

Dayalbagh Educational Institute
(DEEMED TO BE UNIVERSITY)
Dayalbagh, Agra

Notice Inviting Tenders

Limited tender No: DEI-Sc-Botany (Dairy)-PKD-2018-19-TDR-48

Date: 27 February 2019

Sealed tenders are invited from the Manufacturers/ Suppliers/Authorized dealers/ agencies for the supply and installation of the following:-

S.No.	Item	Quantity
1	MP-AES- Microwave Plasma Atomic Emissions Spectrometer For full details of equipment, please see attached Annexure -I	01

The tenderer shall be required to submit the Earnest Money Deposit (EMD) for an amount of **Rs. 38,000/-** by way of demand drafts/banker's cheque/FDRs which is refundable and a non-refundable tender fee for an amount of **Rs.200/- (Rupees two hundred only)** by Cash or Demand draft. The demand drafts shall be drawn in favour of **"Registrar, Dayalbagh Educational Institute, Agra"** payable at Agra. The demand drafts (validity 45 days beyond final bid) for earnest money deposit & tender fee must be enclosed in the envelope containing the bid documents addressed to:

**"The Registrar
Dayalbagh Educational Institute,
Dayalbagh, Agra – 282005,
Uttar Pradesh"**

Note: Central Purchase Organization, Small Scale Industries/ National Small Scale Industries Corporation shall be exempted from payment of Earnest Money Deposit. Tenderers seeking exemption should enclose a self attested photocopy of valid registration certificate with NSIC.

(The Earnest Money will be liable to be forfeited if quotation is not honored or if contract is not signed with the Institute, after the award is made to the Tenderer)

1. Time and last date of submission of the Bid: 02.30 pm on 20.03.2019
2. Time of Bid Opening: 03.00 pm on 20.03.2019
3. Venue of Bid Opening: CAO, Dayalbagh Educational Institute, in the presence of bidders who want to be present at the time of opening of bid.

Interested Contractors/Suppliers/Authorized dealers may put the tender document complete in all respect and other requisite documents in the tender box kept in the General Section, CAO, Dayalbagh Educational Institute, Dayalbagh, Agra- 282005. The bidders are also informed that they may come personally or send their representative to be present at the time of opening of bid. Please note that tender box shall be opened at the time mentioned above irrespective of whether bidders himself or any of their representative are present or not. The tenders shall not be entertained after this deadline under any circumstances what so ever. For more details please visit the institute's website <http://www.dei.ac.in> or contact Prof. P.K.Dantu -9368191921

Registrar
Dayalbagh Educational Institute Dayalbagh,
Agra-282005

Terms & Conditions

Note: Bidders must submit the following primary information/documents with the quotation. Bidders will have to indicate these particulars in their quote failing which the offer may be rejected. Please do produce the related documents whenever required by the Institute.

1. Trade License/Company Registration No.
2. Goods/ Service Tax Regn. No.
3. Income Tax PAN No.
4. Firm's Bank A/c details
5. Bidders are requested to quote rate(s) per unit(s) only in the recognized Accounting units otherwise your quotation will not be accepted.
6. Cost of items shall include installation, support and troubleshooting.
7. Warranty and Support: for Hardware and Software should be explicitly mentioned.
8. Bidders should be OEM/Authorized partner/Authorized dealer of OEM/ Contractors.
9. Bidders should quote rates as per details/specifications mentioned in notice inviting Tender. The Institute reserves the right to place order for each job to single/separate vendor(s) if necessary.
10. Bidders should quote rates on FOR/Free Delivery at the sites specified in the Notice inviting Tender, inclusive of all charges else should mention estimated cost of packing, forwarding, insurance and freight by Rail/Road/Post etc. as the case may be.
11. Bidders must indicate if their rates are inclusive of taxes.
12. Quotation received after the closing date will not be entertained and revision in the price will render the bid invalid. Quotation should indicate clearly the period of Validity, preferably not less than 45 days.
13. In case of an offer for items having multiple options, you should clearly indicate item - specific price(s). Please quote separate item-wise rate(s), when quotation has been asked for so. For every offer, packing and forwarding charges, GST or any Tax etc. should be shown separately.
14. Bids will be evaluated after equated comparison of offers upon calculating all tax/duty/cess/surcharge/discount/packing/transportation costs, other charges with price and non-compliance of technical and commercial terms will render a bid liable for rejection.
15. Bidders will have to submit Bills/Invoices on dispatch of stores, if ordered, to this office in triplicate duly pre-receipted and supported by the relevant delivery documents for audit and payment direct to you or to your bankers. Generally, payments can be expected within one month and are made against acceptance of supplies/ jobs completed and in deserving cases, against shipment documents.
16. No insurance charges are allowed unless otherwise specified and agreed to by us. In the absence of any specific instructions, it will be the responsibility of the supplier to ensure a consignment against transit risk at his own expense if he so desires.
17. The Institute is not bound to accept the lowest rate or any other offer and the acceptance of the offer is entirely at the discretion of the Committee
18. Institute reserves the authority to increase / decrease the quantity (50%) if deemed necessary.
19. The Institute reserves the right to select certain items in single or multiple units and reject the others or all as mentioned in the schedule and to revise or alter the specifications before acceptance of any tender and accept or reject any or all tenders, wholly or partly or close the tender without assigning any reason whatsoever.
20. The Bidder shall be required to submit the Earnest Money Deposit (EMD) by way of Demand Draft /Banker's cheque / FDRs as mentioned in the Notice Inviting Tender is refundable and a non-refundable tender fee for an amount of Rs 200/- (Rupees two hundred only) by way of demand drafts/banker's cheque. The demand drafts shall be drawn in favour of "**Registrar, Dayalbagh Educational Institute, Agra**" payable at Agra. The demand drafts (validity 45 days beyond final bid) for earnest money deposit & tender fee must be enclosed in the envelope containing Technical bid.
 - a) The firm(s) that are registered with the National Small Industries Corporation (NSIC) or Small Scale Industries (SSI) are exempted from furnishing the EMD. Self-attested photocopy of the valid registration certificate must be enclosed with their bid.
 - b) The demand drafts for EMD & tender fee must be enclosed in the envelope containing the Technical Bid and super-scribed with tender number and due date of submission on Technical Bid /Price bid both . Any technical bid is found without the demand drafts of EMD and tender fee will be rejected. The Institute will not be liable to pay any interest on such an amount. The EMD shall be forfeited, if the Bidder withdraws its bid during the period of validity of Tender.
21. Arbitration and Laws: In case of any dispute or difference arising out of or in connection with the tender conditions / order and Contract, the Institute and the Supplier will address the dispute / difference for a mutual resolution and failing which, the matter shall be referred for arbitration to a sole Arbitrator to be appointed by the Institute. The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Agra only. The resolution of the Arbitrator shall be final and binding on both the parties.

22. Jurisdiction: The courts at Agra alone will have the jurisdiction to try any matter, dispute or reference between parties arising out of this tender /contract. It is specifically agreed that no court outside and other than Agra court shall have jurisdiction in the matter.
23. Excise Duty: The Institution is exempted from payment of Excise Duty under notification No.10/97 – Central Excise dt. 01.03.97 issued by Ministry of Science & Technology, Govt. of India. Hence, the offer shall be submitted accordingly incorporated the Integrated Tax(GST).
24. Customs Duty: In case of Imported Items, please note that we are exempted from payment of Customs Duty in terms of Notification No.51/96-CUSTOMS dated 23.7.1996 as amended from time to time. Issued by Ministry of Science & Technology, Dept. of Scientific and Industrial Research, Government of India, we are eligible for concession of Custom duty.

Registrar, DEI

Note:- For full details of equipment, please see attached Annexure -I

Kindly address the quotations to "**Registrar, Dayalbagh Educational Institute, Dayalbagh, Agra**" and dispatch in the properly sealed envelope at the following address or drop the tenders in the drop box kept in the Institute:

**Registrar,
Dayalbagh Educational Institute,
Dayalbagh, Agra 282005**

For any clarification you may contact the following:
Prof. P.K.Dantu -9368191921

Special Terms & Conditions

1. The bid is to be submitted in TWO Bid Pattern i.e Techno-Commercial Bid and Price Bid in **Two separate sealed covers/envelopes.** Warranty should be for Minimum 1 year from the date of supply of goods in working conditions

Note- We have Custom Duty Exemption Certificate.

Other terms and Conditions:

Prices to be inclusive of installation and training

Annexure-I

Technical Specification

S. No.	Requirements
1.	Purpose: to procure a user friendly atomic emission spectrometer with CCD detector that offers high accuracy, reproducibility and versatility for heavy metals and other elements testing.
2.	General Specification for Atomic Emission Spectrometer INSTRUMENT: <ol style="list-style-type: none">1. The instrument must be an atomic emission spectrometer capable of simultaneous measurement of sample and background using a solid-state CCD detector.2. The instrument must be able to determine all desired elements in one run before moving to the next sample analysis.3. Due to space limitation, floor mounted instrument are not acceptable a compact benchtop instrument with minimum space requirement will be preferred.4. The key instrument conditions must be automatically changed to the optimum parameter for each individual element during these multi-element determinations.5. The instrument must be ready to start measuring samples within 40 minutes or less when starting the system from standby, where the instrument and all utilities/accessories (including gases) have been switched off.6. When the instrument is switched off, there should be no gas purge required within the optics or the detector and no electrical consumption for optics thermostating to ensure the lowest standby costs.7. The instrument must be upgradable with a high throughput, random access auto sampler that has capacity for at least 3 sample racks and 2 standard racks for future requirements.8. The system should run through N2 generator or N2 cylinder.
3.	SPECTROMETER: <ol style="list-style-type: none">1. The instrument must use a fast scanning, high resolution optical system with a min. focal length of 600 mm incorporating a single solid state detector.2. The spectrometer must utilize a large holographic diffraction grating blazed at 250 nm or better.3. The entire spectrometer system must be enclosed in a purge able optical enclosure.4. The spectrometer must achieve good optical stability without the need for periodic optical recalibration using Mercury or Neon lamps.5. The spectrometer must not require any source lamps – either for the sample measurement or for the background measurement6. The spectrometer must view the atomization source end on (axially).7. Alignment of the viewing position must be computer controlled and able to be set/changed on an element by element basis.8. The instrument must be capable of continuously measuring wavelengths over the range from 200 to 750 nm to enable determinations across the entire spectrum, both UV and visible.9. The instrument must include a user replaceable pre-optics window for easy and simple maintenance when running difficult samples.10. The spectrometer should provide capability to purge the optics with either nitrogen or air to exclude dust, dirt and acid fumes and maximize instrument performance throughout the life of the instrument.
4.	SYSTEM DETECTOR: <ol style="list-style-type: none">1. The instrument must utilize a single focal plane with one solid-state detector that is optimized for performance across the entire emission spectrum.2. The detector used must be a UV sensitive back thinned solid state CCD with 500 x 100 pixels.3. The detector should be hermetically sealed, eliminating any need for purging of the detector.4. The detector must feature high speed binning for anti-blooming protection to enable the measurement of trace levels in the presence of major matrix constituents.5. To enhance sensitivity and detection limit performance by minimizing detector dark current, the detector must be Peltier cooled.
5.	ATOMIZATION SOURCE: <ol style="list-style-type: none">1. The atomization source must run at an operating frequency of 2000 MHz or better. The atomization source must be computer controlled and provide optimum performance with a power output of 1,000 watts or better.2. The atomization source must be an air cooled design with a solid-state, high voltage power supply,

	<p>eliminating the need for an external water re-circulator.</p> <ol style="list-style-type: none"> 3. Ignition and shut down of the atomization source must be computer controlled and totally automated. 4. The instrument must include a gas flow across the atomization source to protect the pre-optics from the heat of the atomization source. The vendor should specify how this is achieved in their response to this tender. 5. The atomization source must be capable of running using ONLY a supply of air from an external air compressor. The vendor should specify how this is achieved in their response to this tender. 6. The atomization source must operate without requiring a continuous supply of expensive, combustible or oxidizing gases such as Argon, Helium, Acetylene and Nitrous Oxide.
6.	<p>GAS FLOW CONTROL:</p> <ol style="list-style-type: none"> 1. Gas flows for the atomization source must be computer enabled with fixed flow settings for optimum ease of use. Optimum performance must be achieved using a fixed outer flow of 20 L/min or better. and a fixed intermediate flow of 1.5 L/min or better. 2. The nebulizer gas flow must be controlled using a mass flow control system providing a nominal flow range of 0.5 – 1.0 L/min or better.
7.	<p>SAMPLE INTRODUCTION SYSTEM:</p> <ol style="list-style-type: none"> 1. The system must use a three channel, variable speed, computer controlled peristaltic pump for sample introduction. This allows for on-line addition of ionization suppressant and internal standard. 2. The instrument must use sample introduction components that includes glass double pass spray chamber, inert nebulizer and multi-purpose peristaltic pump tubes. 3. The system must have an option of a five channel, variable speed, computer controlled peristaltic pump. 4. The atomization source must be mounted vertically for improved matrix tolerance. 5. The atomization source must be a single piece design and be incorporated into a cassette design enabling easy removal and replacement without requiring the use of special tools. 6. HF and Organic kit must be offered to analyze various kind of samples as given above. 7. The instrument must have an option of a glass cyclonic spray chamber and a low flow concentric nebulizer for best sensitivity and application flexibility. 8. The system must be able to accommodate other commercially available, specialty nebulizers for maximum analytical flexibility. 9. Automated Accessory for low level detection of As, Hg etc. The accessory should have the provision for using hydride as well as non-hydride elements (as per method suitability) without changing any part/module.
8.	<p>SOFTWARE:</p> <ol style="list-style-type: none"> 1. The instrument controlling software must be 64-bit running under the Microsoft Windows 7 operating system. 2. The software must provide capability for the user to create a new worksheet incorporating all method conditions and background correction points using an existing worksheet. 3. The software must provide capability for a novice user to automatically load a preset method by simply clicking an icon on the desktop. The method should have all required parameters already set to the optimum parameters, enabling the user to simply ignite the plasma and start analysis. 4. The software must provide an optimization routine that automatically varies and then selects the optimum instrument parameters that maximize signal intensity, ensuring simple and fast method development by any user. 5. The software must have a library of preferred analytical wavelengths providing relative intensities of each wavelength and graphically highlight potential interferences based on other selected analytes, for easy method development. 6. To improve analytical precision, the instrument must be able to read both background and analyte emission data simultaneously and allow for manual or automatic background correction. 7. The software must provide at least three different forms of background correction (all variations of off-peak background correction are considered as one technique) 8. The software must also provide the capability to apply correction for spectral interferences using spectral modeling techniques in real time. The correction technique used must be able to correct for up to min 5 or better interfering elements simultaneously. The software must provide inter element correction capability. 9. The system must be able to apply spectral interference correction in addition to background correction post sample analysis, eliminating the need to reanalyze the sample. 10. All raw data must be saved and the system must allow for post run reprocessing of the data including changing of background correction points, standard concentrations, curve-fit technique,

	<p>and individual replicate editing.</p> <p>11. Calibration curves must be stored and be able to be recalled for later use.</p> <p>12. The software must provide capability to measure the same analyte using different wavelengths in the same determination so that the most sensitive line can be used to achieve the best detection limits and less sensitive lines can be used to measure higher concentrations. This enables extended dynamic range during the measurement, without re-measuring samples.</p> <p>13. The software must continuously monitor gas pressures, safety interlocks, temperatures inside the atomization source and operation of the atomization source. If any interlock is tripped, the atomization source should be shut down immediately and automatically.</p> <p>14. Vendor should enclose detection limit chart of instrument as per system hardware requirement.</p>
9.	<p>Essential supplies along with system:</p> <ol style="list-style-type: none"> 1. N2 generator. 2. Wavelength calibration solution 500mL with concentration 50 ppm 3. Plasma Torch – 1 extra 4. Nebulizer- 1 extra 5. Fume hood with exhaust 6. Multi element standards 02 sets 7. Online UPS 7.5KVA with 30 minutes back up. 8. Computer with printer 9. HF and organic kit 10. Inert sampler kit and calibration standard for silicon
10.	<p>Miscellaneous:</p> <ol style="list-style-type: none"> 1) Instrument should be offered with warranty for 01years. 2) Quotations should be enclosed with proprietary certificate (if any) and authorization letter/certificates.