documents are not enclosed by the firm and the firm promises that the required documents obtained before the closing date of the tender will be furnished within stipulated time. The decision of the committee will be final in this regard.

20. **Specification:** The desired specifications and allied technical details are placed at Annexure-I, if required the same may be amended / up graded at the time of placing purchase order without increase in the quoted price. These are basic specifications; the firm may quote the same or higher specification as per enclosed annexure format only, without changing the specification and serial number. The committee may amend the specification or add higher specifications of equipment and their decision will be final in this regard.

21. **Bid security / EMD:** The filled in tender form without requisite security bid / EMD and cost of tender form Rs. 1,000/- (*if the downloaded tender form is used*) will not be considered. ***Both the DD (cost of Tender Form)/FDR (for EMDs) are to be drawn separately*** favouring "***Finance Officer, Central University of Jammu***" payable at Jammu. The EMD of bidders will be returned without interest after finalization of the tender. EMD of Successful Bidder(s) will be returned after receipt of Performance Security. 10% of the cost of Purchase order will be Performance Security and will be either submitted by the L-1 in the form of Bank Guarantee or deducted by the University from the payment of Bill, in case bank guarantee is not supplied. The security bid / EMD amount is as follows:

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| Item No | EQUIPMENT / INSTRUMENTS | QTY | EMD/ BID SECURITY |
|---------|---|-----|-------------------|
| 1. | Double Beam UV Vis Spectrophotometer | 1 | Rs 30,000/- |
| 2. | UV-Visible Spectrophotometer | 1 | Rs 30,000 |
| 3. | Combined Electroluminescence and Photoluminescence System | 1 | Rs 30,000 |
| 4. | Rotary Evaporator | 1 | Rs 10,000 |
| 5. | Heating-Magnetic Stirrer | 3 | Rs 2,000 |

Note: EMD for each equipment mentioned above is to be paid collectively (in case a bidder desires to bid for all items) or separately (in case a bidder desires to bid for few or any of the items).

22. **Company profile:** The bidders must submit their company profile and must mention their make/model of the equipments which are offered to be supplied. A list of organizations / agencies to which equipments have been supplied may be furnished along with copies of supply order, with the technical bid.

23. **Experience:** Bidder should be original manufacturer / authorized dealer and should have minimum three years of experience in supply of similar equipments to Govt. / semi Govt. / PSU / reputed organization. A certified copy of the same should be attached with the technical bid.

24. **Warranty:** All the equipments should be with onsite comprehensive warranty for minimum period of two years (or as per OEM warranty period, whichever is later) after satisfactory installation and agreed by the University. The firm should repair / replace the faulty items free of cost during the warranty period.

25. **Payment terms:** No advance payment will be considered. The payment will be release in Indian rupees in the following orders:

- (i) **90% payment of purchase order:** After 100% supply & installation of equipments, subject to certification by the University.
- (ii) **10% payment of purchase order / security deposit:** After availing the warranty period plus one month or on receipt of Bank Guarantee of any nationalized bank of equal amount for a period of warranty plus one month.
- (iii) The purchase order may be placed in phase manner and the payment may be considered phase wise.

26. **Quantity:** The quantity mentioned in the tender document can increase or decrease without changing the quoted price at the discretion of the University and the decision of the University shall be final in all respect. This is a tender cum rate contract and registration of suppliers initially for a period of one year and the item offered in the tender can be re-ordered at the same rate, terms & conditions within a period of twelve (12) months extendable by next year mutually agreed by both the parties.

27. **Management services:** The firm would be required to provide the management / consultation services etc. in respect of the equipments to establish any labs / hall, free of cost as and when required. The firm would provide consultancy to CUJ on Products & technologies that

would provide more efficiency in working. The firm should also share best practices adopted in the industry free of cost.

28. **Rights of the University:** The University reserves all the rights to reject or accept any tender without assigning any reason or cancel or withdraw the tender notice in part or full. The University reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time, without thereby incurring any liability to the affected bidder or bidders of the ground for such action.

29. Late submission of tenders shall not be accepted. If the tenders are sent by post / courier, it should be ensured that cover should be intact at the time of reaching destination without any damage or loss. The University is not responsible for any delay on account of postal / courier services.

30. **Acceptance of terms and conditions:** The bidder shall sign and stamp each page of this tender document and all other enclosures appended to it as a token of having read and understood the terms and conditions contained therein and submit the same along with the bid. The bidder would fill up the information in the Annexure enclosed at the end of this document at Chapter-III in clear and legible terms. Annexure shall also have to be signed and stamped by the bidder or its authorized signatory.

31. **Termination of contract:** If supply of equipments / instruments is not found satisfactory, the purchase order will be cancelled by the University at any stage. The University reserves the right to decrease or increase the quantity at the time of placing the work order; the firm will undertake the same at the quoted rates.

32. The firm should attend all the calls in respects of the fault, efforts should be made to rectify the major fault within 48 hours. The firm is to provide one single point of contact for effective communication to book the fault for users to seek timely support.

33. The University may procure certain equipments offered under DGS&D/GeM rate contract/rate(s), the firm may quote for both DGS&D and Non DGS&D rates, if available. The University will procure the equipments on lowest quoted (L-1) basis from the shortlisted firms on item wise and the firm can quote for any items or all the items, the University decision will be final in this regard. If the University procures certain items under DGS&D/GeM rate contract, the firm will be required to set / configure the supplied equipments technically on other equipments.

34. **Penalty clause:** The supply and installation of equipments / instruments has to be completed within stipulated time period, in case of delay and the University is not satisfied with the stated reason, the University reserves the right to impose the penalty equivalent to 0.5% per week of the value of undelivered goods or unperformed services limited to a maximum of 10% value of the purchase order / left over cost. Once the maximum is reached, the University may consider termination of the contract / order without any notice and further serious action may be initiated.

35. **Settlement of dispute:** In case of any dispute, University Headquarter (Samba) will be the jurisdiction and the Registrar, Central University of Jammu, shall decide the issue and his decision will be final and shall be the binding on both the parties.

36. In case of any disagreement or dispute between the first party (i.e. Central University of Jammu) and the second party (i.e. agency) arising out of or due to the terms and conditions of contact agreement, the Central University of Jammu shall have the discretion for settlement of

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such disputes by appointing a sole arbitrator and the award so made by the arbitrator shall be final and binding on both the parties. Jurisdiction shall be Jammu courts only, for any dispute.

 4/8/17

Assistant Registrar
(Procurement)

Central University of Jammu,

Place: Samba (J&K)

Date: 04-08-2017

Encl: i) Annexure-I : Technical bid (8 pages)
ii) Annexure-II : Financial bid (8 pages)

TECHNICAL BID

(To be filled by the firm and to be submitted to CUJ in Technical Bid)

| Sl. No. | Particulars of the Company/Firm | Details (if yes, furnish certificate No.) | Appendix No. (attached in bid) |
|---------|--|---|--------------------------------|
| 1 | Name of the OEM/Firm / Agency: | M/s. | |
| 2 | Status of the Firm / Agency: (Proprietorship / Partnership / Joint Stock Co. etc) | | |
| 3 | Name of the Proprietor / Partner / Director | | |
| 4 | Address: | -- | -- |
| | a) Head Office | | |
| | b) Office at Jammu: | | |
| 5 | Phone, Mobile No., E-mail & website | | |
| 6 | Documentary proofs of: | -- | -- |
| | a) Valid Registration with competent authority, certificate No. | Yes / No | |
| | b) Proof of incorporation | Yes / No | |
| | c) TIN / PAN No./GST No | Yes / No | |
| | d) Tax Clearance Certificate | Yes / No | |
| | e) Valid Registration no. | Yes / No | |
| | f) Registration with Sale Tax and Service tax no | Yes / No | |
| | g) Number of Years Experience | | |
| | h) Experience certificate, where the agency has supplied, installed, tested and commissioned similar Scientific/Lab equipments to other govt /reputed organizations. | Yes / No | |
| 7 | Earnest Money deposit details: | -- | -- |
| | a) Amount | Rs. | |
| | b) Name of the drawer and issuing bank | | |
| | c) No. and date of bank draft/FDR/etc | | |
| 9 | Details of demand draft/ FDR etc & | Rs. | |
| 10 | Any other Information | | |

TECHNICAL BID

Chapter-III: Technical bid (Items with specification): To be filled by the firm and to submit to CUJ along with the technical bid.

ITEM NO 1

| High Resolution PC based UV-VIS SPECTROPHOTOMETER with following guaranteed specifications to be demonstrated at the time of installation: QUANTITY: 01 | | Compliance with specifications Yes/No Please specify |
|--|--|---|
| Photometric System | Double beam optics | |
| Wavelength Range | 190 to 900 nm or better | |
| Wavelength Accuracy | +/- 0.15 nm or better | |
| Wavelength Repeatability | +/- 0.06 nm or better | |
| Photometric range | Up to 5/6 Abs or better, Transmittance, Reflectance or better | |
| Spectral Bandwidth | Variable from 0.2 to 5 nm or better | |
| Resolution | 0.17 nm or better | |
| Wavelength Scan Speed | Up to 3000 nm/min or better | |
| Noise level | 0.00005 Abs RMS (500nm) or better | |
| Stray light | 0.005% at 220 nm, 340 nm & 370 nm or lesser | |
| Monochromator | Blazed Holographic grating Litrow/Czerny-Turner mounting | |
| Detector | Photomultiplier | |
| Light source | Tungsten and Deuterium lamp with automatic switching | |
| Baseline stability | 0.0003 Abs/h or lesser | |
| Baseline flatness | +/- 0.0008 Abs or lesser | |
| Quartz Cuvette | 3 ml capacity 10mm path length (02 pair) | |
| Automatic Linear Cell Changer | Atleast Six Sample and one reference cell holder | |
| Optional (System should be upgradable) | Integrating sphere with inner diameter of 60mm or better for diffuse reflectance of direct powder/turbid sample analysis. Wavelength range upto 850nm or more with built in PMT detector. | |
| Software | <i>Original licensed Windows 7/8 based Operating software with GLP/GMP compliant and built in features such as real time display of concentration, Time scan, Photometric mode, Single/multi-wavelength, capability for event recording (e.g. addition of reagent) and calculation of Enzyme</i> | |

| | | |
|--|--|--|
| | <i>Kinetics, DNA/protein quantification etc. Validation Software Should also be supplied along with the instrument to check the performance parameters like Stray Light, Resolution, Noise Level, Drift, Baseline flatness etc. to support GLP/GMP compliant</i> | |
| PC, Printer | Branded PC I3, 2GB RAM, 500GB HDD with Laserjet Printer, Online UPS with 30 minutes back up (please quote make and model) | |
| Installation and Training | Installation and Training to be provided at installation site | |
| Warranty | Two Years | |
| Make/Model.... Please specify | | |
| Agreed by firm (Yes/ No), If yes, Sl. No. of technical broacher/details enclosed) | | |

ITEM NO 2

| <p align="center">UV Vis SPECTROPHOTOMETER</p> <p align="center">Specifications</p> | <p>Qty Reqd (Approx)</p> | <p>Make & Model Agreed by firm (Yes/No), If yes, Sl. No. of technical brocher/de tails enclosed)</p> | <p>Compliance with specifications Yes/No Please specify</p> |
|--|---------------------------------|---|--|
| <p>PC controlled, scanning type (max range 1900 nm/min or better) for UV Vis spectrometer with below specifications: Optics: True Double beam Source: D2 and Tungsten lamp Detector: High sensitivity & High Resolution PMT Measurable range: 190 -900 nm or better Spectral Bandwidth: 0.30-4.00 nm with 0.1/0.01 nm steps, motor driven or variable 0.1, 0.2, 0.5, 1,2, 4/5nm Spectral Resolution: ≤ 0.20 nm or better Stay Light: ≤ 0.0014 % T at 370 nm (50mg/L, NaNO₃) Photometric Linear Range: 4 Abs or better Wavelength Accuracy: ± 0.002 nm or better Wavelength Reproducibility: ± 0.009nm (Peak separation) or better Photometric Accuracy: ± 0.00016 Abs or better Baseline Flatness: ± 0.0002 Abs RMS Photometric stability (2 hour warm up, 2nm SBW, 1s AT or better): ≤ 0.0003 Abs @ 0 Abs or better Photometric noise (500nm, 2nm SBW, 1s): ≤ 0.00003 Abs @ 0 Abs or better</p> <p>Accessories: Peltier accessories for sample and reference temperature controller (0-100° C) and Temperature probe, Quartz cuvettes (3.5ml - 10ml path length (02 pair) or better & PC. Diffuse reflectance accessories 60 mm or more with powder cell holder, transmission holder, 10mm cuvettes holder, OEM supplied PC or i7 PC configuration, Laser printer, 3 KVA online UPS with minimum 30 min backup or better</p> <p>Warranty: System warranty of 3 years including UPS batteries Suitable: PC, Laser printer, 3 KVA online UPS with minimum 30 min backup</p> | <p align="center">01</p> | | |

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ITEM NO 3

| <p align="center">Combined Electroluminescence and Photoluminescence System</p> <p>A combined electroluminescence and photoluminescence system has to be assembled with the following components. The system must be assembled such that electroluminescence measurement can be carried out for the semiconductor films deposited on silicon substrate as well as semiconductor heterostructure films deposited on ITO/FTO coated glass substrate.</p> | | Qty | Make & Model Agreed by firm (Yes/ No), If yes, Sl. No. of technical broacher/detail s enclosed) | Compliance with specifications Yes/No Please specify |
|---|--|--|---|--|
| 1 | <p>HC1-QE grating (starting at 250 nm) OFLV-QE-350 order sorting filter 200 μm entrance slit, 25 μm entrance slit</p> | <p>Engineering Specifications QE Pro-FL Dimensions: (L x W x H) mm and inches 182 mm (7.17 in.) x 110 mm (4.33 in.) x 47 mm (1.85 in.) Weight: kg and lb Spectrometer: 1.15 kg (2.6 lbs.); power supply: 0.45 kg (1 lb.) Detector Type: Hamamatsu scientific grade, back-thinned, TE Cooled, 1044 x 64 element CCD array Detector Range: 185 – 1100 nm Detector Quantum efficiency: 90% (peak) Spectroscopic Wavelength range: 350 – 1100 nm Spectroscopic Integration time: 8 ms to 60 minutes Spectroscopic Signal-to-noise ratio: System: 1000:1 (single acquisition) Grating: 14 gratings available (H1–H14), HC1 grating Slit: 5, 10, 25, 50, 100 or 200 μm wide slits (or SMA/FC bulkhead with no slit) Optical resolution: 0.14 – 7.7 nm (Depends on grating and size of entrance aperture Diode Laser (5mW) for calibration / excitation 405nm, 532nm, 635nm, 650nm, 780 nm, and 840nm, Power supply for laser</p> | 1 | |
| 2 | Replacable SLIT 10um | | 1 | |
| 3 | Replacable SLIT 100um | | 1 | |
| 4 | Replacable SLIT 200um | | 1 | |
| 5 | UV/VIS Collimating Lens, 200-2000 nm | | 1 | |
| 6 | 1000 um Premium Fiber, UV/VIS, 1 m | | 1 | |
| 7 | 400 um Premium Fiber, UV/VIS, 1 m | | 1 | |
| 8 | <p>HL-3 plus Vis-NIR Calibrated Light Source for Integrating Spheres</p> | <p>Engineering Specifications HL-3plus-INT-CAL Source: Tungsten halogen Wavelength range: 350-1050 nm Nominal bulb power: 5 W</p> | 1 | |

| | | | | |
|----|---|---|--|--|
| | Warm-up time:* 15 minutes Calibrated for: Absolute irradiance ($\mu\text{W}/\text{nm}/\text{cm}^2$) Maximum uncertainty level: 3% (HL-3plus-CAL) 7% (HL-3plus-INT-CAL) Power requirements: 85-264 V, 50/60 Hz Power Consumption: 1.2 A @ 12 VDC Dimensions: 14 x 6 x 6 cm | | | |
| 9 | Integrating Sphere, 50 mm, for irradiance | 1 | | |
| 10 | Custom sample port for ISP with 12mm diameter | 1 | | |
| 11 | I-V Source Meter | 1 | | |
| 12 | Custom EL Box with Probe holders, with PL Provision and millipositioners | 1 | | |
| 13 | Computer with Operating System, Necessary softwares, Interface with system | 1 | | |
| 14 | 405nm Diode Laser with Fiber Coupler Output Power from MM Fiber 100mW Divergence (Full-Angle): <1 mrad Beam Asymmetry: $\leq 1:1.2$ Beam Diameter @ at $1/e^2$: $0.8 \pm 0.1\text{mm}$ RMS Noise: $\leq 0.1\%$ (20Hz to 20MHz) Power stability: $< \pm 3\%$ (4hr $\pm 3^\circ\text{C}$) Fiber Coupled to $200\mu\text{m}$ Fiber NA 0.22 Fiber Connector FC/PC Fiber Length: 1m Warm Up Time: <5 minutes Cooling: Forced-air cooled Operating Temperature, Case $0^\circ\text{C} \sim 40^\circ\text{C}$ Storage Temperature $-20^\circ\text{C} \sim 60^\circ\text{C}$ Operation Lifetime: 10000 hours | 1 | | |

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ITEM NO 4

| <p align="center">Rotary Evaporator Specifications</p> | <p>Qty Reqd (Approx)</p> | <p>Make & Model Agreed by firm (Yes/No), If yes, Sl. No. of technical broacher/de tails enclosed)</p> | <p>Compliance with specifications Yes/No Please specify</p> |
|---|---------------------------------|--|--|
| <p>Rotary evaporator DC brushless motor drive with speed range of 5-300 rpm or better Manual control of heating bath, vacuum pump, chiller and drive rotation speed Digital displays for rotation speed and heating bath temperature 1500cm² or larger cooling surface area for better recovery rate Manual lift with integrated safety "lift- out-function" Provision to connect vertical,diagonal, reflux and dry ice condenser on same drive Heating temperature range of RT to 180°C for water and oil bath application Bath capacity of 3 liters or more (bath with lower volume heat faster, saves time and energy) Heating bath can accommodatedup to 3 liters of evaporation and receiving flak Heating bath should have heat control accuracy of ±1 K or less Safety temperature circuit and dry run protection of heating bath Locking function of heating bath for avoiding accidental changes of settings Heating bath can be used as standalone unit for different applications. Vacuum pump Two stage diaphragm pumps made of PTFE for protection against aggressive solvents Transparent front cover for detection of solvent build up Suction capacity or flow rate of 1.7 m³/h or more Ultimate vacuum level should be equal or less than 8 mBar Vacuum controller Modular digital Vacuum controller with ceramic pressure sensor for protection against chemicals Measuring range if 1-1100 mBar and accuracy of ±1 mBar or better Controller should be compatible with valve controlled and speed controlled pump Inbuilt solvent library which can store 11 programs or more Provision to connect temperature sensor</p> | <p align="center">01</p> | | |



| | | | |
|---|--|--|--|
| Auto cleaning option for large valve cycles USB AND RS232 interface for remote control data acquisitions and storage Warranty : 2years or as per OEM (whichever is more) Installation and Training at Installation site (inclusive) | | | |
|---|--|--|--|

Item No 5

| Heating- Magnetic Stirrer Specifications | Qty Reqd (Approx) | Make & Model Agreed by firm (Yes/ No), If yes, Sl. No. of technical broacher/details enclosed) | Compliance with specifications Yes/No Please specify |
|--|-----------------------------|--|---|
| Temperature controller: Microprocessor Accuracy: ±1 °C Display: Digital Hot Plate: Ceramic Set safety temperature limit displayed digitally Hot Top indicator Hot surface warning to prevent burns Digital error code display Max. Stirring quantity: 3-4lit. Speed range: 50 - 1500 rpm Temperature range: RT - 350 °C Low power consumption Warranty : 2years or as per OEM (whichever is more) Installation and Training at Installation site (inclusive) | 01 | | |

- I have carefully read and understood all the terms and conditions of the tender and here by convey my acceptance of the same.
- The information / documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I / We, am / are well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.
- Declaration:** I hereby certify that the information furnished above is true and correct to the best of my / our knowledge. I understand that in case any deviation is found in the above statement at any stage, I / we will be blacklisted and will not have any dealing with the University in future.
- The firm is not a black listed firm, if found at later date, my tender can be rejected, even after awarded.

Signature with date & Seal of the agency :

Name of the applicant :

Designation :



FINANCIAL BID

Chapter-IV: Financial bid: To be utilized by the bidders for quoting their prices of equipment/ instruments items wise along with specification and to submit to Central University Jammu along in separate sealed envelope.

ITEM No 1

| High Resolution PC based UV-VIS SPECTROPHOTOMETER with following guaranteed specifications to be demonstrated at the time of installation: QUANTITY: 01 | | Qty Reqd (Approx) | Make & Model Agreed by firm (Yes/ No), If yes, Sl. No. of technical broacher/de tails enclosed) | Basic Cost* (per Unit) INR | Total Cost** (INR) (Inclusiv e of all taxes, charges etc FOR) |
|---|---|-------------------------|--|-------------------------------------|--|
| Photometric System | Double beam optics | 01 | | | |
| Wavelength Range | 190 to 900 nm or better | | | | |
| Wavelength Accuracy | +/- 0.15 nm or better | | | | |
| Wavelength Repeatability | +/- 0.06 nm or better | | | | |
| Photometric range | Up to 5/6 Abs or better, Transmittance, Reflectance or better | | | | |
| Spectral Bandwidth | Variable from 0.2 to 5 nm or better | | | | |
| Resolution | 0.17 nm or better | | | | |
| Wavelength Scan Speed | Up to 3000 nm/min or better | | | | |
| Noise level | 0.00005 Abs RMS (500nm) or better | | | | |
| Stray light | 0.005% at 220 nm, 340 nm & 370 nm or lesser | | | | |
| Monochromator | Blazed Holographic grating Litrow/Czerny-Turner mounting | | | | |
| Detector | Photomultiplier | | | | |
| Light source | Tungsten and Deuterium lamp with automatic switching | | | | |
| Baseline stability | 0.0003 Abs/h or lesser | | | | |
| Baseline flatness | +/- 0.0008 Abs or lesser | | | | |
| Quartz Cuvette | 3 ml capacity 10mm path length (02 pair) | | | | |

| | | | | | |
|--|---|-------------------------|--|--|--|
| Automatic Linear Cell Changer | Atleast Six Sample and one reference cell holder | | | | |
| Optional (System should be upgradable) | Integrating sphere with inner diameter of 60mm or better for diffuse reflectance of direct powder/turbid sample analysis. Wavelength range upto 850nm or more with built in PMT detector. | | | | |
| Software | Original licensed Windows 7/8 based Operating software with GLP/GMP compliant and built in features such as real time display of concentration, Time scan, Photometric mode, Single/multi-wavelength, capability for event recording (e.g. addition of reagent) and calculation of Enzyme Kinetics, DNA/protein quantification etc. Validation Software Should also be supplied along with the instrument to check the performance parameters like Stray Light, Resolution, Noise Level, Drift, Baseline flatness etc. to support GLP/GMP compliant | | | | |
| PC, Printer | Branded PC I3, 2GB RAM, 500GB HDD with Laserjet Printer, Online UPS with 30 minutes back up (please quote make and model) | | | | |
| Installation and Training | Installation and Training to be provided at installation site | | | | |
| Warranty | Two Years or as per OEM (whichever is more) | | | | |
| Add Tax (es)* | GST @..... | | | | |
| | Any other tax @..... | | | | |
| | TOTAL COST (in rupees) | In words: In figure: | | | |

* University will pay taxes as per actual.

** Basic Cost and Tax component(s) must be quoted separately

Q

ITEM NO 2

| <p align="center">UV VisSPECTROPHOTOMETER</p> | <p align="center">Qty Reqd (Approx)</p> | <p align="center">Make & Model Agreed by firm (Yes/ No), If yes, Sl. No. of technical broacher/details enclosed)</p> | <p align="center">Basic Cost* (per Unit) INR</p> |
|---|--|---|---|
| <p>PC controlled, scanning type (max range 1900 nm/min or better) for UV Vis spectrometer with below specifications:</p> <p>Optics: True Double beam Source: D2 and Tungsten lamp Detector: High sensitivity & High Resolution PMT Measurable range: 190 -900 nm or better Spectral Bandwidth: 0.30-4.00 nm with 0.1/0.01 nm steps, motor driven or variable 0.1, 0.2, 0.5, 1,2, 4/5nm Spectral Resolution: ≤ 0.20 nm or better Stay Light: ≤ 0.0014 % T at 370 nm (50mg/L, NaNO₃) Photometric Linear Range: 4 Abs or better Wavelength Accuracy: ± 0.02 nm or better Wavelength Reproducibility: ± 0.009nm (Peak separation) or better Photometric Accuracy: ± 0.00016 Abs or better Baseline Flatness: ± 0.0002 Abs RMS Photometric stability (2 hour warm up, 2nm SBW, 1s AT or better): ≤ 0.0003 Abs @ 0 Abs or better Photometric noise (500nm, 2nm SBW, 1s): ≤ 0.00003 Abs @ 0 Abs or better</p> <p>Accessories: Peltier accessories for sample and reference temperature controller (0-100° C) and Temperature probe, Quartz cuvettes (3.5ml - 10ml path length (02 pair) or better & PC. Diffuse reflectance accessories 60 mm or more with powder cell holder, transmission holder, 10mm cuvettes holder, OEM supplied PC or i7 PC configuration, Laser printer, 3 KVA online UPS with minimum 30 min backup or better</p> <p>Warranty: System warranty of 3 years including UPS batteries</p> <p>Suitable: PC, Laser printer, 3 KVA online UPS with minimum 30 min backup</p> <p>Installation and Training at Installation site (inclusive)</p> | <p align="center">01</p> | | |
| <p>Add: Tax(es)*</p> | <p>GST @..... Any other tax @.....</p> | | |
| <p align="center">TOTAL COST** (in rupees including taxes)</p> | | | |

R

* University will pay taxes as per actual.

** Basic Cost and Tax component(s) must be quoted separately

ITEM NO 3

| Combined Electroluminescence and Photoluminescence System | | Qty | Make & Model Agreed by firm (Yes/ No), if yes, Sl. No. of technical broacher/details enclosed) | Basic Cost* |
|--|--|--|---|--------------------|
| <p>A combined electroluminescence and photoluminescence system has to be assembled with the following components. The system must be assembled such that electroluminescence measurement can be carried out for the semiconductor films deposited on silicon substrate as well as semiconductor heterostructure films deposited on ITO/FTO coated glass substrate.</p> | | | | |
| 1 | <p>HC1-QE grating (starting at 250 nm) OFLV-QE-350 order sorting filter 200 µm entrance slit, 25 µm entrance slit</p> | <p>Engineering Specifications QE Pro-FL Dimensions: (L x W x H) mm and inches 182 mm (7.17 in.) x 110 mm (4.33 in.) x 47 mm (1.85 in.) Weight: kg and lb Spectrometer: 1.15 kg (2.6 lbs.); power supply: 0.45 kg (1 lb.) Detector Type: Hamamatsu scientific grade, back-thinned, TE Cooled, 1044 x 64 element CCD array Detector Range: 185 – 1100 nm Detector Quantum efficiency: 90% (peak) Spectroscopic Wavelength range: 350 – 1100 nm Spectroscopic Integration time: 8 ms to 60 minutes Spectroscopic Signal-to-noise ratio: System: 1000:1 (single acquisition) Grating: 14 gratings available (H1–H14), HC1 grating Slit: 5, 10, 25, 50, 100 or 200 µm wide slits (or SMA/FC bulkhead with no slit) Optical resolution: 0.14 – 7.7 nm (Depends on grating and size of entrance aperture Diode Laser (5mW) for calibration / excitation 405nm, 532nm, 635nm, 650nm, 780 nm, and 840nm, Power supply for laser</p> | 1 | |
| 2 | Replacable SLIT 10um | 1 | | |
| 3 | Replacable SLIT 100um | 1 | | |
| 4 | Replacable SLIT 200um | 1 | | |
| 5 | UV/VIS Collimating Lens, 200-2000 nm | 1 | | |
| 6 | 1000 um Premium Fiber, UV/VIS, 1 m | 1 | | |
| 7 | 400 um Premium Fiber, UV/VIS, 1 m | 1 | | |
| 8 | HL-3 plus Vis-NIR Calibrated Light | Engineering Specifications HL-3plus-INT-CAL | 1 | |

| | | | | | |
|-----|--|--|---|--|--|
| | Source for Integrating Spheres | Source: Tungsten halogen Wavelength range: 350-1050 nm Nominal bulb power: 5 W Warm-up time:* 15 minutes Calibrated for: Absolute irradiance ($\mu\text{W}/\text{nm}/\text{cm}^2$) Maximum uncertainty level: 3% (HL-3plus-CAL) 7% (HL-3plus-INT-CAL) Power requirements: 85-264 V, 50/60 Hz Power Consumption: 1.2 A @ 12 VDC Dimensions: 14 x 6 x 6 cm | | | |
| 9 | Integrating Sphere, 50 mm, for irradiance | | 1 | | |
| 10 | Custom sample port for ISP with 12mm diameter | | 1 | | |
| 11 | I-V Source Meter | | 1 | | |
| 12 | Custom EL Box with Probe holders, with PL Provision and millipositioners | | 1 | | |
| 13 | Computer with Operating System, Necessary softwares, Interface with system | | 1 | | |
| 14 | 405nm Diode Laser with Fiber Coupler Output Power from MM Fiber 100mW Divergence (Full-Angle): <1 mrad Beam Asymmetry: $\leq 1:1.2$ Beam Diameter @ at 1/e 2 : $0.8 \pm 0.1\text{mm}$ RMS Noise: $\leq 0.1\%$ (20Hz to 20MHz) Power stability: $< \pm 3\%$ (4hr $\pm 3^\circ\text{C}$) Fiber Coupled to 200 μm Fiber NA 0.22 Fiber Connector FC/PC Fiber Length: 1m Warm Up Time: <5 minutes Cooling: Forced-air cooled Operating Temperature, Case 0 $^\circ\text{C}$ ~ 40 $^\circ\text{C}$ Storage Temperature -20 $^\circ\text{C}$ ~ 60 $^\circ\text{C}$ Operation Lifetime: 10000 hours Warranty : 2years or as per OEM (whichever is more) Installation and Training at Installation site (inclusive) | | 1 | | |
| 15 | Add Tax(es)* | GST@..... | | | |
| | | Any other tax(es).....please specify | | | |
| .16 | TOTAL COST** (INR including taxes) | | | | |

* University will pay taxes as per actual.

** Basic Cost and Tax component(s) must be quoted separately

2

Item No 4

| <p align="center">Rotary Evaporator Specifications</p> | <p>Qty Reqd (Approx)</p> | <p>Make & Model Agreed by firm (Yes/No), If yes, Sl. No. of technical broacher/details enclosed)</p> | <p>Basic Cost*</p> |
|--|---------------------------------|---|---------------------------|
| <p>Rotary evaporator DC brushless motor drive with speed range of 5-300 rpm or better Manual control of heating bath, vacuum pump, chiller and drive rotation speed Digital displays for rotation speed and heating bath temperature 1500cm² or larger cooling surface area for better recovery rate Manual lift with integrated safety “lift- out-function Provision to connect vertical,diagonal, reflux and dry ice condenser on same drive Heating temperature range of RT to 180°C for water and oil bath application Bath capacity of 3 liters or more (bath with lower volume heat faster, saves time and energy) Heating bath can accommodated up to 3 liters of evaporation and receiving flask Heating bath should have heat control accuracy of ±1 K or less Safety temperature circuit and dry run protection of heating bath Locking function of heating bath for avoiding accidental changes of settings Heating bath can be used as standalone unit for different applications. Vacuum pump Two stage diaphragm pumps made of PTFE for protection against aggressive solvents Transparent front cover for detection of solvent build up Suction capacity or flow rate of 1.7 m³/h or more Ultimate vacuum level should be equal or less than 8 mBar Vacuum controller Modular digital Vacuum controller with ceramic pressure sensor for protection against chemicals Measuring range if 1-1100 mBar and accuracy of ±1 mBar or better Controller should be compatible with valve controlled and speed controlled pump Inbuilt solvent library which can store 11 programs or more Provision to connect temperature sensor</p> | <p align="center">01</p> | | |

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|---|--------------------|--|--|
| Auto cleaning option for large valve cycles USB AND RS232 interface for remote control data acquisitions and storage Warranty : 2years or as per OEM (whichever is more) Installation and Training at Installation site (inclusive) | | | |
| Add: Tax(es)* | GST @..... | | |
| | Any other Tax@.... | | |
| TOTAL COST** (INR including taxes) | | | |

* University will pay taxes as per actual.

** Basic Cost and Tax component(s) must be quoted separately

Item No 5

| Heating- Magnetic Stirrer Specifications | Qty Reqd (Approx) | Make & Model Agreed by firm (Yes/ No), If yes, Sl. No. of technical broacher/details enclosed) | Basic Cost* |
|---|---------------------------------|---|-------------|
| Temperature controller: Microprocessor Accuracy: ± 1 °C Display: Digital Hot Plate: Ceramic Set safety temperature limit displayed digitally Hot Top indicator Hot surface warning to prevent burns Digital error code display Max. Stirring quantity: 3-4lit. Speed range: 50 - 1500 rpm Temperature range: RT - 350 °C Low power consumption Warranty : 2years or as per OEM (whichever is more) Installation and Training at Installation site (inclusive) | 01 | | |
| Add: Tax(es)* | GST @..... | | |
| | Any other Tax, charge etc @.... | | |
| TOTAL COST** (INR including taxes) | | | |

* University will pay taxes as per actual.

** Basic Cost and Tax component(s) must be quoted separately

** The University will provide Custom duty and Central Excise duty exemption certificate in terms of Government notification No 51/96-Customs dated 23-07-1996 and 10/97-Central Excise dated 1-03-1997 respectively. Further, the University will also provide Certificate under SRO 129 of 2012, if applicable, for exemption of State Entry tax on scientific instruments.*

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1. I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.

2. The information / documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I / We, am / are well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

3. **Declaration:** I hereby certify that the information furnished above is true and correct to the best of my / our knowledge. I understand that in case any deviation is found in the above statement at any stage, I / we will be blacklisted and will not have any dealing with the University in future.

4. The firm is not a black listed firm, if found at later date, my tender can be rejected, even after awarded.

Signature with date & Seal of the agency :

Name of the applicant :

Designation :



