

TENDER NOTICE FOR EQUIPMENTS

**DR. APJ ABDUL KALAM CENTRAL INSTRUMENTATION LABORATORY
GURU JAMBHESHWAR, UNIVERSITY OF SCIENCE & TECHNOLOGY,
HISAR-125001, HARYANA
(Phone: 01662-263352, 263358)**

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GURU JAMBHESHWAR UNIVERSITY OF SCIENCE AND TECHNOLOGY, HISAR

TENDER NOTICE

Sealed tenders are invited from reputed manufacturers/suppliers for the supply of following equipments required for Dr. APJ Abdul Kalam Central Instrumentation Laboratory :-

S.No.	Name of the Equipments
1.	Water Purification System
2.	Differential Scanning Calorimeter (DSC)
3.	High Performance Liquid Chromatograph (HPLC)
4.	Microwave Plasma Atomic Emission Spectrometer (MP-AES)

The tender document having detailed specifications for each equipment separately may be obtained either from CIL or may be downloaded from the University website www.gjust.ac.in for which a demand draft of Rs.300/- per tender document drawn in favour of the Registrar, GJUS&T and payable at Hisar is to be submitted with technical bid itself. Technical and Financial bids should be submitted separately with full name of the equipment on the envelope. The tender complete in all respect must reach Director, Dr. A.P.J. Abdul Kalam Central Instrumentation Laboratory (CIL), GJUS&T, Hisar on or before **30.01.2017 by 11:00 A.M.** where after no tender document will be accepted. The technical bid will be opened on **30.01.2017 at 3:30 P.M.** in the CIL. The bidders/representative may remain present at the time of opening of tenders at their own cost.

45570

REGISTRAR

Dainik Bhaskar & Hindustan Times: 18.01.2017

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY
HISAR-125001**

Tender For Supply of Equipment(s)

To

Subject: Invitation for tender for supply of equipments.

Dear Sir (s),

You are invited to submit your most competitive tender for the following equipment (s) with the following terms and conditions:-

A. SCHEDULE OF EVENTS :-

1. TENDER NO.* :: CIL/2017 /-----
2. TENDER FLOATING DATE ::
3. TENDER SUBMISSION CLOSING DATE & TIME : 30.01.2017 at **11:00 A.M.**
4. TENDER OPENING DATE & TIME :: **30.01.2017 at 3:30 P.M.**
5. VENUE FOR TENDER SUBMISSION & OPENING :
Submission: Director, Dr. A P J Abdul Kalam Central Instrumentation Laboratory,
GJUST, Hisar
Opening: Committee Room, Vice Chancellor's Office/CIL, GJUST, Hisar.
6. PRE-BID CONFERENCE(IF ANY) :: No
DATE, TIME AND VENUE
Committee Room, Vice Chancellor's Office, GJUST, Hisar
7. TENDER DOCUMENT COST :: Rs. 300/-
* Tender number must be mentioned in all correspondence.

B. BRIEF DISCRIPTIONOF TENDER DOCUMENT :-

This tender document consists of four parts namely:

1. **Brief description of the equipment(s):-**
It mentions the name of the equipment required and its quantity. The quantity is subject to increase and decrease, at the discretion of the indenter.
2. **Technical data sheet (technical specifications of the equipment):-**
It contains the technical details / specification of the equipment. It should be submitted in a separate sealed envelope marked as "Technical Bid". Bids having deviation in technical specification will be declared as "technically non-responsive" and it will not be considered for commercial evaluation.
3. **Commercial Data Sheet:-**
This format deals with the commercial aspect of the tender. The bidder should quote the basic/ex-works rate of goods and other over head charges only in his format.
4. **General / standard Terms and conditions:-**
This portion contains the general/standard terms and conditions of the tender and its compliance is essential, failing which the contract may be cancelled and bidder may be liable for penal action against it.
5. **Special Terms and conditions:-**
It contains special terms and condition which may be in addition to / in super-session of the referred "General / Standard Terms and conditions" and its compliance is also compulsory in the same manner, as in the case of the General / Standard Terms and conditions.

1. Brief description of the equipment name :-

Name of Equipment(s) Qty. Required
 Microwave Plasma Atomic Emission Spectrometer (MP-AES)- IMPORTED 1No.

2. Technical data sheet (Technical specifications of the equipment) :-

Sr. No.	Description of the Equipment (s)	Technical Specifications
1.	Microwave Plasma Atomic Emission Spectrometer (MP-AES) - IMPORTED	ANNEXURE- I

3. Commercial Data Sheet:-

Format of Tender – Price/commercial bid

TENDER NO & DATE: -----

A.BASIC/ EX -WORKS PRICE.

Sr. No.	Brief Description of the Equipments/ Software	Specifications	Quantity	* Cost per Unit	* Total Cost

* SPECIFY CURRENCY

B Over Head Charge (Taxation etc.)

Sr. No.	Nature of Overhead Charges(Tax/insurance/freight etc.)	Rate	Total amount (Rs)

Total A +B = Rs ----- (in words Rs.....)

We agree to supply the above Equipments/software in accordance with the above technical specifications for a total contract price referred as above, with in the period specified in the Invitation for Tender. We also confirm that the normal commercial warranty/guarantee of as per tender document shall apply to the offered Equipments/ Software.

Signature of Supplier with seal
 Correspondence address of the company
 With phone, Fax, and E-mail and
 Name & address of contact person
 Place and Date

4. General/Standard Terms and Conditions of the Tender:-

1 Two Envelope Bid :-

The tender is to be submitted on two envelope bid pattern i.e. “Technical bid” and “Price/commercial bid” in separately sealed envelopes. Both of these envelopes should be put in and sealed in another envelope addressed to Coordinator, Central Instrumentation Laboratory, Guru Jambheshwar University of Science & Technology, Hisar-125001 (Haryana), India and super-scribed in bold as **“TENDER FOR SUPPLY OF MICROWAVE PLASMA ATOMIC EMISSION SPECTROMETER”**.

The “Technical bid” should mention only the technical details of the item/equipment. Price per unit be mentioned only in the **“Price/commercial bid format”**.

2. Bid Signing:-

The Tender must be signed by authorized signatory of the bidding firm/company on each page, along with seal of the firm/company, as the case may be.

3. Conditional Bid:-

Conditional Bid is not acceptable. Hence, the supplier is advised neither to alter the specifications nor to mention anything on the Tender form, except cost, signature with seal, otherwise his Tender will not be considered.

4. Delivery Destination:-

The Tender should be quoted as FOR GJUS&T, Hisar. The transient insurance and freight charges etc, if any, needs to be mentioned separately of the basic/ ex-works price of the quoted item.

5. Delivery Acceptance:-

The delivery of the material will be handed over to the authorized official of the concerned indenting department/office, however, the goods will be deemed to accept subject to the approval of the inspection committee of GJUS&T. In case of rejection of the consignment, the supplier should immediately remove the consignment from the university premises failing which it will remain there at the risk and responsibility of the supplier and university will not be responsible for any kind of liability in this regard.

6. Delivery Period:-

The supply is to be made within 30 days of the date of dispatch of the supply order. However, in case of imported goods this time limit will be 60 days, instead of 30 days.

7. Delivery Period Extension:-

The supply order(s) shall be executed within the time specified in this regard. However, in case of Force Majure / reasons beyond control of the supplier, he may make a written request to the Vice-Chancellor for grant of extension for delivery period. The written request in this regard should clearly spelling out such reasons. The Vice-Chancellor, if he is satisfied of such reasons and further that the requested extension will not be detrimental to the interests of the university, may grant extension for a reasonable period for delivery of the goods. The supplier would be required to indemnify the university against any loss on account of downfall of the price during the extended period.

8. Penalty for delayed supply:-

In the event of the delayed supply, if accepted, the Registrar will be competent to impose penalty @ 1% per day of the purchase order, provided that the entire amount of penalty shall not exceed 10% of the total amount of Purchase order. The supply will be deemed to be complete on the day when 100 % supply is handed over to the indenter (in case of supply in installments) and its installation is done. An appeal against these orders shall, however, lie to the Vice-Chancellor whose decision shall be final.

9. EMD forfeiture:-

In case of the contractor backs out the supply, the earnest money deposited by him shall be forfeited. Apart from it, he will be liable for any other action against him, as may be considered necessary by the Vice-Chancellor.

10. Rejection of incomplete tenders;_

Incomplete Tender such as unsigned Tender, late submitted Tender, conditional tender, not confirming to the eligibility criteria and Technical specification or with any vague term such as 'Extra as applicable' will be considered as rejected.

11. Quantity Variation :-

The quantity shall be subject to increase or decrease as the case may be.

12. Manual/literature:-

The detailed literature/catalogue of the quoted instrument and its accessories should also be attached with the tender. The specifications claimed by the firm should be clearly mentioned in the literature/catalogue also. Its manual should also be supplied with the equipment.

13. Taxation:-

Taxes/Excise duty/Custom duty etc. should be quoted independent of the ex-works price of the item and it will be paid as applicable under Government rules, if so quoted by the Supplier in the tender, subject to the certificate in the bill of costs as follows. However, wherever exemption from duty (excise/custom duty) is applicable, the university will provide the exemption certificate, along with supply/purchase order itself.

In case of imported goods the custom clearance is to be arranged by the supplier at his own. Charges, if any, in this regard, however, need to be mentioned accordingly in the quote itself. University will provide necessary documents for this purpose. In case the quote is silent with regard to taxation and clearance charges etc, no such charges will be paid by the university.

14. Right to Bid rejection:-

The University reserves the right to reject any or all offers without assigning any reason.

15. Packaging of Consignment:-

The material should be packed in a strong case so as to avoid any damage, theft or pilferage in the transit, in which case the responsibility shall be that of the supplier.

16. Warranty :-

The warranty should not be less than 12 months from the date of installation of the equipment.

17. Performance Warranty :-

Before release of the payment, the successful bidders will be required to submit a performance warranty in form of bank guarantee equal to 10% of the purchase order for the warranty period of the Equipments.

In case of imported goods requiring opening of LC or advance copy of the draft, the bank guarantee on account of performance warranty, having validity for warranty period plus 4 months, should be submitted before issuance of the purchase order by the indenter. If required, its validity will be got suitably extended by the supplier before release of his EMD.

18. Payment :-

The payment will be made within 30 days of the successful installation and its inspection and further after the on-site training imparted, if it is the requirement of the tender document.

19. Currency:-

The rates are quoted in Indian Currency (I N R). However, in case of imported item it may be quoted in foreign currency where in the date of floating of tender will be taken as the conversion date for bid evaluation and comparison purpose

20. Earnest Money Deposit(EMD) :-

The earnest money of the amount, as per the slab given below, in the form of bank draft payable at Hisar and drawn in favour of the Registrar, Guru Jambheshwar University of Sc. & Tech. Hisar or a irrevocable bank guarantee, will be required to be remitted with the tenders. **EMD should be enclosed with Price bid and the same should be indicated in the Technical bid also.**

21. Arbitration :

In case of any dispute both the parties will be bounded by the decision of the Vice-Chancellor, GJUS&T, Hisar, as the arbitrator.

22. Jurisdiction :-

All disputes shall be subject to Hisar jurisdiction.

EMD Slab:-

<u>Sr. No.</u>	<u>Contract Value</u>	<u>Earnest Money</u>
1.	Rs. 300001 to 500000/-	Rs. 20000/-
2.	Rs. 500001 to 1000000/-	Rs. 40000/-
3.	Rs. 1000001 to 2000000/-	Rs. 70000/-
4.	Above Rs. 20 Lacs	Rs. 100000/-

Director,
Dr. A P J Abdul Kalam Central Instrumentation
Laboratory, GJUST, Hisar

The terms & conditions of tender have been read and I/We certify that I/We clearly understand the same and undertake for its compliance

Place: -----

Signature of authorized representative
of the bidding firm/company with seal.

Dated: -----

(Affix Rubber Stamp of the firm)

5. Special Terms and Conditions

1. If the equipment is not manufactured by the bidder, authorization of the manufacturer to the bidder for marketing and servicing of the equipment in India should be enclosed along with technical bid of the tender.
2. The detailed literature/catalogue of the quoted instrument and accessories should be attached with the tender. The specifications claimed by the firm should be clearly mentioned in the literature/catalogue
3. The firm should agree to supply the spare parts/software, etc. for at least five years.
4. Please quote the AMC/CMC rate for at least four years after warranty period.
5. Free upgradation of software for at least for five years after warranty period.
6. The instruments and accessories will be installed completely in Dr. A P J Abdul Kalam Central Instrumentation Laboratory, GJUST, Hisar by the successful bidder. It is also necessary to provide training for lab./technical personnel including trouble shooting etc. and also presentation and demonstration to research scholars, teachers and technician/lab. attendant on instruments.
7. In case of short supply or wrong supply of equipment, its parts or accessories or supply of items in damaged conditions, it is the responsibility of the bidder to arrange for the supply of the required items in working condition as per the purchase order, within the period specified for instrument. Any additional expenditure, whatsoever, for the above will be borne by the bidder only.
8. Payment: In case of imported items, option of payment through L.C. or thorough draft or as decided by the university.
9. The successful bidders will be required to submit a performance warranty in form of bank guarantee equal to 10% of the purchase order for the warranty period of the Equipment at the time of successful installation.

Director,
Dr. A P J Abdul Kalam Central Instrumentation
Laboratory, GJUST, Hisar

I hereby accept all the terms and conditions.

Authorized Signatory
with date and office seal

Note: Please submit it along with tender.

GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR

TENDER NO & DATE: -----

**TECHNICAL SPECIFICATION / TECHNICAL DATA SHEET
OF THE EQUIPMENT/ITEM REQUIRED.**

Sr, No.	Name of Instruments and its technical specifications
	Microwave Plasma Atomic Emissions Spectrometer (atomic emission spectrometer with CCD detector that offers high accuracy, reproducibility and versatility for heavy metal testing)
1.	<p>General Specification for Microwave Plasma Atomic Emissions Spectrometer:</p> <ul style="list-style-type: none"> • The instrument must be an atomic emission spectrometer capable of simultaneous measurement of sample and background using a solid-state CCD detector. • The instrument must be able to determine all desired elements in one run before moving to the next sample analysis. • The key instrument conditions must be automatically changed to the optimum parameter for each individual element during these multi-element determinations. • 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. • 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. • 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. • The system should run through N2 generator or N2 cylinder.
2.	<p>SPECTROMETER:</p> <ul style="list-style-type: none"> • 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. • The spectrometer must utilize a large holographic diffraction grating blazed at 250 nm or better. • The spectral bandwidth across the full spectrum must be less than 0.1 nm. • The entire spectrometer system must be enclosed in a purge able optical enclosure. • The spectrometer must achieve good optical stability without the need for periodic optical recalibration using Mercury or Neon lamps. • The spectrometer must not require any source lamps – either for the sample measurement or for the background measurement • The spectrometer must view the atomization source end on (axially). • Alignment of the viewing position must be computer controlled and able to be set/changed on an

	<p>element by element basis.</p> <ul style="list-style-type: none"> • 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. • The instrument must include a user replaceable pre-optics window for easy and simple maintenance when running difficult samples. • 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.
3.	<p>SYSTEM DETECTOR:</p> <ul style="list-style-type: none"> • The instrument must utilize a single focal plane with one solid-state detector that is optimized for performance across the entire emission spectrum. • The detector used must be a UV sensitive back thinned solid state CCD with 500 x 100 pixels. • The detector should be hermetically sealed, eliminating any need for purging of the detector. • 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. • To enhance sensitivity and detection limit performance by minimizing detector dark current, the detector must be Peltier cooled.
4.	<p>ATOMIZATION SOURCE:</p> <ul style="list-style-type: none"> • 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. • The atomization source must be an air cooled design with a solid-state, high voltage power supply, eliminating the need for an external water re-circulator. • Ignition and shut down of the atomization source must be computer controlled and totally automated. • 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. • The atomization source must be capable of running using only a supply of air from an external air compressor. Branded Compressor to be provided. • The atomization source must operate without requiring a continuous supply of expensive, combustible or oxidizing gases such as Argon, Helium, Acetylene and Nitrous Oxide.
5.	<p>GAS FLOW CONTROL:</p> <ul style="list-style-type: none"> • 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. • 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.
6.	<p>SAMPLE INTRODUCTION SYSTEM:</p> <ul style="list-style-type: none"> • 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. • The instrument must use sample introduction components that includes glass double pass spray

	<p>chamber, inert nebulizer and multi-purpose peristaltic pump tubes.</p> <ul style="list-style-type: none"> • The system must have an option of a five channel, variable speed, computer controlled peristaltic pump. • The atomization source must be mounted vertically for improved matrix tolerance. • 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. • HF and Organic kit must be offered to analyze various kind of samples as given above. • The instrument must have an option of a glass cyclonic spray chamber and a low flow concentric nebulizer for best sensitivity and application flexibility. • The system must be able to accommodate other commercially available, specialty nebulizers for maximum analytical flexibility. • 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 without changing any part/module.
7.	<p>SOFTWARE:</p> <ul style="list-style-type: none"> • The instrument controlling software must be 64-bit running under the Microsoft Windows 7 operating system. • 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. • 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. • 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. • 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. • 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. • The software must provide at least three different forms of background correction (all variations of off-peak background correction are considered as one technique) • 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. • 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. • 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, and individual replicate editing. • Calibration curves must be stored and be able to be recalled for later use. • The software must provide capability to measure the same analyte using different wavelengths in

	<p>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> <ul style="list-style-type: none"> • 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. • Vendor should enclosed detection limit chart of instrument as per system hardware requirement.
	<p>8. Essential supplies (rate to be quoted separately) :</p> <ol style="list-style-type: none"> 1. N2 generator. 2. Wavelength calibration solution 500mL for each element with concentration 50 ppm 3. Plasma Torch – 4 nos. 4. Fume hood with exhaust 5. Multi element standards 01 sets (100 µg/mL Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Fe, Mn, Ni, Pb, Se, Tl, , V, Zn, etc.) & single element standards for As,Cd,Cr,,Au,Mg,Si,Se,Mo, 6. Latest configuration branded Computer with Laser Printer compatible with the instrument
	<p>9. Optional items (rate to be quoted separately) :</p> <ol style="list-style-type: none"> 1. Online UPS 10KVA along with batteries with one hour back up. 2. Autosampler 100 position or more
	<p>10 Miscellaneous:</p> <ol style="list-style-type: none"> 1) Instrument should be offered with warranty for 03 years . 2) Quotations should be enclosed with proprietary certificate (if any and authorization letter/certificates. 3) Tentative instrument consumables should be offered for smooth operation of 3 years' operation after warranty period.

HISAR
DATED;

Director,
Dr. A P J Abdul Kalam Central Instrumentation
Laboratory, GJUST, Hisar

BIDDER'S ACKNOWLEDGEMENT

I UNDERTAKE TO SUPPLY THE EQUIPMENT / ITEM AS PER ABOVE TECHNICAL SPECIFICATIONS

PLACE:
DATED :

(SIGN WITH SEAL OF THE BIDDER)