

**DEMOCRATIC SOCIALIST REPUBLIC OF
SRI LANKA**



**UVA WELLASSA UNIVERSITY
AHEAD PROJECT**

**SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF
XRF MACHINE FOR THE DEPARTMENT OF BIOSYSTEMS
TECHNOLOGY
FACULTY OF TECHNOLOGICAL STUDIES**

REF No: UWU/AHEAD/RA1/R2/FTS/BST/LE/03

BIDDING DOCUMENT

Bid Opening On	30 th September 2019- 03.00 p.m.
Bid Validity up to	28 th January 2020


AHEAD Operation
Uva Wellassa University

Uva Wellassa University
Passara Road,
Badulla,
Sri Lanka.

Deputy Director Procurement
Uva Wellassa University

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**INVITATION FOR BIDS
UVA WELLASSA UNIVERSITY
AHEAD PROJECT**



**SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF XRF MACHINE
FOR THE DEPARTMENT OF BIOSYSTEMS TECHNOLOGY
FACULTY OF TECHNOLOGICAL STUDIES
UWU/AHEAD/RA1/R2/FTS/BST/LE/03**

The Chairman, Department Procurement Committee, on behalf of the AHEAD project Uva Wellassa University, invites sealed bids from eligible bidders and qualified bidders for **Supply, Delivery, and Installation & Commissioning of XRF Machine for the Department of Biosystems Technology, Faculty of Technological Studies.**

1. Bidding will be conducted through the National Competitive Bidding (NCB) procedure.
2. Bidder should have at least three years' experience in the relevant field in Sri Lanka.
3. Interested eligible bidders may obtain further information from the Deputy Director Procurement (AHEAD/OTS), Uva Wellassa University, Passara Road, Badulla, (Tel. No: 055-2226622 Ext- 1124, Fax No: 055-2226633), and inspect the bidding documents at the project office of the University between **09.00 am to 3.00 pm** from **9th September 2019 to 27th September 2019 and until 3.00p.m.**
4. A complete set of bidding documents in English may be purchased by interested bidders on submission of a written application to the Deputy Director Procurement (AHEAD/OTS), Uva Wellassa University, Passara Road, Badulla and upon payment of a non-refundable fee of Rupees **4,000.00** in cash at the AHEAD/OTS office of the University. The bidder can also download the bidding documents from the University website www.uwu.ac.lk/procurement. Those who are obtaining bidding documents from the University website should submit the complete documents along with a Bank Draft drawn in favor of the "Vice Chancellor, Uva Wellassa University" for Rs.4, 000.00 as non-refundable fee or the payments could be made to any branch of Bank of Ceylon, to the Uva Wellassa University, Account No: 82592579, and the original of the cash receipt/deposit slip to be attached with the bidding documents. The documents may be purchased **until 03.00 p.m. on 27/09/2019**. The pre bidding meeting has been scheduled to be held on **16/09/2019 at 11.30 a.m. at the Board Room of the University.**
5. Bids must be delivered to be addressing **Chairman, Department Procurement Committee, Uva Wellassa University, Passara Road, Badulla**, on or before **03.00 p.m. on 30/09/2019**. Please indicate the **"SUPPLY, DELIVERY, INSTALLATION & COMMISSIONING OF XRF MACHINE FOR THE DEPARTMENT OF BIOSYSTEMS TECHNOLOGY, FACULTY OF TECHNOLOGICAL STUDIES – UWU/AHEAD/RA1/R2/FTS/BST/LE/03"** on the top left hand corner of the envelope.
6. All bids must be accompanied by a Bid Security addressed to the **Vice Chancellor, Uva Wellassa University**, valid for 148 days from the date of the bid opening. The Value of the Bid Security shall be **Rs.240,000.00**
7. The bids shall be deposited in the 'Tender Box' available in the Registrar's Office of the University, or sent under Registered Cover to be received before the deadline to the address given in Clause No.5.
8. Late bids will be rejected. Bids will be opened immediately after the closing of bids, in the presence of the bidders or their authorized representatives who choose to attend the bid opening at the board room of the Uva Wellassa University.

Chairman,
Department Procurement Committee,
Uva Wellassa University,
Passara Road, Badulla
Tel/ Fax No: 055-2226475, 055-2226633

Section I.

Instructions to Bidders (ITB)

This Bidding Document is based on the standard bidding document for National Competitive Bidding (NPA/Goods/SBD 01). Section I will not be provided with this bidding document. Bidders are instructed to refer the Section I of the standard bidding document (NPA/Goods/SBD 01). The document is available at the website of NPA, www.npa.gov.lk

Section VI.

Conditions of Contract

This Bidding Document is based on the standard bidding document for National Competitive Bidding (NPA/Goods/SBD 01). Section VI will not be provided with this bidding document. Bidders are instructed to refer the Section VI of the standard bidding document (NPA/Goods/SBD 01). The document is available at the website of NPA, www.npa.gov.lk

Section VIII. Contract Forms

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Contract Agreement

THIS CONTRACT AGREEMENT is made

the [insert: number] day of [insert: month], [insert: year].

BETWEEN

(1) [Insert complete name of Purchaser], a [insert description of type of legal entity, for example, an agency of the Ministry of or corporation and having its principal place of business at [insert address of Purchaser] (hereinafter called “the Purchaser”), and

(2) [Insert name of Supplier], a corporation incorporated under the laws of [insert: country of Supplier] and having its principal place of business at [insert: address of Supplier] (hereinafter called “the Supplier”).

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., [insert brief description of Goods and Services] and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of [insert Contract Price in words and figures, expressed in the Contract currency (ies)] (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:

- (a) This Contract Agreement
- (b) Contract Data
- (c) Conditions of Contract
- (d) Technical Requirements (including Schedule of Requirements and Technical Specifications)
- (e) The Supplier’s Bid and original Price Schedules
- (f) The Purchaser’s Notification of Award
- (g) [Add here any other document(s)]

3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

4. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of 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 Democratic Socialist Republic of Sri Lanka on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: [insert signature]

in the capacity of [insert title or other appropriate designation]

in the presence of [insert identification of official witness]

For and on behalf of the Supplier

Signed: [insert signature of authorized representative(s) of the Supplier]

in the capacity of [insert title or other appropriate designation]

in the presence of [insert identification of official witness]

Performance Security

[The issuing agency, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated] ----- [Issuing Agency's Name, and Address of Issuing Branch or Office] -
----- * Beneficiary:----- [Name and Address of Employer] -----

Date: -----

PERFORMANCE GUARANTEE No.: -----

We have been informed that ----- [Name of Supplier] (hereinafter called "the Supplier") has entered into Contract No. ----- [Reference number of the contract] dated ----- with you, for the -----
---- Supply of ----- [name of contract and brief description] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required. At the request of the Supplier, we ----- [name of Agency] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of -----
[Amount in figures] (-----) [amount in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein. This guarantee shall expire, no later than the day of, 20.. [Insert date, 28 days beyond the scheduled completion date including the warranty period] and any demand for payment under it must be received by us at this office on or before that date.

[Signature(s)]

Section II.

Bidding Data Sheet (BDS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

[Instructions for completing the Bid Data Sheet are provided, as needed, in the relevant ITB Clauses.]

ITB Clause Reference	A. General
ITB 1.1	The Purchaser is: Uva Wellassa University, AHEAD Project
ITB 1.1	The name and identification number of the Contract are: Supply, Delivery, Installation & Commissioning of XRF Machine for the Department of Biosystems Technology, Faculty of Technological Studies. Contract No: UWU/AHEAD/RA1/R2/FTS/BST/LE/03
ITB 1.2	The bidder should have at least three years' experience in the relevant industry in Sri Lanka and should submit documents to prove experience in the industry.
ITB 2.1	The source of funding is: GOSL
ITB 4.4	Foreign bidders are allowed to participate in bidding: Not allowed
	B. Contents of Bidding Documents
ITB 7.1	For Clarification of bid purposes only, the Purchaser's address is: Attention: Deputy Director Procurement (AHEAD/OTS) Address: Uva Wellassa University, Passara Road, Badulla. Telephone: 055-2226622 Ext-1124 Electronic mail : ahead@uwu.ac.lk
	C. Preparation of Bids
ITB 11.1 (e)	The Bidder shall submit the following additional documents: A complete company profile of the bidders including, but not limited to, the following: <ul style="list-style-type: none"> • Business Registration Certificate • VAT Registration Certificate • List of client who use the Products • Past 3 years relevant experience in the relevant Industry in Sri Lanka • Manufacturer's Authorization. • Certificate of Registration under Public Contract Act.
ITB 15.1	The bidder shall quote the local expenditure in Sri Lankan Rupees.
ITB 18.1 (b)	After sales service is: Required
ITB 19.1	The bid shall be valid for: 120 days from 30/09/2019
ITB 20.1	Bid shall include a Bid Security in any of following ways (a) A Bank guarantee issued by a reputed bank operated in Sri Lanka. (b) Cash deposit at the Shroff Counter of the University (c) Cash deposit from any branch of Bank of Ceylon, to the Uva Wellassa University, Account No: 82592579, and the cash receipt/deposit slip to be attached with the bidding documents.
ITB 20.2	The amount of the Bid Security shall be: Rs. 240,000.00 Beneficiary: Vice Chancellor, Uva Wellassa University.

	The validity period of the bid security shall be 148 days from the closing date of the Bid
	D. Submission and Opening of Bids
ITB 22.2 (c)	The inner and outer envelopes shall bear the following identification marks: SUPPLY, DELIVERY, INSTALLATION & COMMISSIONING OF XRF MACHINE FOR THE DEPARTMENT OF BIOSYSTEMS TECHNOLOGY, FACULTY OF TECHNOLOGICAL STUDIES Contract No: UWU/AHEAD/RA1/R2/FTS/BST/LE/03
ITB 23.1	For bid submission purposes, the Purchaser's address is: Attention: Deputy Director Procurement (AHEAD/OTS) Address: Uva Wellassa University, Passara Road, Badulla. The deadline for the submission of bids is Date: 30/09/2019 Time: 03.00 p.m.
ITB 26.1	The bid opening shall take place at: Address: Board Room, Uva Wellassa University, Passara Road, Badulla. Date: 30/09/2019 Time: 03.00 p.m.
	E. Evaluation and Comparison of Bids
ITB 34.1	Domestic preference shall not be a bid evaluation factor.
ITB 35.3(d)	The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria: (a) Deviation in Delivery schedule: Option 2 is selected and the adjustment is 0.5% per week or part thereof (b) Deviation in payment schedule: Not applicable (c) The cost of major replacement components, mandatory spare parts, and service: Applicable
ITB 35.4	The following factors and methodology will be used for evaluation: Not applicable
ITB 35.5	Bidders shall be allowed to quote for one or more lots. [refer to Section III Evaluation and Qualification Criteria] Purchaser will evaluate the bid item by item basis.

Section III.

Evaluation and Qualification Criteria

1. Evaluation Criteria (ITB 35.3 (d))

The Purchaser's evaluation of a bid may take into account, in addition to the Bid Price quoted in accordance with ITB Clause 14, one or more of the following factors as specified in ITB Sub-Clause 35.3(d) and in BDS referring to ITB 35.3(d), using the following criteria and methodologies.

(a) Delivery schedule

Option 2

The goods covered under this invitation are required to be delivered within an acceptable range of weeks specified in the Schedule of Requirement. No credit will be given to earlier deliveries, and bids offering delivery beyond this range will be treated as nonresponsive. Within this acceptable range, an adjustment per week, as specified in the Bid Data Sheet, will be added for evaluation purposes only, to the bid price of bids offering deliveries later than the earliest delivery period specified in the Section V, Schedule of Requirements

(a) Deviation in payment schedule. **Not applicable**

(c) Cost of major replacement components, mandatory spare parts, and service:

The required spare parts for the goods covered under this invitation shall be available for at least five years of period and after sales service (Free service & Pay service).

(d) Specific additional criteria: **None**

2. Evaluation Criteria (ITB 35.4):

Not Applicable

3. Multiple Contracts (ITB 35.5)

The Purchaser shall award multiple contracts to the Bidder that offers the lowest evaluated combination of bids (one contract per bid) and meets the post-qualification criteria (this Section III, Sub-Section ITB 37.2 Post-Qualification Requirements)

The Purchaser shall:

- (a) Evaluate only lots or contracts that include items per lot and quantity per item
- (b) Take into account: The lowest-evaluated bid for each lot

3. Post qualification Requirements (ITB 37.2)

After determining the lowest-evaluated bid in accordance with ITB Sub-Clause 36.1, the Purchaser shall carry out the post qualification of the Bidder in accordance with ITB Clause 37, using only the requirements specified. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualifications.

Qualification Criteria:

- (a) Bid may be submitted by any reputed supplier of **Laboratory Equipment** , registered business in Sri Lanka or any accredited local agent who takes fullest responsibility for the whole bid. The local agent shall submit evidence of status, obligations, power of attorney and any other documentary evidence that he is duly authorized and eligible to bid on behalf of the manufacturer.
- (b) The bidders should also have previous experience of at least three years in relevant industry in the supply and also technical and financial capability necessary to perform the contract.
- (c) Bids will be rejected as non- responsive if documentary evidence in proof of above has not been provided.
- (d) If an Agent submits bids on behalf of more than one supplier, unless each such bid is accompanied by a separate Bid Form for each bid, and a bid security when required for each bid, and authorization from the respective Manufacturer, and valid vendor certificate, all such bids will be rejected as non-responsive.
- (e) Bidders should possess the Certificate of Business Registration issued by a Governmental Authority/ Registrar of Companies/ Provincial Registrar of Business in the relevant category.
- (f) Bidders shall register the Contract under Public Contract Act and submit the certificate of registration (ITB 11.1(e)).
- (g) Bidders offering goods under their own brand names should provide along with their bids a current certification/s of quality; Bid not complying with this requirement may be treated as non - responsive.
- (h) Having a service center in Badulla or Uva Province will be considered as an added qualification.

4. Domestic Preference (ITB 34.1) – **Not applicable**

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FORM OF BID
UVA WELLASSA UNIVERSITY
UWU/AHEAD/RA1/R2/FTS/BST/LE/03

To: Chairman
Procurement Committee
Uva Wellassa University
Passara road,
Badulla

We, the undersigned, declare that:

Having examined the Instructions to Bidders and Conditions of Tender, Conditions of Contract, Schedule of Requirements, Schedule of Particulars and Bills of Quantities, I / We the undersigned, offer to **Supply, Delivery, Installation & Commissioning of XRF Machine for the Department of Biosystems Technology, Faculty of Technological Studies, Contract No: UWU/AHEAD/RA1/R2/FTS/BST/LE/03** said Price Schedule amounting to Rupees
.....and cents.....(Rs) only

I / We undertake to **Supply, Delivery, and Installation & Commissioning of XRF Machine for the Department of Biosystems Technology, Faculty of Technological Studies** within the time stated in the tender documents, if our tender is accepted.

I / We agree to abide by this tender for period of 120 calendar days from the date fixed for receiving of Bids or any extended period and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Unless and until a formal Agreement is prepared and executed, this Tender, together with your written acceptance thereof, shall constitute a binding Contract between us.

I / We understand that, you are not bound to accept the lowest or any tender, you may receive.

This day of20..... in the capacity of..... duly authorized to sign Bids for and on behalf (indicate whether the Freehold Owner or Power of Attorney Holder) of (Blanks to be filled in BLOCK CAPITALS)

Signature.....

Duly authorized for signed on behalf of
(Name of the Bidder)

Address.....
.....

Date.....

Price Schedule
Supply, Delivery, Installation & Commissioning of XRF Machine for the
Department of Biosystems Technology
Faculty of Technological Studies
Contract No: UWU/AHEAD/RA1/R2/FTS/BST/LE/03

No	Items	QTY	Unit Price (excluding VAT)	Total Price (excluding VAT)	VAT 15%	Total Price including VAT
1	X-Ray Fluorescence Spectrophotometer – Wavelength Dispersive Spectroscopy (WDSXRF)	01				

Total Price with VAT (in Words):

.....

Maintenance charges (as a percentage) after the warranty period (If any):

Vat Registration No:

Signature.....

Duly authorized for signed on behalf of
(Name of the Bidder)

Address.....

.....

Date.....

FORM OF BID SECURITY

[insert issuing agency's name, and address of issuing branch or office]

Beneficiary: Vice Chancellor, Uva Wellassa University, Passara road, Badulla

Date: ----- [insert (by issuing agency) date]

BID GUARANTEE No.: ----- [insert (by issuing agency) number]

We have been informed that ----- [name of the Bidder] (hereinafter called "the Bidder") has submitted to you its bid dated ----- [date] (hereinafter called "the Bid") for the execution of [insert name of Contract] under Contract No. -----

Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.

At the request of the Bidder, we ----- [insert name of issuing agency] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ----- [insert amount in figures] ----- [insert amount in words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the bidder is in breach of its obligation(s) under the bid conditions, because the bidder:

- (a) has withdrawn its bid during the period of bid validity specified; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB") ; or
- (c) having been notified of the acceptance of its bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) the successful bidder furnishing the performance security, otherwise it will remain in force up to ----- (insert date)

Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.

[Signature of authorized representative(s)]



MANUFACTURER'S AUTHORIZATION

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the BDS.]

Date: [insert date (as day, month and year) of Bid Submission]

No.: [insert number of bidding process]

To: [insert complete name of Purchaser]

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 27 of the Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on _____ day of _____, _____ [insert date of signing]

Section V

Schedule of Requirements

1. List of Goods and Delivery Schedule

[The Purchaser shall fill in this table, with the exception of the column “Bidder’s offered Delivery date” to be filled by the Bidder]

No	Description of Goods	Qty	Final Destination as specified in BDS	Delivery Date 1		
				Earliest Delivery Date	Latest Delivery Date	Bidder’s offered Delivery date
1	As Listed in the Price Schedule		Department of Biosystems Technology, Uva Wellassa University	Within 4 Weeks of the Order	Within 10 Weeks of the Order	

* Destination of delivery: - Department of Biosystems Technology,
Uva Wellassa University,
Passara Road,
Badulla.

2. Technical Specifications

The bidder shall follow the following technical requirement and other requirement

General Conditions

For equipment, Bidders should provide following details:

Country of origin catalogues, Mother company registration letter, possible date of supply, Mother company warranty period, After sales and service facility, Service agreement cost and free service period, Approximate value for main spare parts, Installation & operational manual/s, installation and demonstration should provide free of charge if this product is purchased, Local agent should have necessary tools to carry out complete service and repair.

Technical Specifications

**Supply, Delivery, Installation & Commissioning of XRF Machine for the
Department of Biosystems Technology
Faculty of Technological Studies
Contract No: UWU/AHEAD/RA1/R2/FTS/BST/LE/03**

No	Item	Feature	Description	Bidders' Response
1	X-Ray Fluorescence Spectrophotometer – Wavelength Dispersive Spectroscopy (WDSXRF)	Sample input mode	Solid : Powder, Block, Crystal, thin films, Liquid	
			Adaptable to various sample sizes	
			400 mm (diameter) , 50 mm (thickness) 30 kg (mass) or close maximum value	
		Elemental range	${}^4\text{Be} - {}^{92}\text{U}$	
		Requirements for	Study the Biological, Geological and composite materials	
			Sputtering target composition	
			Isolation films	
			Metal films	
			Electrode films	
			Surface acoustic wave (SAW) device process: thickness and composition	
		Special features	Mapping and multi-spot XRF analysis Real-time camera or any optical zooming system to allows the analysis area to be viewed within software.	
		Resolution (Mn- Ka)	35eV or better	
		Detection limit	0.1 ppm - 100% or better	
		Depth detection	Thicknesses $\sim 1 \text{ \AA}$ to 1mm or better range	
Analyzing area	50 mm to 1 μm diameter or close			
Optics	Wavelength dispersive EDS enabled			
Automatic Sample	For around 10-20 samples			

	changer		
	Primary beam filter	Minimum six position, programmable changeable or better	
	Diaphragm exchanger	Six position area limiting diaphragm or better	
	Measurement time	300s or better	
	Soller slit (collimator)	Minimum four position, programmable or better	
	Crystal exchanger	8 position analyser or better	
	Analysing crystal	LiF 200, LiF220, PET, RX25, Ge, and XS-55 or better	
	Detector	For heavy elements: Scintillation counter	
		For light elements: Flow proportional counter	
		Or better technology	
	P5 and P-10 Gas	Ar 90% Methane 10% Mixture gas pressure 0.15 MPa or similar	
	Goniometer	Scan range: SC 5° - 118° (2θ) or better	
		F-PC 8° - 148° (2 θ) or better	
		Step scan: 0.005°, 0.01°, 0.02°, 0.05° or better	
		Angular reproducibility: Within ±0.0005°	
	X-ray tube	End window type - 75 μm, 50 μm and 30 μm Be Rh-anode, 4 KW or better Continuously ON during changeover	
	X-ray generator	High voltage generator: High frequency inverter system or better	
		: Max. Rating: 4 kW, 60 kV – 150 mA, 1 kW steps and 1 mA steps	
		: 0.01% for ±10% line deviation or better	
		Control: Micro computer	

		controlled or better	
		Automatic aging option	
		Automatic power off option	
	Spectrometer Chamber	Thermal stabilization preferably heater system to keep optical chamber temperature steady.	
		Facility to maintain the constant temperature even if the X-rays are OFF (or in standby mode with minimum kV-mA) and keep heating system ON even if the main unit is off.	
Accessories and external systems			
	Vacuum Pump	Noise free Single vacuum pump with dust trap or better	
	Other Accessories	Standard rock and metal samples (certified reference materials) for calibration - fused borate discs or better	
		Cu base FP package	
		Wide rage oxide calibration package (fused beads) or better	
		Pellet pressing device with metal jaw plates	
		Sample holders for pellets, blocks, liquid, and thin films	
		Pellet pressing device and additional sample holders for powder pellets and Teflon rings for pressing the powder	
	Cooling system	Water cooler: Drinking/Tap water equivalent quality heat exchange recirculating with tubing	
	Drainage	Open drainage	
Computer and software			
	Hardware	Complete desktop or laptop with mentioned bellow or better performance	

			CPU - i5 with windows 10 Operating system, RAM 4 GB, VGA 2GB	
			LED monitor 22-24 HD	
		Software	All licensed software included in CD-ROMs with help	
		Literature	All operational manuals, instrument manual and safety guidelines	
		Online data processing	Quantitative Analysis: User friendly licensed Data processing software with Fundamental Parameter Method	
			Semi-quantitative Analysis: components for Calibration Curve Method	
			Qualitative Analysis	
		Offline data processing	Quantitative Analysis: User friendly licensed data processing software with Fundamental Parameter Method	
			Semi-quantitative Analysis: components for Calibration Curve Method	
			Qualitative Analysis Display function	
Power and Conditions				
		Power requirements	230 V (50Hz), 15A or similar	
		UPS	Suitable smart UPS (20 kVA, 30 min back up or better) to run the system and any other recommended items or support system not explicitly mentioned above but are parts of the basic XRF spectrometer configuration. The batteries should be maintenance free.	

	Installation/ Operation environment	Line Voltage: 230V±10%, 50± 5% with protective RF ground. The required material for RF ground should be provided by the supplier 10 to 35 °C environment	
Other Features			
	Quality and Safety	DIN EN ISO 9001:2008 or better	
	Installation and service	Free installation, demonstration/training and two free services with extended service agreement	
	Literature	All operational manuals, instrument manual and safety guidelines	
	Warranty	3 year comprehensive	

Section VII

Contract Data

The following Contract Data shall supplement and / or amend the Conditions of Contract (CC). Whenever there is a conflict, the provisions herein shall prevail over those in the CC.

CC 1.1(i)	The Purchaser is: AHEAD Project, Uva Wellassa University
CC 1.1 (m)	The Project Site(s)/Final Destination(s) is/are: Department of Biosystems Technology, Uva Wellassa University, Passara Road, Badulla.
CC 8.1	For notices, the Purchaser's address shall be: Deputy Director Procurement (AHEAD/OTS) Uva Wellassa University, Passara Road, Badulla.
CC 11	Goods shall be supplies in compliance with the quality and the specification given.
CC 15.1	CC 15.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows: For Goods offered within Sri Lanka Payment shall be made in Sri Lankan Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. a) No Advance payment applicable for this contract b) Up to a maximum of ninety (90) percentage of the Contract Price, shall be paid on receipt of the Goods and confirm by the evaluation committee. c) Ten (10) percentage of the Contract price will be hold as Retention for a period of 12 months from the date of commissioning of equipment. d) The Retention shall be paid on completion of Twelve (12) months. During that period supplier shall correct all defects and confirmed by the purchase or his agent.
CC 17.1	A Performance Security – 10% Performance security may be in any of the following way (a) A Bank guarantee issued by a reputed bank operated in Sri Lanka. (b) Cash deposit at the Shroff Counter of the University
CC 26.1	If the supplier fails to deliver any or all of the goods by the date(s) specified above the purchaser may deduct from the payment a sum equivalent to 0.05% of the delivered price of the delayed good, for each day of delay.
CC 26.1	The maximum amount of liquidated damages shall be: 10 % from the contract sum.
CC 27.3	The warranty shall remain valid for a period of time specified with the specifications.
CC 27.6	The supplier shall remedy the defects within 3 Months from the date of information by the purchaser.

“Check List”

No	Required Specification	Bidder's Offer			
		Conformity		Page No	Remark
		Yes	No		
1	Company Profile				
2	Business Registration				
3	VAT Registration				
4	List of Clients				
5	Past three year experience in the industry				
6	Manufacturer Authorization				
7	Public Contract Act				
8	Bid Security				
9	Forms of Bids				
10	Price Schedule				
11	Tender Fee				
12	Financial Statement				
Status					

“Bidders must be filled above check List”