Department of Environmental Sciences, MLSU, Udaipur Standard Bidding Document Single Stage Online Bid under Two-Cover System



# Mohanlal Sukhadia University, Udaipur Department of Environmental Sciences

NOTICE INVITING E-BID MLSU/ES/RUSA/E-Bid/24-25/81 DATE: 04/01/2025

# **Bidding Document**

(Supply Installation of Atomic Absorption Spectrophotometer with accessories)

Single Stage Online Bid under Two Cover Systems

Last Date for Bid Submission is 15 January 2025



Email: rusaenvsc@gmail.com

### NOTICE INVITING TENDER THROUGH E-PROCUREMENT

MLSU/ES/RUSA/E-Bid/24-25/81 DATE: 04/01/2025

Online bids are invited from the interested firms under single stage two bid system for procurement of "Supply Installation of Atomic Absorption Spectrophotometer with accessories" at Mohanlal Sukhadia University Udaipur Rajasthan. Manual bids shall not be entertained. Tender document may be downloaded from websites SPPP Rajasthan (<a href="https://sppp.rajasthan.gov.in/">https://sppp.rajasthan.gov.in/</a>), e-procurement (<a href="https://eproc.rajasthan.gov.in">https://eproc.rajasthan.gov.in</a>) and University website (<a href="https://mlsu.ac.in">https://eproc.rajasthan.gov.in</a>) as per schedule as given in CRITICAL DATE SHEET as under.

**Note:** - Online single stage tender two bid system (technical and financial) must be uploaded strictly in accordance with all the terms & conditions of the University, otherwise the tender shall not be considered and shall be rejected outright. Counter conditions shall not be accepted. Bidders should read these conditions very carefully and comply strictly before submitting their tender. If a bidder has any doubts regarding the interpretation of any of the conditions or specifications mentioned in these documents, before submitting the tender, refer to the Head, Department of Environmental Sciences and obtain clarification. The decision of the Head, Department of Environmental Sciences regarding interpretation of the conditions and specification shall be final and binding on the bidders.

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Head Department of Environmental Sciences Mohanlal Sukhadia University, Udaipur



Email: rusaenvsc@gmail.com

# CRITICAL DATE SHEET, TENDER FEE AND EMD

Tender No.	MLSU/ES/RUSA/E-Bid/24-25/81 DATE: 04/01/2025
Date for issue E-Bid	04-01-2025
Date & Time Publishing	04-01-2025 (07:00 PM)
Document Downloads/ Sale Start Date & Time	04-01-2025 (07:00 PM)
Website for Downloading Bid Documents	https://eproc.rajasthan.gov.in
Bid Submission Start Date & Time	04-01-2025 (07:00 PM)
Pre Bid Meeting at Department of Environmental Sciences, Vigyan Bhawan, Block- B, Mohanlal Sukhadia University, Udaipur, 313001	11-01-2025 (11:00 AM)
Bid Submission End Date & Time	15-01-2025 (06:00 PM)
Date & Time for Opening of Bids	16-01-2025 (11:00 AM)
Tender Fee EMD	RISL bid processing fees of Rs. 500/- for MD RISL, Jaipur payable at Jaipur (Managing Director, Raj Comp Info Services Ltd.) Rs. 2000/- (For Tender) Rs. 50000/- (For EMD 2%) (All Fess to be paid through RTGS/NEFT. Bank details are as under: Beneficiary Name: HEAD, DEPARTMENT OF ENVIRONMENTAL SCIENCES, MOHANLAL SUKHADIA UNIVERSITY Bank Name: ICICI Bank Pvt. Ltd. Branch Address: B.N. College, Udaipur (Rajasthan) Bank Account No.: 693201700431 IFSC Code: ICIC0006932 MICR Code: 313229012 (This is mandatory that UTR Number is provided)
Security Deposit	5%
Warranty	3 year
Bid Validity	90 days
Address for Communication	Department of Environmental Sciences, Vigyan Bhawan, Block- B, Mohanlal Sukhadia University, Udaipur, 313001



Email: rusaenvsc@gmail.com

(A bridged Form of Notice Inviting e-Bids to be published in newspapers with UBN Nos.)

### DEPARTMENT OF ENVIRONMENTAL SCIENCES, MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR NOTICE INVITING E- BID No.: MLSU/ES/RUSA/E-Bid/24-25/81 DATE: 04/01/2025

Two (02) single stage online unconditional bids under two-cover system are invited for the procurement of "Supply Installation of Atomic Absorption Spectrophotometer with accessories" for Research purpose from manufacturers/ authorized distributors/ authorized dealers up to 06:00 PM of 15-01-2025.

Details of required number of items, specifications and other terms and conditions etc. may be seen in the Bidding Documents on the website <a href="https://sppp.rajasthan.gov.in/">https://eproc.rajasthan.gov.in</a> and University website <a href="https://sppp.rajasthan.gov.in/">https://eproc.rajasthan.gov.in</a> and University website <a href="https://sppp.rajasthan.gov.in/">https://eproc.rajasthan.gov.in/</a> and University website <a href="https://sppp.rajasthan.gov.in/">https://eproc.rajasthan.gov.in/</a> and University website <a href="https://sppp.rajasthan.gov.in/">https://sppp.rajasthan.gov.in/</a> and University website <a href="https://sppp.rajasthan.gov.in/">https://sppp.rajasthan.gov.in/</a> and University website <a href="https://sppp.rajasthan.gov.in/">https://sppp.rajasthan.gov.in/</a> and <a href="https://sppp.rajastha

NIB Code
UBN No

Head Department of Environmental Sciences, Mohanlal Sukhadia University, Udaipur



Email: rusaenvsc@gmail.com

#### **TECHNICAL SPECIFICATIONS**

#### TECHNICAL SPECIFICATION OF EQUIPMENTS

Item Name: Atomic Absorption Spectrophotometer with accessories

(Estimated Cost: 25 Lacs including 18% GST)

#### **Specifications:**

- A PC controlled true double beam multi element Atomic Absorption Spectrophotometer (AAS)
  with essential accessories for analysis of different elements in soil, stream, sediment, rock,
  mineral, water samples.
- The instrument has to use latest technology and design and must be capable of giving elemental analysis of metals and alloys with all major alloying elements, traces and impurities.
- The instrument should be fully automated with single point software control for all the modules and the model quoted should be of latest configuration by the reputed company.
- The instrument should be Double Beam Flame Atomic Absorption Spectrophotometer with Capability of futuristic up-gradation of the System by Zeeman based Graphite Tube Atomizer & furnace system.
- The instrument should have capability of simultaneous analysis of all mounted elements in single aspiration in flame mode for all mounted lamps.
- The quoted model should be capable of analyzing accurately and precisely at ppm level in various types of geological and environmental materials including R&D activities.

#### A. Optics:

- The instrument should be true Double beam optical design.
- The wavelength range should be 190-900 nm or better.
- The Monochromator should be Ebert/Echelle/Hologarphic Grating/Littrow/Czerny/ Turner type offering minimum 1200 lines/mm or better technology.
- The instrument should have Automatic Wavelength and Slit Selection with Automatic peak achieving system.
- The instrument should have Automated Variable Slit of 0.2-1.0nm or better wide range.
- The Slit width (variable) should be also selectable through PC.
- The instrument should have automatic wavelength correction.
- The instrument should have focal length of 230 mm or better.
- The instrument should have Solid State or Photo Multiplier Tube (It Should be Wide PMT to Cover Complete Range 190-900nm) or better.
- The instrument should have wavelength reproducibility of 0.05 nm or better.
- The lamp turret should be minimum four lamp or more.
- The lamp turret should be automatic controlled with software with auto alignment, independent power supply to all the lamp holders and capability to switch on all lamps simultaneously

- warmed up.
- The instrument should have Flame Fast sequential mode for simultaneous analysis of all
  mounted elements in single aspiration in flame mode for all mounted lamps.
- Minimum Four lamps or more automatic aligning turret with computer-controlled lamp selection for both flame and furnace with capability to turn as many lamps ON as required by the user to avoid delays in lamp heating.
- Single element/Multi element Coded Hollow Cathode Lamp should supplied for following elemental analysis:
  - Al, As, B, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Na, Ni, Pb, Se & Zn.
- Lifespan of each lamp should be 2000 Hr. or more.
- The instrument should have Deuterium correction and future upgradable with Zeeman background Graphite furnace.
- The sensitivity of the instrument for flame operation should not be less than 0.8 Abs for 5 ppm Cu with <0.5% RSD using 5 seconds integrations time.
- Absorbance Range should -2 to 2 A or better (including background signal).

#### **B. Flame System:**

- The system should have separate 100 mm Air-Acetylene Titanium Burner Head and also 50 mm
   Nitrous Oxide burner head with quick change burner head assembly.
- The instrument should have Universal Titanium finned burner with corrosion free Titanium material Fully inert spray chamber.
- Burner should have Horizontal/Vertical /Angular movement control (As per system requirement).
- Spray chamber should be capable of handling acids, alkalis and organic solvents.
- Alignment of the flame in the light beam is fully automatic, using a motorized burner mount for vertical and horizontal burner adjustment and automatic software- controlled self-optimization of the burner position.
- Burner height automatically adjustable and automatic gas controlled for optimization.
- The changeover should be automatic between Air/Acetylene & Acetylene/Nitrous Oxide through software.
- Automatic ignition and shut down of flame, inclusive in case of power outage or gas pressure drop.
- The instrument should have adjustable nebulizer with inert platinum/iridium capillary.
- The instrument should have all suitable online software controlled Hydride/VGA accessories
  for elemental analysis of As, Hg, Se, etc.VGA accessories must be upgradable with Flame
  autosampler & Zeeman based graphite furnace.
- All flow rates should be fully automatic and controlled through software or programmable gas box.
- The sampling compartment should be extremely spacious to allow easy access to change the burner heads or nebulizers.
- Gas control system of an instrument must have maximum safety features like Automatic gas

- leak check, Prevention of wrong burner head use, Gas Pressure monitor, drain tank level monitor, flame monitor, etc., so as to have complete safe operation.
- The instrument should have software controlled automatic flame ignition, automatic oxidant changeover, automatic fuel gas boost on oxidant changeover, Automatic flame shut down, Fuel line flashback arrestor, Fuel line pressure regulator, Fuel and oxidant line pressure sensors, Flame present sensor, Burner type sensor, Power failure protection, Empty drain protection, Spray chamber over pressure protection.
- The instrument should have safety interlocks for Burner, Liquid Trap, Pressure Relief Bung, flame shield, flame operation, Gas and Oxidant Pressure, Spray Chamber, gas leak check.

#### C. Software

- Windows 10 or latest based operating software.
- Software should handle instrument linear absorbance reading, concentration, or emission intensity, integration time, calibration equation control.
- The instrument should have comprehensive quality control protocols facility including blank, multiple quality control standards, QA/QC audit trail and calibration failure.
- Software should have hardware validation function and should check wavelength accuracy, noise level, baseline drift, absorbance, repeatability etc. automatically.
- System must be EU CE and ISO certified.
- System must be field upgradable with Zeeman based Graphite furnace (100 vial or more) in future.

#### D. Accessories:

- Suitable OEM supplied PC OR reputed brand with latest configuration (windows 10, i7 processor, 1TB or more HDD, 8 GB RAM or more) and 21" LCD/LED monitor along with latest laser printer—(One set)
- Good quality air compressor with air filters for moisture, dust, oil & mist removal.
- High Purity filled Acetylene Gas Cylinder with dual stage brass Regulator.
- High Purity filled Nitrous Oxide Cylinder with dual stage brass Regulator and Preheater.
- High Purity filled Argon Gas Cylinder with dual stage brass Regulator.
- Complete Gas purification panel for all gases.
- SS Exhaust 15 Feet Fume Hood with vent assembly.
- Compatible 10KVA Online UPS with 30 minutes back-up, 230 VAC,50Hz, Single Phase I/P & O/P, MCB and 30-meter cable
- Single element Standards 100 mL volume, 1000 ppm concentration for above mentioned elements.
- Basic chemicals to be supplied for demonstration of AAS performance i.e. Flame & Hydride samples (Appx.200 sample runs)
- The vendor should install a properly sized tabletop platform for the AAS and an aluminumglass partition for its safety.

#### F. Warranty:

• 3 Years Warranty

- 1. The name, make, model, part no, spares, etc. should be mentioned along with price.
- 2. The instrument should be of a reputed international brand with import quality.
- 3. The instrument should not be manufactured in China or routed through China.
- 4. Bidder or manufacturer must have at least 10 or more installations of quoted or any AAS Model in India in past 5 years. Performance certificate /Installation report of 2 references should be enclosed.
- 5. All the requirements laid down under the above specifications must carefully be read and understood before claiming your instrument as complied.
- 6. All operation manual/ flow charts etc. should be provided in printed form along with its soft copy.
- 7. All the above-mentioned technical specifications must be supported by printed literature as authenticated documents of principal.
- 8. A good service report is desired and service call should be attended.
- 9. Company should be willing to support for minimum period of ten years with guaranteed supply of spares and adequate servicing of the instrument.
- 10. ISO9001/CE/CPA/GLP/GMP compliance.
- 11. The supplier should enclose the technical compliance statements against our technical specification clearly mentioning for each point. The statement should be supported by relevant literature/data.
- 12. A list of customers using the same make/version of the instrument in the Northern/ Western region should be provided.
- 13. The bidder must provide information about same model of AAS (that is being quoted) with any of Indian users or at supplier's application lab in India for assessment/practical demonstration of the instrument to meet the desired analytical requirements & to verify the quoted technical specification during the technical evaluation.
- 14. The bidder must be either OEM/OEM's Indian counterpart or long-term (at least 12 years from the date of bidding) authorized associate/franchisee by the OEM to ensure the supply of spares, consumables & maintenance of the instrument, otherwise offer of the bidder will be treated as cancelled.
- 15. The bidder must have their own office setup &well-trained operation/application experts & maintenance engineers, which may be verified through submitted documents & visit of the said location.
- 16. 3 days application training to be provided at university site after successful installation and commissioning.
- 17. User list should be attached along with literature.
- 18. Bidder or manufacturer should have office or agents in India. Qualified technical and service personnel should be available in North India.
- Purchase should be FOR- Department of Environmental Sciences, Mohanlal Sukhadia University, Udaipur, Rajasthan.
- 20. Demonstration: The supplier should arrange demonstration of the offered instrument in India. Falling to demonstrate the instrument capability as per buyer requirement may lead the disqualification in respect of technical bid.



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#### TERMS AND CONDITIONS

#### 1. Pre-condition for applying

The following criteria must be fulfilled by a bidder for submitting bid.

- 1.1 The bidder must be a company/firm registered under the India Company Act, 1956 or a proprietary firm or a firm registered under partnership Act 1932. No consortium is allowed. Necessary certificates must be enclosed.
- 1.2 The bidder must be a manufacturer/authorised dealer /supplier of equipment/ software (as applicable in this bid) of reputed brand used in at least 5 Universities /Educational Institutions in the country.
- 1.3 The manufacturer of the equipment/experiments/software should have been in the business during last three years with dealer/supplier network in different locations in the country.
- 1.4 The manufacturer should have own service engineers capable of installing/servicing equipments/ software at the site of the customer. A certificate from manufacturer must be attached.
- 1.5 The turnover of the company during last financial year must be Rs 25 Lacs or more.

#### 2. Preparation of Bids

The offer/bid should be submitted in online two bid systems (i.e.) Technical bid and financial bid. The technical bid should consist of all technical details (Technical Specification) along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid in the given format i.e BOQ (Annexure-VIIIA & B).

Technical and Financial Bids to be submitted online in PDF format only.

**2.1. Technical Bid Format & Content:** The technical bid shall not include any financial information. A Technical Bid containing material financial information shall be declared non-responsive.

**2.2.** The prospective bidders are requested to go through the Terms and Conditions of the contract carefully. The bid documents (Technical and Financial) are to be uploaded as per Annexure I and VIIIA & VIIIB. The rates quoted in the BOQ (VIIIA and VIIIB) should be inclusive of all charges such as labour, transportation, storage etc. but exclusive of applicable taxes. Incomplete or ambiguous uploaded bids without documentary proof will not be considered.

#### 2.3. Format and Signing of Bid

- 2.3.a. The bid forms/templates/annexures etc. wherever applicable in technical bid shall be typed or written in indelible ink and shall be signed (all the pages) by a person duly authorized to sign, in token of acceptance of all the terms and conditions of the bidding document. This authorization shall consist of a written letter of authorization.
- 2.3.b. Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initiated by the authorized person signing the bid.
- 2.3.c. The bid, duly signed (digitally) by Authorized signatory, should be uploaded on the eProc portal in respective file/ format.

### 2.4. Bid Opening/Opening of tenders

- 2.4.a. The Bid Evaluation Committee will perform the bid opening, which is a critical event in the bidding process.
- 2.4.b. The Technical Bids shall be opened online through e-procurement portal https://eproc.rajasthan.gov. Bidder may access the document online.
- 2.4.c. All the bids uploaded up to specified date and time shall be opened online, on date and time at the specified place in the presence of bidders or their authorized representatives who may choose to be present as per procedure laid down in RTPP Rules 2013. Alternatively, the bidders may also view the bid opening status/ process online at eProc website https://eproc.rajasthan.gov.
- 2.4.d. All the documents comprising of technical bid/cover shall be opened ONLINE on the eProc website (only for the bidders who have submitted the prescribed fee(s) intimated/ submitted transition reference to <a href="Head, Department of Environmental Sciences">Head, Department of Environmental Sciences</a>, <a href="Mohanlal Sukhadia">Mohanlal Sukhadia</a> <a href="University">University</a>, <a href="Udaipur">Udaipur</a>.

#### 2.5. Evaluation of Technical Bid

2.5.a. The evaluation shall be completed by the Bid Evaluation Committee as early as possible after opening of technical bids.

- 2.5.b. The eligible bidders whose bid is determined to be substantially responsive shall be considered to be qualified in the technical evaluation, unless disqualified pursuant to clause "Conflict of Interest" or "Disqualification."
- 2.5.c. The Technical Evaluation Committee will assess the ability of the agencies to render the requisite services based on its past record, profile and on such other criteria and only those found fit will be eligible for financial bid opening.
- 2.5.d. The firms qualifying in technical evaluation will be informed.
- 2.5.e. The bid evaluation committee shall have full powers to undertake negotiations if any.
- 2.5.f. Tendering authority's Right to accept/reject any or all of the Bids: The tendering authority reserves the right to accept or reject any bid and to cancel the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the bidders.
- 2.5.g. Price/purchase preference in evaluation: Price and/or purchase preference notified by the State Government shall be considered in the evaluation of bids and award of contract.

#### 2.6. Evaluation of Financial Bids

- 2.6.a. The Financial bids/cover or bidders who qualify in technical evaluation shall be opened ONLINE at the notified time, date and place in the presence of the bidders or their representatives who choose to be present. Alternatively, the bidders may also view the financial bid opening status/process online on e-proc website.
- 2.6.b. The process of opening of financial bids/covers shall be similar to that of technical bids.
- 2.6.c. Acceptance of the Tender/Bid:

The tendering authority shall award the contract to the bidder whose proposal/bid has
been determined to be the lowest value bid.
As soon as a bid is accepted by the tendering authority, its written intimation (LOA)
would be sent to the concerned bidder asking to execute an agreement.
The acceptance of an offer is complete as soon as the letter of communication is posted to
the last notified address/correct address of the bidder(s).
The acceptance of the bid shall also be placed on website of www.mlsu.ac.in

- **2.7.** The rates once finalized will not be enhance/ reduced during the currency of contract. In case of foreign currency, conversion rates in INR will be taken on that day when financial bid will open.
- **2.8.** In case the rates quoted by the tenderers are very high or do not suit to the University the negotiation may be undertaken for reducing the quoted rates.

- **2.9.** Merely quoting of lowest rates does not mean that order shall be given to that firm. The purchase committee /competent authority will finally decide on the basis of quality and performance of past installations.
- **2.10** Approved tenderer will have to execute an agreement in prescribed format on a non-judicial stamp of Rs. 0.25% of the order value at his own cost within 15 days from receipt of the order along with security money.
- **2.11** Prices of Optional items will be considered for price evaluation of bids.

#### **3. EMD**

- 3.1 The Tenderer should submit an EMD amount through RTGS/NEFT. The Technical Bid without EMD would be considered as UNRESPONSIVE and will not be accepted. The EMD will be refunded without any interest to the unsuccessful tenderers after the award of contract.
- 3.2 In case of successful bidder shows inability at any stage, after the contract is finalized and awarded, for whatsoever reason(s), to honour the contract, the EMD / security deposited would be forfeited.

#### 4. Refund of EMD:

The EMD will be returned to unsuccessful tenderers only after the Tenders are finalized. In case of successful Tenderer, it will be retained till the successful, complete installation of the equipment and receipt of performance security.

**5.** Acceptance/ Rejection of bids: The Institute reserves the all right to reject any bid not fulfilling the eligibility criteria.

#### 6. Eligibility Criteria:

- 6.1 Tenderer should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) specific to the tender should be enclosed.
- 6.2 An undertaking from the OEM is required stating that they would facilitate the tenderer on a regular basis with technology/product updates and extend support for the warranty as well. (Ref. Annexure-II)
- 6.3 OEM should be internationally reputed company.
- 6.4 Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between tenderer specification and supporting documents etc. may lead to rejection of the bid.

6.5 In the tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.

6.6 If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

#### 7. Performance Bank Guarantee:

The firm, to whom the tender will be awarded, will have to deposit the performance bank guarantee (Annexure-IV) equal to 5% of total amount at the time of installation of equipment. If services are not found to be satisfactory, the performance security liable to be forfeited. No interest will be paid on performance security.

#### 8. Force Majeure:

The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.

8.1 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

8.2 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

#### 9. Risk Purchase Clause:

In event of failure of supply of the item/equipment within the stipulated delivery schedule, the Purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause.

#### 10. Packing Instructions:

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Item Nomenclature
Order/Contract No.
Country of Origin of Goods

Supplier's Name and Address
Consignee details
Packing list reference number

#### 11. Delivery and Documents:

Delivery of the goods should be made within 06 months from the date of placement of purchase order. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e-mail the full details of the shipment including contract number, railway

receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:

ıpa	ny:
	Four Copies of the Supplier invoice showing contract number, goods' description, quantity.
	Unit price and total amount.
	Insurance Certificate if applicable.
	Manufacturer's/Supplier's warranty certificate.
	Inspection Certificate issued by the nominated inspection agency, if any.
	Supplier's factory inspection report.
	Certificate of Origin (if possible by the beneficiary).
	Two copies of the packing list identifying the contents of each package.
	The above documents should be received by the Purchaser before arrival of the Goods
	(except where the Goods have been delivered directly to the Consignee with all documents)
	and, if not received, the Supplier will be responsible for any consequent expenses.

#### 12. Liquidated Damages (L.D):

If a supplier fails to execute the order in time as per the terms and conditions stipulated therein, it will be open to the purchaser to recover liquidated damages for delay in delivery and installation from the supplier. The L.D charges can be increased in case of gross violation of the purchase order terms as decided by the Comptroller of the Institute.

Delay upto 1/4th of the time period of supply: 2.5% Delay 1/4th and above but less than ½ of supply period: 5% Delay ½ and above but less than 3/4th of the supply period: 7.5% Delay more than 3/4th of the time period of supply: 10%

#### 13. Prices:

The final price should be inclusive of all charges including of all taxes and FOR to Department of Environmental Sciences, Vigyan Bhawan, Block-B, University Campus, Mohanlal Sukhadia University, Udaipur. The vender should deliver the instrument in the premises of the Department of Environmental Sciences, University Campus, Mohanlal Sukhadia University, Udaipur. For delivery

of goods at the purchaser's premises, the insurance shall be obtained by the supplier from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes.

#### 14. Progress of Supply:

Wherever applicable, supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:

- 14.1. Quantity offered for inspection and date;
- 14.2. Quantity accepted/rejected by inspecting agency and date;
- 14.3. Quantity dispatched/delivered to consignees and date;
- 14.4. Quantity where incidental services have been satisfactorily completed with date;
- 14.5. Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date;
- 14.6. Date of completion of entire Contract including incidental services, if any; and
- 14.7. Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified).

#### 15. Resolution of Disputes:

The dispute resolution mechanism would be as follows:

- 15.1. In case of dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Comptroller, MLSU, Udaipur and if he is unable or unwilling to act, the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
- 15.2. In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.
- 15.3 The venue of the arbitration shall be the place from where the order is issued.

### 16. Applicable Law:

The place of jurisdiction would be Rajasthan.

#### 17. Right to Use Defective Goods:

If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the purchaser shall have the right to

continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the purchaser's operation.

#### 18. Transfer and Subletting:

The supplier shall not sublet, transfer, assign or otherwise part with the acceptance to the tender or any part thereof, either directly or indirectly, without the prior written permission of the Purchaser.

#### 19. Supplier Integrity:

The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract (annexure-VI) using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

#### 20. Installation & Demonstration:

- 20.1. The supplier is required to do the installation and demonstration of the equipment within two weeks of the arrival of materials at the Mohanlal Sukhadia University, site of installation; otherwise the penalty clause will be the same as per the supply of materials.
- 20.2. In case of any damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Mohanlal Sukhadia University, will not be liable to any type of losses in any form.

#### 21. Insurance:

For delivery of goods at the purchaser's premises, the insurance shall be obtained by the supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes.

#### 22. Warranty:

22.1. Warranty period shall be (as stated in "technical specifications" of this tender) from date of installation of Goods at Mohanlal Sukhadia University, Udaipur. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site.

22.2. The Purchaser shall promptly notify the supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall arrange to repair or replace the defective goods or parts within 15 days free of cost in Mohanlal Sukhadia University. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 15 days. If the supplier having been notified fails to remedy the defects within 15 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.

**23. AMC:** After the warranty period is over, annual maintenance contract (AMC) if required vendor will be contacted. The AMC charges will not be included in computing the total cost of the equipment. Tenderer must specify the terms and condition applicable for AMC.

#### 24. Governing Language:

The contract shall be written in English language. English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.

#### 25. Duties:

Mohanlal Sukhadia University is exempted from paying custom duty under notification No.51/96 and necessary "Custom Duty Exemption Certificate" can be issued after providing following information and Custom Duty Exemption Certificate will be issued to the shipment in the name of the Institute, no certificate will be issued to third party:

- 25.1. Shipping details i.e. Master Airway Bill No. and House Airway No. (if exists)
- 25.2 Forwarder details i.e. Name, Contact No., etc.

#### 26. Payment:

26.1 For imported items payment will be made through irrevocable Letter of Credit (LC). Letter of Credit (LC) will be established in favour of foreign Supplier after the submission of performance security. The letter of credit (LC) will be established on the exchange rates in INR will be taken on that day when financial bid will open. For Imports, LC will be opened for 100% FOB/CIF value. 90% of the LC amount shall be released on presentation of complete and clear shipping documents and 10% of the LC amount shall be released after the installation and demonstration of the

equipment at the Mohanlal Sukhadia University, site of installation in faultless working condition for period of 60 days from the date of the satisfactory installation.

26.2 All the bank charges within India will be borne by the Institute and outside India will be borne by the Supplier.

#### 27. User list:

Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided (Ref. Annexure-III).

#### 28. Site Preparation:

The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter.

The supplier may visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements.

#### 29. Spare Parts:

The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract. In the event of termination of production of the spare parts; Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

**30. Defective Equipment:** If any of the equipment supplied by the Supplier is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of

such equipment shall be refunded by the Supplier with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 30 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, Mohanlal Sukhadia University may consider "Banning" the supplier.

#### 31. Termination for Default:

The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the
order, or within any extension thereof granted by the Purchaser.
If the Supplier fails to perform any other obligation(s) under the Contract.  If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent
practices in competing for or in executing the Contract. For the purpose of this Clause:
"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to
influence the action of a public official in the procurement process or in contract execution.
"Fraudulent practice" means a misrepresentation of facts in order to influence a procurement
process or the execution of a contract to the detriment of the borrower, and includes collusive
practice among Tenderer (prior to or after bid submission) designed to establish bid prices at
artificial non-competitive levels and to deprive the Borrower of the benefits of free and open
competition.
In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may
procure, upon such terms and in such manner, as it deems appropriate, Goods or Services
similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess
costs for such similar Goods or Services. However, the Supplier shall continue the
performance of the Contract to the extent not terminated.

#### 32. Downtime:

During the warranty period, not more than 2% downtime will be permissible. For every day exceeding permissible downtime, penalty of 1/365 of the 1% FOB value will be imposed. Downtime will be counted from the date and time of the filing of complaint with in the business hours.

Supplier should clearly mention about their service set up in India (preferably in Northern part of
India) for prompt service support along with contact details of service engineers specially trained
on the offered system.
In case of machine remain non-operational due to probe breakdown the supplier must arrange

#### 33. Training of Personnel:

alternative probe for the repair time.

The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment as per <u>Annexure VII.</u>

#### 34. Compliancy certificate:

This certificate must be provided indicating conformity to the technical specifications. (Annexure-I)

#### 35. Award of Contract:

Mohanlal Sukhadia University shall award the contract to the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated commercial bid based on the Grand Total calculated of all items + taxes etc. of the Price Bids. However, Mohanlal Sukhadia University reserves the right and has sole discretion to reject the lowest evaluated bid.

If more than one bidder happens to quote the same lowest price, Mohanlal Sukhadia University reserves the right to decide the criteria and further process for awarding the contract, decision of Mohanlal Sukhadia University shall be final for awarding the contract.

#### **36. Additional Points:**

If the ITEMS supplied by the Bidder fail during the warranty period, the supplier is required to repair/replace faulty devices or components. If the ITEMS show frequent failure and requires frequent repair during warranty period, the supplier is required to replace the system free of cost.

Note: This is to be ensured by the firm that purchase order of the same model supplied in the Govt. organization/University/institution should be provided while submitting the bid. In case bidder fail to provide the purchase order of the same model supplied in the Govt. organization/University/institution, then bid may be cancelled on the technical ground.



Email: rusaenvsc@gmail.com

### **ANNEXURE-I**

### COMPLIANCE SHEET: TECHNICAL SPECIFICATION

To: Head, Department of Environmental Sciences, Mohanlal Sukhadia University, Udaipur, 313001

## **TECHNICAL SPECIFICATIONS**

Items name:	Atomic Absorption Spectrophotometer with accessories (Estimated Cost: 25 Lacs including 18% GST)	Quantity	Compliance (Yes/No)	Deviation, if any
<b>Specifications:</b>				
• A PC con	trolled true double beam multi element Atomic Absorption Spectrophotometer (AAS)			
with essen	ntial accessories for analysis of different elements in soil, stream, sediment, rock, mineral,			
water sam	ples.			
• The instru	ment has to use latest technology and design and must be capable of giving elemental			
analysis of	f metals and alloys with all major alloying elements, traces and impurities.			
• The instru	ment should be fully automated with single point software control for all the modules			
and the mo	odel quoted should be of latest configuration by the reputed company.			
• The instru	ment should be Double Beam Flame Atomic Absorption Spectrophotometer with			
Capability	of futuristic up-gradation of the System by Zeeman based Graphite Tube Atomizer &			
furnace sy	vstem.			
• The instru	ment should have capability of simultaneous analysis of all mounted elements in single			
aspiration	in flame mode for all mounted lamps.			
• The quote	d model should be capable of analyzing accurately and precisely at ppm level in various			

types of geological and environmental materials including R&D activities.

### **B.** Optics:

- The instrument should be true Double beam optical design.
- The wavelength range should be 190-900 nm or better.
- The Monochromator should be Ebert/Echelle/Hologarphic Grating/Littrow/Czerny/ Turner type offering minimum 1200 lines/mm or better technology.
- The instrument should have Automatic Wavelength and Slit Selection with Automatic peak achieving system.
- The instrument should have Automated Variable Slit of 0.2-1.0nm or better wide range.
- The Slit width (variable) should be also selectable through PC.
- The instrument should have automatic wavelength correction.
- The instrument should have focal length of 230 mm or better.
- The instrument should have Solid State or Photo Multiplier Tube (It Should be Wide PMT to Cover Complete Range 190-900nm) or better.
- The instrument should have wavelength reproducibility of 0.05 nm or better.
- The lamp turret should be minimum four lamp or more.
- The lamp turret should be automatic controlled with software with auto alignment, independent
  power supply to all the lamp holders and capability to switch on all lamps simultaneously warmed
  up.
- The instrument should have Flame Fast sequential mode for simultaneous analysis of all mounted elements in single aspiration in flame mode for all mounted lamps.
- Minimum Four lamps or more automatic aligning turret with computer-controlled lamp selection
  for both flame and furnace with capability to turn as many lamps ON as required by the user to
  avoid delays in lamp heating.
- Single element/Multi element Coded Hollow Cathode Lamp should supplied for following elemental analysis:
  - Al, As, B, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Na, Ni, Pb, Se & Zn.
- Lifespan of each lamp should be 2000 Hr. or more.

- The instrument should have Deuterium correction and future upgradable with Zeeman background Graphite furnace.
- The sensitivity of the instrument for flame operation should not be less than 0.8 Abs for 5 ppm Cu with <0.5% RSD using 5 seconds integrations time.
- Absorbance Range should -2 to 2 A or better (including background signal).

### **B. Flame System:**

- The system should have separate 100 mm Air-Acetylene Titanium Burner Head and also 50 mm
   Nitrous Oxide burner head with quick change burner head assembly.
- The instrument should have Universal Titanium finned burner with corrosion free Titanium material Fully inert spray chamber.
- Burner should have Horizontal/Vertical /Angular movement control (As per system requirement).
- Spray chamber should be capable of handling acids, alkalis and organic solvents.
- Alignment of the flame in the light beam is fully automatic, using a motorized burner mount for vertical and horizontal burner adjustment and automatic software- controlled self-optimization of the burner position.
- Burner height automatically adjustable and automatic gas controlled for optimization.
- The changeover should be automatic between Air/Acetylene & Acetylene/Nitrous Oxide through software.
- Automatic ignition and shut down of flame, inclusive in case of power outage or gas pressure drop.
- The instrument should have adjustable nebulizer with inert platinum/iridium capillary.
- The instrument should have all suitable online software controlled Hydride/VGA accessories for elemental analysis of As, Hg, Se, etc.VGA accessories must be upgradable with Flame autosampler & Zeeman based graphite furnace.
- All flow rates should be fully automatic and controlled through software or programmable gas box.
- The sampling compartment should be extremely spacious to allow easy access to change the burner heads or nebulizers.
- Gas control system of an instrument must have maximum safety features like Automatic gas leak

- check, Prevention of wrong burner head use, Gas Pressure monitor, drain tank level monitor, flame monitor, etc., so as to have complete safe operation.
- The instrument should have software controlled automatic flame ignition, automatic oxidant changeover, automatic fuel gas boost on oxidant changeover, Automatic flame shut down, Fuel line flashback arrestor, Fuel line pressure regulator, Fuel and oxidant line pressure sensors, Flame present sensor, Burner type sensor, Power failure protection, Empty drain protection, Spray chamber over pressure protection.
- The instrument should have safety interlocks for Burner, Liquid Trap, Pressure Relief Bung, flame shield, flame operation, Gas and Oxidant Pressure, Spray Chamber, gas leak check.

#### C. Software

- Windows 10 or latest based operating software.
- Software should handle instrument linear absorbance reading, concentration, or emission intensity, integration time, calibration equation control.
- The instrument should have comprehensive quality control protocols facility including blank, multiple quality control standards, QA/QC audit trail and calibration failure.
- Software should have hardware validation function and should check wavelength accuracy, noise level, baseline drift, absorbance, repeatability etc. automatically.
- System must be EU CE and ISO certified.
- System must be field upgradable with Zeeman based Graphite furnace (100 vial or more) in future.

#### D. Accessories:

- Suitable OEM supplied PC OR reputed brand with latest configuration (windows 10, i7 processor, 1TB or more HDD, 8 GB RAM or more) and 21" LCD/LED monitor along with latest laser printer— (One set)
- Good quality air compressor with air filters for moisture, dust, oil & mist removal.
- High Purity filled Acetylene Gas Cylinder with dual stage brass Regulator.
- High Purity filled Nitrous Oxide Cylinder with dual stage brass Regulator and Preheater.
- High Purity filled Argon Gas Cylinder with dual stage brass Regulator.
- Complete Gas purification panel for all gases.

•	SS Exhaust 15 Feet Fume Hood with vent assembly.		
•	Compatible 10KVA Online UPS with 30 minutes back-up, 230 VAC,50Hz, Single Phase I/P &		
	O/P,MCB and 30-meter cable		
•	• Single element Standards 100 mL volume, 1000 ppm concentration for above mentioned elements.		
•	Basic chemicals to be supplied for demonstration of AAS performance i.e. Flame & Hydride		
	samples (Appx.200 sample runs)		
•	The vendor should install a properly sized tabletop platform for the AAS and an aluminum-glass		
	partition for its safety.		
]	F. Warranty:		
•	3 Years Warranty		

Signature of Tenderer		
Name:		
Designation:		
Organization Name:		
Contact No.:		



(Signature of the Tenderer)

**Seal of the Company** 

# DEPARTMENT OF ENVIRONMENTAL SCIENCES MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR

Email: rusaenvsc@gmail.com

# ANNEXURE-II << Organization Letter Head >> <u>DECLARATION SHEET</u>

We, \_\_\_\_\_ hereby certify that all the information and data furnished by our organization with regard to these tender specifications are true and complete to the

best of our knowledge. I have gone through the specifications, conditions and stipulations in details and agree to comply with the requirements and intent of specification.			
I/We hereby unconditionally accept the tender conditions of above-mentioned tender document(s)/corrigendum(s) in its totality/entirety.			
This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certify that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.			
The corrigendum(s) issued from time to time by your department/organization too have also been taken into consideration, while submitting this acceptance letter.			
We, further specifically certify that our organization has not been Black Listed/De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.			
The prices quoted in the financial bids are subsidiz Sukhadia University -Udaipur.	red due to academic discount given to Mohanlal		
Name & Address of The Vendor/ Manufacturer /			
Agent			
Phone			
Fax			
E-mail			
Contact Person Name			
Mobile Number			
TIN Number			
PAN Number			
(In case of on-line payment of Tender Fees)			
UTR No. (For Tender Fee)			
(In case of on-line payment of EMD)			
UTR No. (For EMD)			
Other Details			



Email: rusaenvsc@gmail.com

# ANNEXURE-III << Organization Letter Head >>

## **LIST OF ORGANIZATION/ DEPARTMENT.**

List of organizations for whom the Tenderer has undertaken such work during last three years (must be supported with work orders)

		Name of Contact Person   Contact No	

Name of application specialist / Service Engineer who have the technical competency to handle and support the quoted product during the warranty period.

Name of the	Name of Contact	Contact No.
Organization	rerson	No.
	Name of the Organization	

Signature of Tenderer			
ame:			
Designation:			
Organization Name:			
'antact Na ·			



Email: rusaenvsc@gmail.com

### **ANNEXURE-IV**

## FORMAT FOR PERFORMANCE BANK GUARANTEE

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT UDAIPUR OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT UDAIPUR OR ANY SCHEDULED BANK (OTHER THAN NATIONALISED BANK) SITUATED AT UDAIPUR. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.)

To,

Mohanlal Sukhadia University Udaipur-313001 India

#### **LETTER OF GUARANTEE**

WHEREAS Mohanlal Sukhadia University (Buyer) have invited Tenders vide Tenders No
of
NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document / purchase order / performance of the equipment / machinery, etc. this bank shall pay to Mohanlal Sukhadia University on demand and without protest or demur Rs
This bank further agrees that the decision of Mohanlal Sukhadia University, Udaipur (Buyer) as twhether the said Tenderer (Seller) has committed a breach of any of the conditions referred in tended document / purchase order shall be final and binding.
We,
Notwithstanding anything contained herein:  1. Our liability under this Bank Guarantee shall not exceed Rs (Indian Rupees only).  2. This Bank Guarantee shall be valid up to

3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if institute serve upon us a written claim or demand on or before(date).
This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at
Yours truly,
Signature and seal of the guarantor:
Name of Bank:
Address:
Date:
<b>Instruction to Bank:</b> Bank should note that on expiry of Guarantee Period, the Original Guarantee will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.



The Head

# DEPARTMENT OF ENVIRONMENTAL SCIENCES MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR

Email: rusaenvsc@gmail.com

## **ANNEXURE-V**

Date: /

# MANDATE FORM FOR ELECTRONIC FUND TRANSFER/RTGS TRANSFER

<b>Department of Enviro</b> Mohanlal Sukhadia Ur Udaipur-313001			
•	er/RTGS Transfer.	om Mohanlal Sukhadia Univers	ity, Udaipur through
2. Address of the Party 3. Particulars of Bank	2 0		
Bank Name		Branch Name	
Branch Place		Branch City	
PIN Code		Branch Code	
MICR Code		IFS Code	
Account Type	Savings	Current	Cash Credit
Account Number		-	
Account Name			
effected for reasons of University, Udaipur res	ne particulars given above f incomplete or incorrect sponsible. I also undertake cords for purpose of credit of	DECLARATION  are correct and complete. If any information I shall not hold R to advise any change in the pof amount through NEFT/RTGS	egistrar, Mohanlal Sukhadia particulars of my account to
Signature & Seal of th	e Authorized Signatory of	f the Party	
Certified that particulars	s furnished above are correct	ct as per our records	
Bankers Stamp:		Date:	
	orized Official from the Banformation in CAPITAL L	ank .ETTERS, computer typed; pleas	se TICK wherever it is



Email: rusaenvsc@gmail.com

**ANNEXURE VI** 

(to be printed on Supplier's letterhead)

### **INTEGRITY PACT**

#### General

NOW, THEREFORE, to avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and Enabling Tenderer to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

### 1. <u>Commitments of the BUYER:</u>

1.1 The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the TENDERER, either for themselves or for any person, organization or third party related to the

contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the Contract.

- 1.2 The BUYER will, during the pre-contract stage, treat all Tenderer alike, and will provide to all tenderer the same information and will not provide any such information to any particular TENDERER which could afford an advantage to that particular TENDERER in comparison to other Tenderer.
- 1.3 All the officials of the Buyer will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
- 1.4 In case any such preceding misconduct on the part of such official (s) is reported by the TENDERER to the BUYER, with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

#### 2. Commitments of TENDERER:

The TENDERER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:

- 2.1 The TENDERER will not offer, directly or through intermediaries, any bribe, consideration, gift, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
- 2.2 The TENDERER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other Contract with the Government for showing or

forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.

2.3 Tenderer shall disclose the name and address of agents and representatives and Indian Tenderer shall disclose their foreign principals or associates.

- 2.4 Tenderer shall disclose the payments to be made by them to agents / brokers or any other intermediary, in connection with this bid/contract.
- 2.5 The TENDERER further confirms and declares to the BUYER that the TENDERER is the original manufacturer/ integrator/ authorized government sponsored export entity of the defence stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER, or any of its functionaries, whether officially or unofficially to the award of the contract to the TENDERER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 2.6 The TENDERER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 2.7 The TENDERER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 2.8 The TENDERER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 2.9 The TENDERER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The TENDERER also undertakes to exercise due and adequate care lest any such information is divulged.
- 2.10 The TENDERER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 2.11 The TENDERER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 2.12 If the TENDERER or any employee of the TENDERER or any person acting on behalf of the TENDERER, either directly or indirectly, is a relative of any of the officers of the BUYER, or alternatively, if any relative of an officer of the BUYER has financial interest/stake in the

TENDERER's firm, the same shall be disclosed by the TENDERER at the time of filing of tender. The term relative for this purpose would be as defined in Section 6 of the Companies Act 1956.

2.13 The TENDERER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the BUYER.

#### 3. Previous Transgression

3.1 The TENDERER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify TENDERER's exclusion from the tender process 3.2 The TENDERER agrees that if it makes incorrect statement on this subject, TENDERER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

### 4. Earnest Money Deposit

- 4.1 While submitting bid, the TENDERER shall deposit an amount mentioned in tender document as Earnest Money, with the University through the following instruments:
- 4.1.1 The tenderer should submit an EMD amount through NEFT/RTGS. The Technical Bid without EMD would be considered as UNRESPONSIVE and will not be accepted. The EMD will be refunded without any interest to the unsuccessful tenderer after the award of contract.
- 4.2 No interest shall be payable by the BUYER to the TENDERER on Earnest Money for the period of its currency.
- 4.3 In case of successful TENDERER, EMD will be returned within 30 days from the date of submission of Performance Bank Guarantee.

#### 5. <u>SECURITY DEPOSIT / PERFORMANCE GUARANTEE</u>:

- 5.1 Performance Bank Guarantee is mandatory.
- 5.2 Successful tenderer should submit performance guarantee as prescribed above to be received in the **Head, Department of Environmental Sciences, Mohanlal Sukhadia University Udaipur** at the time of installation. The performance bank guarantee to be furnished in the form of Bank Guarantee as per security of the tender documents, for an amount covering 5% of the purchase order value.

- 5.3 The Performance Bank Guarantee should be established in favour of **Head, Department of Environmental Sciences, Mohanlal Sukhadia University** through any Bank situated at Udaipur or outstation with a clause to enforce the same on their local branch at Udaipur. Performance Bank Guarantee shall be for the due and faithfully performance of the contract and shall remain binding, notwithstanding such variations, alterations for extensions of time as may be made, given, conceded or agreed to between the successful tenderer and the purchaser under the terms and conditions of acceptance to tender.
- 5.4 The successful tenderer is entirely responsible for due performance of the contract in all respects according to the speed, intent and meaning of the terms and conditions and specification and all other documents referred to in the acceptance of tender.
- 5.5 The performance bank guarantee shall be kept valid during the period of contract and shall continue to be enforceable for a period of two years from the date of order acknowledgement.

### 6. Sanctions for Violations

- 6.1 Any breach of the aforesaid provisions by the TENDERER or any one employed by it or acting on its behalf (whether with or without the knowledge of the TENDERER) shall entitle the BUYER to take all or any one of the following actions, wherever required:
- 6.1.1 To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the TENDERER. However, the proceedings with the other TENDERER(s) would continue.
- 6.1.2 The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bank Guarantee (after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.
- 6.1.3 To immediately cancel the contract, if already signed without giving any compensation to the TENDERER.
- 6.1.4 To recover all sums already paid by the BUYER, and in case of an Indian TENDERER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a TENDERER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the TENDERER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.

- 6.1.5 To encash the advance bank guarantee and performance guarantee/warranty bond, if furnished by the TENDERER, in order to recover the payments, already made by the BUYER, along with interest.
- 6.1.6 To cancel all or any other contracts with the TENDERER. The TENDERER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation/rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the TENDERER.
- 6.1.7 To debar the TENDERER from participating in future bidding processes of the Government of India for a minimum period of two years, which may be further extended at the discretion of the BUYER.
- 6.1.8 To recover all sums paid in violation of this pact by the TENDERER(s) to any middleman or agent or broker with a view to securing the contract.
- 6.1.9 In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the TENDERER, the same shall not be opened.
- 6.1.10 Forfeiture of Performance Bank Guarantee in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 6.2 The BUYER will be entitled to take all or any of the actions mentioned at para 6.1.1 to 6.1.10 of this Pact also on the Commission by the TENDERER or any one employed by it or acting on its behalf (whether with or without the knowledge of the TENDERER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 6.3 The decision of the BUYER to the effect that a breach of the provisions of this pact has been committed by the TENDERER shall be final and conclusive on the TENDERER. However, the TENDERER can approach the independent monitor(s) appointed for the purposes of this pact.

#### 7. Fall Clause

The TENDERER undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar product/system or subsystem was supplied by the TENDERER to any other Ministry/Department of the Government of India or PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the TENDERER to the BUYER, if the contract has already been concluded.

### 8. Facilitation of Investigation

In case of any allegation of violation of any provisions of this pact or payment of commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the TENDERER and the TENDERER shall provide necessary information & documents in English and shall extend all possible help for the purpose of such examination.

## 9. Law and Place of Jurisdiction

This Pact is subject to Indian Law. The place of performance and Jurisdiction is the Seat of the BUYER.

### 10. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

### 11. Validity

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- 11.1 The validity of this Integrity Pact shall be from date of its signing and extend upto 3 years or the complete execution of the contract to the satisfaction of both the BUYER and the TENDERER/ Seller, including warranty period, whichever is later. In case TENDERER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.
- 11.2 Should one or several provisions of this pact turn out to be invalid, the remainder of this pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

TENDERER

### 13. The parties hereby sign this Integrity Pact.

DOTER	ILINDLIKLIK
	Signature with seal
Mohanlal Sukhadia University, Udaipur	
Date & Place:	Date & Place:
Witness	Witness
1	1
(Indenter)	



Email: rusaenvsc@gmail.com

# **BID SUBMISSION**

## **Online Bid Submission:**

The Online bids (complete in all respect) must be uploaded online in Three Envelops as explained below:-

	Envelope – 1									
	(Following documents to be provided as single PDF file)									
Sl. No.	Documents	Content	File Types							
1.	Fee Documents	NEFT/RTGS/UTR No and Date/Bank Details Bid Fess RISL Processing  Fee EMD Details etc.	.PDF							
	Documents	Envelope – 2	1							
		(Following documents to be provided as single PDF file)								
Sl. No.	Documents	Content	File Types							
1.		Compliance Sheet as per Annexure – I	.PDF							
2.		Organization Declaration Sheet as per Annexure – II	.PDF							
3.		List of organizations/ clients where the same products have been supplied (in last two years) along with their contact number(s). (Annexure-III)	.PDF							
4.	Technical Bid	Format For Performance Bank Guarantee (Annexure IV)	.PDF							
5.		Mandate Form for Electronic Fund Transfer/RTGS Transfer (Annexure V)	.PDF							
6.		Integrity Pact (Annexure VI)	.PDF							
7.		Technical supporting documents in support of all claims made at Annexure-I	.PDF							
		Envelope – 3								
Sl. No.	TYPES	Content	File Type							
1.	Financial Bid	Price bid Annexure-VIIIA	BOQ							
2.		Annexure-VIIIB	BOQ							
3.		Financial Bid Documents	.PDF							



Email: rusaenvsc@gmail.com

#### **AGREEMENT**

(To be executed on a non-judicial stamp)

An agreement made thisday ofday of
betweenhereinafter
called as "the Supplier"), which expression shall, where the context so admits, be deemed to include his
heirs successors, executers and administrators of the one part and the ${\it Head}$ , ${\it Department}$ of
Pharmaceutical Science, Mohanlal Sukhadia University, Udaipur herein after called "the Procuring
Entity' which expression shall, where the context so admits, be deemed to include his successors in office
and assigns, of the other part.
WHEREAS the Procuring Entity invites Bids for certain Goods and Related Services ,viz.
and has accepted a Bid by the Supplier for the supply of those Goods and Related Services for the sum
of(Amount in figures and words)
(Here in after the Contract Price).

#### NOW THIS AGREEMENT WITNESSTH ASFOLLOWS:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract referred to.
- 2. The following documents shall be deemed to form and be read and construed as a part of this Agreement, viz.
  - (a) The Procuring Entity's Notification to the Supplier of Award of Contract;
  - (b) The Bid Submission Sheet and the Price Schedule including negotiated price, if any, submitted by the Supplier;
  - (c) The Special Conditions of the Contract;
  - (d) The General Conditions of Contract;
  - (e) The Schedule of Supply;
  - (f) Instructions to Bidders;

(g) The Notice Inviting Bids

In the event of any discrepancy or inconsistency within the Contract, the documents shall prevail in the order listed above

- 3. In consideration to the payments to be made by the Procuring Entity to the Supplier as indicated in this Agreement, the Supplier hereby covenants with the Procuring Entity to provide the Goods and Related Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Procuring Entity hereby covenants to pay the Supplier in consideration of the provision of the Goods and Related Services and the remedying of the defects therein, the Contract Price or such other sum as may become payable under the Provisions of the contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of the Central and the State Government on the day, month and year first mentioned herein before.

Witness 1	Signed by:
	(for the Supplier)
	Name
	Designation
	Address
Witness 2	Signed by:
	(for the Procuring Entity)
	Name
	Designation
	Address



Email: rusaenvsc@gmail.com

## **ANNEXURE -VII**

# **Training Requirement**

1.	Product Description	"Supply Installation of Atomic Absorption Spectrophotometer with accessories"			
2.	No of Attendees	30			
3.	No. of Days	3 Days			
4.	Type of Training	a. Operational Training			
		b. End User Training			
		c. Maintenance Training			

**TENDERER** Signature with seal



Email: rusaenvsc@gmail.com

## Annexure-VIII-A

### Date:

## **Subject: Purchase of <Item> (Following format is used for imported items)**

S.	Currency	Description and Specification of	Qty. in	Unit	Agency	Discount	Ex-works	Packing +	FOB/FCAAi	Insurance	CIF Price
No.		the Item	Units	Price			price	Handling +	rport Price	+ Freight	(f+g)
					(If		(1 - 11 - 1	DOC +	(f. 1)	(g)	
					applicable)		(d=a+b-c)	Inland	(f=d+e)		
				(a)	(b)			Freight +			
				` ′		(c)		FCA			
								Charges (e)			
1											
1											

Note: At any circumstances, it is the responsibility of the foreign supplier to hand over the material to our forwarder at the origin airport after completing all the inland clearing. No Ex-works consignment will be entertained.

**Authorised Signature (With Seal)** 



Email: rusaenvsc@gmail.com

## **Annexure-VIII-B**

For indigenous items please quote as per following format.

S. No.	Description and Specification of the	Qty. in Units	Unit Price in Rs.	GST%	Total Price in Rs.
	Item				
1.					

Note: The above financial template should be strictly followed. Any deviation from the above template (in terms of description and specification of the item) may lead to cancellation of the tender

**Authorised Signature (With Seal)** 



Email: rusaenvsc@gmail.com

## FINACIAL BID FORM (Please submit in PDF item wise rate)

To: Head, Department of Environmental Sciences, Mohanlal Sukhadia University, Udaipur - 313001

Name of Supply: "Supply Installation of Atomic Absorption Spectrophotometer with accessories"

Quantity: **1 Nos**Name of Supplier:

Sr. No.	Items name and Specifications	Quantity	Rate per unit including all cost (F.O.R., Udaipur) Including all taxes and Other Charges, custom duty and/or any other tax but excluding GST (A)	Current rate of 18 %GST, If applicable (B)	Total In Rs (A+B)
1.	Atomic Absorption Spectrophotometer with accessories				
	Specifications:				
	A PC controlled true double beam multi element Atomic				
	Absorption Spectrophotometer (AAS) with essential				
	accessories for analysis of different elements in soil,				
	stream, sediment, rock, mineral, water samples.				
	The instrument has to use latest technology and design				
	and must be capable of giving elemental analysis of				
	metals and alloys with all major alloying elements, traces				
	and impurities.				
	The instrument should be fully automated with single				
	point software control for all the modules and the model				
	quoted should be of latest configuration by the reputed				
	company.				
	The instrument should be Double Beam Flame Atomic				

•	
	Absorption Spectrophotometer with Capability of
	futuristic up-gradation of the System by Zeeman based
	Graphite Tube Atomizer & furnace system.
•	The instrument should have capability of simultaneous
	analysis of all mounted elements in single aspiration in
	flame mode for all mounted lamps.
•	The quoted model should be capable of analyzing
	accurately and precisely at ppm level in various types of
	geological and environmental materials including R&D
	activities.
C	Optics:
•	The instrument should be true Double beam optical
	design.
•	The wavelength range should be 190-900 nm or better.
•	The Monochromator should be
	Ebert/Echelle/Hologarphic Grating/Littrow/Czerny/
	Turner type offering minimum 1200 lines/mm or better
	technology.
•	The instrument should have Automatic Wavelength and
	Slit Selection with Automatic peak achieving system.
•	The instrument should have Automated Variable Slit of
	0.2-1.0nm or better wide range.
•	The Slit width (variable) should be also selectable
	through PC.
•	The instrument should have automatic wavelength
	correction.
•	The instrument should have focal length of 230 mm or
	better.
•	The instrument should have Solid State or Photo

Multiplier Tube	(It Should be Wide PMT to Cover		
Complete Range	190-900nm) or better.		
• The instrument s	hould have wavelength reproducibility		
of 0.05 nm or be	tter.		
The lamp turret	should be minimum four lamp or more.		
The lamp turret	should be automatic controlled with		
software with au	to alignment, independent power supply		
to all the lamp h	olders and capability to switch on all		
lamps simultane	ously warmed up.		
• The instrument	should have Flame Fast sequential mode		
for simultaneous	analysis of all mounted elements in		
single aspiration	in flame mode for all mounted lamps.		
Minimum Four	amps or more automatic aligning turret		
with computer-c	ontrolled lamp selection for both flame		
and furnace with	capability to turn as many lamps ON as		
required by the	ser to avoid delays in lamp heating.		
Single element/I	Multi element Coded Hollow Cathode		
Lamp should su	oplied for following elemental analysis:		
Al, As, B, Ca, C	d, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Na,		
Ni, Pb, S	e & Zn.		
Lifespan of each	lamp should be 2000 Hr. or more.		
• The instrument	hould have Deuterium correction and		
future upgradab	e with Zeeman background Graphite		
furnace.			
• The sensitivity	of the instrument for flame operation		
should not be le	ss than 0.8 Abs for 5 ppm Cu with <0.5%		
RSD using 5 sec	onds integrations time.		
Absorbance Ran	ge should -2 to 2 A or better (including		
background sign	al).		

### **B. Flame System:**

- The system should have separate 100 mm Air-Acetylene Titanium Burner Head and also 50 mm Nitrous Oxide burner head with quick change burner head assembly.
- The instrument should have Universal Titanium finned burner with corrosion free Titanium material Fully inert spray chamber.
- Burner should have Horizontal/Vertical /Angular movement control (As per system requirement).
- Spray chamber should be capable of handling acids, alkalis and organic solvents.
- Alignment of the flame in the light beam is fully automatic, using a motorized burner mount for vertical and horizontal burner adjustment and automatic software- controlled self-optimization of the burner position.
- Burner height automatically adjustable and automatic gas controlled for optimization.
- The changeover should be automatic between Air/Acetylene & Acetylene/Nitrous Oxide through software.
- Automatic ignition and shut down of flame, inclusive in case of power outage or gas pressure drop.
- The instrument should have adjustable nebulizer with inert platinum/iridium capillary.
- The instrument should have all suitable online software controlled Hydride/VGA accessories for elemental analysis of As, Hg, Se, etc.VGA accessories must be

	upgradable with Flame autosampler & Zeeman based
	graphite furnace.
•	All flow rates should be fully automatic and controlled
	through software or programmable gas box.
•	The sampling compartment should be extremely spacious
	to allow easy access to change the burner heads or
	nebulizers.
•	Gas control system of an instrument must have
	maximum safety features like Automatic gas leak check,
	Prevention of wrong burner head use, Gas Pressure
	monitor, drain tank level monitor, flame monitor, etc., so
	as to have complete safe operation.
•	The instrument should have software controlled
	automatic flame ignition, automatic oxidant changeover,
	automatic fuel gas boost on oxidant changeover,
	Automatic flame shut down, Fuel line flashback arrestor,
	Fuel line pressure regulator, Fuel and oxidant line
	pressure sensors, Flame present sensor, Burner type
	sensor, Power failure protection, Empty drain protection,
	Spray chamber over pressure protection.
•	The instrument should have safety interlocks for Burner,
	Liquid Trap, Pressure Relief Bung, flame shield, flame
	operation, Gas and Oxidant Pressure, Spray Chamber,
	gas leak check.
C.	Software
•	Windows 10 or latest based operating software.
•	Software should handle instrument linear absorbance
	reading, concentration, or emission intensity, integration

time, calibration equation control.

- The instrument should have comprehensive quality control protocols facility including blank, multiple quality control standards, QA/QC audit trail and calibration failure.
- Software should have hardware validation function and should check wavelength accuracy, noise level, baseline drift, absorbance, repeatability etc. automatically.
- System must be EU CE and ISO certified.
- System must be field upgradable with Zeeman based
   Graphite furnace (100 vial or more) in future.

#### D. Accessories:

- Suitable OEM supplied PC OR reputed brand with latest configuration (windows 10, i7 processor, 1TB or more HDD, 8 GB RAM or more) and 21" LCD/LED monitor along with latest laser printer— (One set)
- Good quality air compressor with air filters for moisture, dust, oil & mist removal.
- High Purity filled Acetylene Gas Cylinder with dual stage brass Regulator.
- High Purity filled Nitrous Oxide Cylinder with dual stage brass Regulator and Preheater.
- High Purity filled Argon Gas Cylinder with dual stage brass Regulator.
- Complete Gas purification panel for all gases.
- SS Exhaust 15 Feet Fume Hood with vent assembly.
- Compatible 10KVA Online UPS with 30 minutes backup, 230 VAC,50Hz, Single Phase I/P & O/P,MCB and 30-meter cable
- Single element Standards 100 mL volume, 1000 ppm

concentration for above mentioned elements.		
Basic chemicals to be supplied for demonstration of AAS		
performance i.e. Flame & Hydride samples (Appx.200		
sample runs)		
<ul> <li>The vendor should install a properly sized tabletop</li> </ul>		
platform for the AAS and an aluminum-glass partition		
for its safety.		
F. Warranty:		
• 3 Years Warranty		

Signature of Tenderer
Name:
Designation:
Organization Name:
Contact No.: