



University of Ruhuna

Wellamadama

Matara.

23.06.2021

The Manager

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Invitation for Bids (IFB)

Contract: IFB No: : Supply, Delivery, Installation and Testing of Laboratory Equipments & Chemicals

AHEAD/RA3/RIC/RUH/LABORATORY EQUIPMENT & CHEMICALS/2021/NS 132

The Chairman, Department Procurement Committee on behalf of the University of Ruhuna now invites sealed bid from you for **Supply, Delivery, Installation and Testing of Laboratory Equipments & Chemicals** indicated in the annexed bid document

01. Bidding will be conducted through National Shopping method of procurement.
02. You may obtain further information if any from the **Deputy Director- Procurement**, Supplies Branch, University of Ruhuna, Wellamadama, Matara. (T/P 041- 2227027/ Fax No. 041 – 2227027/ E-mail:secretary_otsruh2019@gmail.com)
03. Bids must be delivered by mail in sealed envelopes addressed to Deputy Director (Procurement), AHEAD Program-OTS Office, University of Ruhuna, Wellamadama, Matara before **02.00 p.m. on 08.07.2021**. Late bids will be rejected.
04. This contract is subject to,
 - I. Providing of performance security of 10% of the total contract price in accordance with the format attached and issued with this in favor of the **Vice Chancellor**, University of Ruhuna.
 - II. Entering in to the formal agreement with the University of Ruhuna.

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Deputy Director- Procurement
University of Ruhuna,
Matara.

Mr. R. C. Wijewardena
Deputy Director- Procurement
Operations & Finance
AHEAD Program
University of Ruhuna



UNIVERSITY OF RUHUNA

**PROCUREMENT OF GOODS UNDER
NATIONAL SHOPPING PROCEDURES**

**INVITATION FOR QUOTATIONS
FOR**

**Supply, Delivery, Installation and Testing of
Laboratory Equipments & Chemicals**

IFB No: AHEAD/RA3/RIC/RUH/LABORATORY EQUIPMENTS & CHEMICALS/2021/ NS 132

Mr. R. C. Ketipearachchi
Deputy Director, Procurement
Operations, Technical, Contractual
& Administration
University of Ruhuna
Wellington Road, Ruhuna

Section I. Instructions to Vendors(ITV)

A:General	
1. Scope of Bid	1.1 The Purchaser named in the Data Sheet invites you to submit a quotation for the supply of Goods as specified in Section III Schedule of Requirements.
B:Contents of Documents	
2. Contents of Documents	2.1 The documents consist of the Sections indicated below. <ul style="list-style-type: none"> • Section I. Instructions to Vendors(ITV) • Section II. Data Sheet • Section III. Schedule of Requirements • Section IV. Technical Specifications & Compliance with Specifications • Section V. Quotation submission Form(s)
C:PreparationofQuotation	
3. Documents Comprising your Quotation	3.1 The Quotation shall comprise the following: <ul style="list-style-type: none"> (a) Quotation Submission Form and the Price Schedules; (b) Technical Specifications & Compliance with Specifications
4. Quotation Submission Form and Price Schedules	4.1 The vendor shall submit the Quotation Submission Form using the form furnished in Section V. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested. 4.2 Alternative offers shall not be considered. The vendors are advised not to quote different options for the same item but furnish the most competitive among the options available to the bidder.
5. Prices and Discounts	5.1 Unless specifically stated in Data Sheet, all items must be priced separately in the Price Schedules. 5.2 The price to be quoted in the Quotation Submission Form shall be the total price of the Quotation, including any discounts offered.

	<p>5.3 The applicable VAT shall be indicated separately.</p> <p>5.4 Prices quoted by the vendor shall be fixed during the vendor's performance of the Contract and not subject to variation on any account. A Quotation submitted with adjustable price shall be treated as nonresponsive and may be rejected.</p>
6. Currency	6.1 The vendors shall quote only in Sri Lanka Rupees.
7. Documents to Establish the Conformity of the Goods	<p>7.1 The vendor shall furnish as part of its quotation the documentary evidence that the Goods conform to the technical specifications and standards specified in Section IV, "Technical Specifications & Compliance with Specifications".</p> <p>7.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods, demonstrating substantial Responsiveness of the Goods to the technical specifications, and if applicable, a statement of deviations and exceptions to the provisions of the Technical Specifications given.</p> <p>7.3 If stated in the Data Sheet the vendor shall submit a certificate from the manufacturer to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in Sri Lanka.</p>
8. Period of Validity of quotation	8.1 Quotations shall remain valid for the period of sixty(60) days after the quotation submission deadline date.
9. Format and Signing of Quotation	9.1 The quotation shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the vendor.
D: Submission and Opening of Quotation	
10. Submission of Quotation	<p>10.1 Vendors may submit their quotations by mail (Registered post) by hand in sealed envelopes addressed to the Purchaser and bear the specific identification of the quotation number.</p> <p>10.2 If the quotation is not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the quotation.</p>
11. Deadline for Submission of Quotation	11.1 Quotation must be received by the Purchaser at the address set out in Section II, "Data Sheet", and not later than the date and time as specified in the Data Sheet.
12. Late Quotations	12.1 The Purchaser shall reject any quotation that arrives after the Deadline for submission of quotations, in accordance with ITV Clause 11.1 above.

13. Opening of Quotations	<p>13.1 The Purchaser shall conduct the opening of quotation in public at the address, date and time specified in the Data Sheet.</p> <p>13.2 A representative of the bidders may be present and mark his attendance.</p>
E: Evaluation and Comparison of Quotations	
14. Clarifications	<p>14.1 To assist in the examination, evaluation and comparison of the quotations, the Purchaser may, at its discretion, ask any vendor for a clarification of his quotation. Any clarification submitted by a vendor in respect to his quotation which is not in response to a request by the Purchaser shall not be considered.</p> <p>14.2 The Purchaser's request for clarification and the response shall be in writing.</p>
15. Responsiveness of Quotations	<p>15.1 The Purchaser will determine the responsiveness of the quotation to the documents based on the contents of the quotation received.</p> <p>15.2 If a quotation is evaluated as not substantially responsive to the documents issued, it may be rejected by the Purchaser.</p>
16. Evaluation of quotations	<p>16.1 The Purchaser shall evaluate each quotation that has been determined, to be substantially responsive.</p> <p>16.2 To evaluate a quotation, the Purchaser may consider the following:</p> <ul style="list-style-type: none"> (a) the Price as quoted; (b) price adjustment for correction of arithmetical errors; (c) price adjustment due to discounts offered. <p>16.3 The Purchaser's evaluation of a quotation may require the Consideration of other factors, in addition to the Price quoted if stated in Section II, Data Sheet. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods.</p>
17. Purchaser's Right to Accept any Quotation, and to Reject any or all Quotations	<p>17.1 The Purchaser reserves the right to accept or reject any quotation, and to annul the process and reject all quotations at any time prior to acceptance, without there by incurring any liability to bidders.</p>

F: Award of Contract

18. Acceptance of the Quotation	18.1 The Purchaser will accept the quotation of the vendor whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the documents issued.
19. Notification of acceptance	19.1 Prior to the expiration of the period of validity of quotation, the Purchaser will notify the successful vendor, in writing that his quotation has been accepted.
20. Signing of Contract	20.1 Within (14) days after notification, the Purchaser shall complete the Agreement, and in form the successful Bidder have to sign it. 20.2 Within fourteen (14) days of receipt of such information, the successful Bidder shall sign the Agreement.
21. Performance Security.	21.1 Within fourteen (14) days of the receipt of notification of award from the Purchaser, the successful Bidder is required furnish the Performance Security in accordance with the CC, using for that purpose the Performance Security Form included in Section VII contract forms, The Employer shall promptly notify the name of the winning Bidder to each unsuccessful Bidder and discharge the Bid Security of the unsuccessful bidders. 21.2 Failure of the successful Bidder to submit the above mentioned Performance Security or sign the contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security or execution of the Bid-Securing Declaration. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder, whose offer is substantially responsive and is determined by the purchaser to be qualified to perform the contract satisfactorily.

Section II: Data Sheet

ITV Clause Reference	
1.1	The Purchaser is: Vice Chancellor Address: University of Ruhuna, Wellamadama Matara.
5.1	If the bidder is allowed to quote for lesser number of items than the total number of items specified, indicate details.
7.3	Manufacturer's Authorization is required.
11.1	Address for submission of Quotations is Director/OTS, AHEAD Project, University of Ruhuna, Wellamadama, Matara. Deadline for submission of Quotations is at 2.00 p.m. on 08.07.2021
13	The Quotations shall be opened at the following address:
16 ¹	Other factors that will be considered for evaluation are (List and describe the methodology):
Additional clause	
17. Payment	Payment shall be made within eight weeks after receiving the invoice for each item supplied.
18. Liquidated Damages	The supplier should deliver the items within the delivery period stipulated in the schedule of requirements. The supplier should make payment to the purchaser for each week of delay in delivery, at the rate of 0.5% of the contract sum per each week of delay, up to a maximum of 10% of the contract sum.
21. Performance Security	The supplier should forward performance security of 10% of the total contract price. This should be issued in favor the Vice Chancellor, University of Ruhuna, valid for a period of one year from date of acceptance of the order. (Format is attached)

Mr. R. C. ...
 Dept. of ...
 Operations ...
 University of Ruhuna
 Wellamadama, Matara

Section III: Schedule of Requirements

Note:

1. Bidders a) May quote whole item,
2. Evaluation will be based on: b) Separately

Item Number	Brief Description of the Goods	Specification and Requirements	Quantity	Delivery Period in Days from issue of Purchase Order	Place of Delivery
01	Stirrer Bars	Please refer Section IV (annex I)	20	2 weeks	University of Ruhuna, Wellamadama.
02	Chemical/Material Containers	Please refer Section IV (annex II)	20	2 weeks	University of Ruhuna, Wellamadama.
03	Magnetic Separator	Please refer Section IV (annex III)	01	2 weeks	University of Ruhuna, Wellamadama.
04	Glass Reactor	Please refer Section IV (annex IV)	01	2 weeks	University of Ruhuna, Wellamadama.
05	Vacuum pump connectors and utensils.	Please refer Section IV (annex V)	01	2 weeks	University of Ruhuna, Wellamadama.
06	Thermal Gravimetric Analyzer	Please refer Section IV (annex VI)	01	2 weeks	University of Ruhuna, Wellamadama.
07	Analytical Balance	Please refer Section IV (annex VII)	01	2 weeks	University of Ruhuna, Wellamadama.
08	Lab Scale Pyrolysis Unit	Please refer Section IV (annex VIII)	01	2 weeks	University of Ruhuna, Wellamadama.
09	Mechanical Miller	Please refer Section IV (annex IX)	01	2 weeks	University of Ruhuna, Wellamadama.
10	n-Octane	Please refer Section IV (annex X)	10L	2 weeks	University of Ruhuna, Wellamadama.

Please Mention the delivery date 2021

Section V Quotation Submission Form

[The Vendor shall fill in this Form in accordance with the instructions indicated. No Alterations to its form at shall be permitted and no substitutions will be accepted.]

Date:

To:.....

[insert complete name of Purchaser]

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the document issued;
- (b) We offer to supply in conformity with the documents issued and in accordance with the Delivery Schedules specified in the Schedule of Requirements, the following Goods[insert a brief description of the Goods];
- (c) The total price of our quotation including any discounts offered is: [insert the total quoted price in words and in figures];
- (d) Our quotation shall be valid for the period of time specified in ITVSub-Clause8.1, from the date fixed for the quotation submission deadline in accordance with ITV Sub-Clause11.1, and its hall remain binding up on us and may be accepted at any time before the expiration of that period;
- (e) We understand that this quotation, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us.
- (f) We understand that you are not bound to accept the lowest evaluated quotation or any other quotation that you may receive.

Signed:.....

[insert signature of Person whose name and capacity are shown]

Name:.....

[insert complete name of person signing the Bid Submission Form]

Dated:

Umsatzsteuerliche Begünstigung
Laptop, Notebook, Tablet, Smart
Operatingsystem, Peripherieartikel
www.wahlrecht.de
Universität Würzburg
Wahlmanagement, Wetzlar

PRICE SCHEDULE -IV

Package Name:

Item Number	Brief Description of the Goods	Quantity	Unit Rate. (Without VAT) (Rs. & Cots)	VAT (Rs. & Cots)	Total Amount (With VAT) (Rs. & Cots.)
01	Stirrer Bars	20			
02	Chemical/Material Containers	20			
03	Magnetic Separator	01			
04	Glass Reactor	01			
05	Vacuum pump connectors and utensils.	01			
06	Thermal Gravimetric Analyzer	01			
07	Analytical Balance	01			
08	Lab Scale Pyrolysis Unit	01			
09	Mechanical Miller	01			
10	n-Octane	10L			

We agree to supply, delivery, installation & maintenance the above goods in accordance with the technical specifications for a total contract price of Rupees..... (amount in figures) (

.....amount in words) within the period specified in the Invitation for Quotations.

We also confirm that the warrantee/ guarantee specified shall apply to the offered goods.

.....
Signature of the Bidder

.....
Name of the Bidder

.....
Date

Mr. R. C. Kefipearachchi
Deputy Director - Planning and
Operations, Technical Services Unit
AFIAD Project
University of Ruhuna
Wellamadama, Matara

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 & 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)]

Mr. R. C. Kelpachchi
Deputy Director - Procurement
Operations, Technical Secretariat
Ministry of Health
University of Kelaniya
Katubeddi, Katubeddi, Katubeddi

Specifications

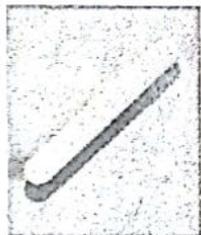
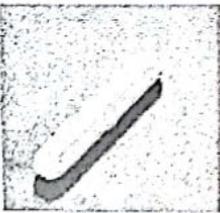
Procurement Plan for Goods – AHEAD RIC – Department of Chemistry, Faculty of Science,

University of Ruhuna

Credit/Grant Number : RIC Round 2 No. 18

Project Name : AHEAD/RA3/RIC/RUH/SCI/Carbon Char

AHEAD/RA3/RIC/RUH/SCI/Carbon Char/ GOODS/06	Supply & Delivery Of Stirrer Bars	Quantity is given in the following
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No:	Items	Specifications	Qty	Bidders compliance	
				Yes/ No	If 'No' Indicate offer
1.	1.1. Cylindrical Magnetic Stirrer bar 	<ul style="list-style-type: none"> • Plain design with rounded ends • Strong alloy magnets sheathed in pure white inert PTFE • Chemical Resistant & High temperature resistant (~ 300 °C) • Lengths –4.5 cm 	2 pack per each length (1 pack = 2 bars)		
	1.2. Octagonal Magnetic Stirrer bar 	<ul style="list-style-type: none"> • Strong alloy magnets sheathed in pure white inert PTFE with central pivot ring • Chemical Resistant & High temperature resistant (~ 300 °C) • Lengths –2.5 cm 	5 pack per each length (1 pack = 2 bars)		
	1.3. Triangular Magnetic Stirrer bar 	<ul style="list-style-type: none"> • Strong alloy magnets sheathed in pure white inert PTFE • Chemical Resistant & High temperature resistant (~ 300 °C) • Lengths – 5 cm 	1 pack per each length (1 pack = 2 bars)		

	<p>1.4. Plain Magnetic Stirrer bar</p> 	<ul style="list-style-type: none"> • Rounded ends • Strong alloy magnets sheathed in pure white inert PTFE • Chemical Resistant & High temperature resistant (~ 300 °C) • Length – 7.5 cm 	<p>2 pack (1 pack = 2 bars)</p>		
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Documentation
Manufacture product catalogues with requested information should be supplied
Manufacture authorization for the bidder to represent the given brand
User reference list should be attached

Mr. R. C. Phillipard
Deputy Director - Equipment
Operations & Chemicals
Z-REVD Project
University of Rufuna
Molokani, Tama, Victoria

Specifications

Procurement Plan for Goods – AHEAD RIC – Department of Chemistry, Faculty of Science,

University of Ruhuna

Credit/Grant Number : RIC Round 2 No. 18

Project Name : AHEAD/RA3/RIC/RUH/SCI/Carbon Char

AHEAD/RA3/RIC/RUH/SCI/Carbon Char/ GOODS/08	Supply and delivery of Chemical/material containers	Quantity = 20
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No:	Items	Specifications	Qty	Bidders compliance	
				Yes/ No	If 'No' indicate your offer
1.	Chemical/ Material Containers	<ul style="list-style-type: none">• HDPE/ Plastic• Chemical Resistant• Lid with buckets• Durable• Handle grip for easy lifting and carrying• Capacity – 2 L<li style="padding-left: 20px;">5 L<li style="padding-left: 20px;">10 L<li style="padding-left: 20px;">15 L	05 05 05 05		

Specifications

Procurement Plan for Goods – AHEAD RIC- Department of Chemistry, Faculty of Science,
University of Ruhuna

Credit/Grant Number: RIC round 02 No. 18

AHEAD/RIC/RUH/SCI/Carbon char/ GOODS/09	Supply and installation of Magnetic separator	Quantity = 1
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No.	Specifications	Requirements	Bidders compliance	
			Yes/ No	If "No" indicate your offer
1	Country of Origin	Manufacturing country should be Japan, Europe or USA		
2	Brand	Please specify		
3	Model	Please specify		
4	Manufacturer Authorization	Bidder should submit manufacturer's authorization certificate for quoted brand direct from Manufacture		
5	Application	For Separating magnetic particles from carbon black powder		
6	Magnetic Intensity	18000 Gauss or more and must be adjustable		
7	Impeller Diameter	45 mm – 65 mm		
8	Roll Rotating Speed (r/min)	4-10 should be adjustable		
09	Pole pitch	30 – 40 mm		
10	Capacity	5 – 25 (kg/hr)		
11	Feeding size	0 – 5 mm		
12	Power voltage	All component should operate on 230 V ± 10%, 50 Hz		

13	Warranty	At least 03 years		
14	Essential documentation qualification / services criteria for evaluation	Printed original literature from instrument manufacturer should be attached with the offer. All requested specifications should highlight and tag for easy reference		
		Letter of Authority from instrument manufacturer should be accompanied with the tender document by the certifying local agent in Sri Lanka. Offers not carrying authentic letter of authority will be rejected.		
		Complete set of operation and maintenance manuals should be available		
		Installation and commissioning of the instrument should be done by the local agent		
		One set of all the documents containing warranty certificates, operation manual and method manual should in the English language		
		After sales services, calibration and maintenance work should be provided by the local agent up to 5 years. Local agent should attend to service and repairs within 24 hours from a breakdown.		
		Local representative should have		

		<p>proper after sales service and details of after sales service members should be submitted with the quotation.</p> <p>Copy of training certificates of after sales service members should be attached.</p>		
15	Training	<p>Complete training for operation, maintenance and calibration of instrument should be provided by the local agent at the installation site.</p>		

Mr. R. C. Kothandaraman
 Director, Project Management
 Department of Technical Education
 Government of Tamil Nadu
 Chennai - 600 009

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Specifications

**Procurement Plan for Goods – AHEAD RIC- Department of Chemistry, Faculty of Science,
University of Ruhuna**

Credit/Grant Number: RIC round 02 No. 18

AHEAD/RIC/RUH/SCI/Carbon char/ GOODS/10	Supply and installation of Glass reactor	Quantity = 1
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No.	Specifications	Requirements	Bidders compliance	
			Yes/ No	If “No” indicate your offer
1	Country of Origin	Please specify		
2	Brand	Please specify		
3	Model	Please specify		
4	Manufacturer Authorization	Bidder should submit manufacturer's authorization certificate for quoted brand direct from Manufacture		
5	Application	For reflux and distillation operations with a stirring and heating element, for all laboratory's pilot plant operations and small production		
6	Reactor module built material	Base - Glazed steel or high quality stainless steel Reaction jacked – Borosilicate glass (resistance to the temperature)		
7	Reaction Jacket	Volume 5 liters Must be hydrolytic resistance, acid resistance, alkali resistance and		

		temperature resistance		
8	Reactor vacuum pressure	± 0.5 pressure bars		
9	Working temperature	04 to 200 °C or better		
10	Stirring speed	0 to 250 rpm or better		
11	Maximum torque	132 N/cm		
12	Stirring unit type	Overhead stirrer type		
13	Stirring anchor	Should be hydrolytic resistance, acid resistance, alkali resistance and temperature resistance		
14	Accessories	Thermo static bath should be supplied to regulate the temperature from ambient 5°C -200 °C		
		Water Re-circulator should be supplied to regulate the temperature		
		Easy handling -Trolley or something like that need to keep the accessories		
15	Power voltage	All component should operate on 230 V ± 10%, 50 Hz		
16	Warranty	At least 3 years warranty		
17	Essential documentation qualification / services criteria for evaluation	Printed original literature from instrument manufacturer should be attached with the offer. All requested specifications should highlight and tag for easy reference		
		Letter of Authority from instrument manufacturer should be accompanied with the tender document by the certifying local		

Dr. R. G. ...
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		agent in Sri Lanka. Offers not carrying authentic letter of authority will be rejected.		
		Complete set of operation and maintenance manuals should be available		
		Installation and commissioning of the instrument should be done by the local agent		
		One set of all the documents containing warranty certificates, operation manual and method manual should in the English language		
		After sales services, calibration and maintenance work should be provided by the local agent up to 5 years. Local agent should attend to service and repairs within 24 hours from a breakdown.		
		Local representative should have proper after sales service and details of after sales service members should be submitted with the quotation. Copy of training certificates of after sales service members should be attached.		
18	Training	Complete training for operation, maintenance and calibration of instrument should be provided by		

		the local agent at the installation site.		
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Mr. R. G. Kelippearatchi
Deputy Director - Procurement
Operations Technical Secretariat
AHEAD Project
University of Ruhuna
Welfordama, Matara

Specifications

Procurement Plan for Goods – AHEAD RIC- Department of Chemistry, Faculty of Science, University of Ruhuna

Credit/Grant Number: RIC round 02 No. 18

AHEAD/RIC/RUH/SCI/Carbon char/ GOODS/11	Supply and installation of Vacuum pump connectors and utensil	Quantity = 1
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No	Specifications	Requirements	Bidders compliance	
			Yes/ No	If "No" indicate your offer
1	Country of origin	Please specify		
2	Brand	Please specify		
3	Model	Please specify		
4	Application	For Vacuum drying Purpose		
5	Features	Should be dual bank manifolds come with 0-10 mm bore high-vacuum PTFE valves.		
		Oil bubler with 5-7 mL		
		Cold Trap with dewar length in 325 mm		
		Three set of round bottom flasks in capacity of 100 mL, 250 mL, 500 mL, 1 L. (neck size 24/29) Relevant connectors (4 items)and clips (4 items) should be provided		
		Relevant Tubing should be provided		
6	Tubes	Heat sealable, Abrasion resistant, Resistance to acids & bases, Crack resistance		
7	Pump clamps	Pump clamps with thumb screw		
8	Warranty	One year or more comprehensive		
9	Other Mandatory Requirements	Printed original literature from instrument manufacturer should be attached with the offer. All requested specifications should highlight and tag for easy reference		
		Letter of Authority from instrument manufacturer should be accompanied with the tender document by the certifying local agent in Sri Lanka. Offers not carrying authentic letter of authority will be rejected.		
		Complete set of operation and maintenance manuals should be		

	available		
	Installation and commissioning of the instrument should be done by the local agent. It should be commissioned to working condition by using the vacuum pump available in the Department.		
	Complete training for operation, maintenance and calibration of instrument should be provided by the local agent at the installation site.		
	After sales services, calibration and maintenance work should be provided by the local agent. Local agent should attend to service and repairs within 24 hours from a breakdown		
	Local representative should have proper after sales service and details of after sales service members should be submitted with the quotation. Copy of training certificates of after sales service members should be attached.		

Specifications

Procurement Plan for Goods - AHEAD RIC – Department of Chemistry, Faculty of Science,
University of Ruhuna

Credit/Grant Number: RIC round 2 No. 18

AHEAD/RA3/RIC/RUH/SCI/Carbon char/GOODS/12	Supply and installation of Thermal Gravimetric Analyser	Quantity = 1
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Specification of TGA

No.	Specifications	Requirements	Bidders compliance	
			Yes/ No	If "No" indicate your offer
1	Manufacturer	Internationally recognized Brand suitable to take measurement to be published in indexed journals		
2	Local agent/Supplier	Local agent/supplier must submit a formal letter of authentication (or similar) from the manufacturer to sell and maintain the product in Sri Lanka		
3	Country of origin	Manufacturing country should be Japan, Europe, or USA		
4	Brand	Please specify		
5	Model	Please specify		
6	Manufacturer Authorization	Bidder should submit manufacturer's authorization certificate for quoted brand direct from Manufacture		
7	TGA Balance type	Top loading balance		
8	Temperature	Ambient to 1000°C or better		

	range			
9	Temperature calibration	Curie point		
10	Scanning rates	0.1 to 200 °C/min		
11	Scanning temperature accuracy	±1 °C or better		
12	Scanning temperature precision	±0.8 °C		
13	Cooling time	1000 °C to 100 °C under 10 min or less		
14	Sample temperature precision	± 0.5 °C or better		
15	Balance digital resolution	0.2 µg or better		
16	Balance sensitivity	1 µg		
17	Balance accuracy	± 0.02 %		
18	Balance precision	± 0.01 %		
19	Balance capacity	1500 mg or better		
20	Furnace	Made of a material which is corrosion resistant		
21	Control	Software Control with PC		
22	Accessories and items for complete the system	Sample pans	Ceramic sample pans (5 Nos) volume 180 µL or above	
			Platinum sample pans (3 Nos or above)	
		Computer and	Latest branded computer (windows 10, 64 bit or latest), 19" inch LCD monitor	
			Minimum 15 minutes battery backup, 2	

Mr. R. C. ...
 Deputy Director ...
 ...

		UPS	kVA		
		Printer	Branded laser printer		
		Control Software	Chromatography data system for control, acquisition, processing, & Reporting software. Instrument manufacturer licensed software should be provided for the TGA system along with the software CD/DVD and required original license key of the software. Software should have GLP feature for system monitoring and audit trail features.		
			Ability of data conversion to other formats/ spread sheets		
		Supply voltage	All component should operate on 230 V \pm 10%, 50 Hz		
			Electrically operated Chiller for Cooling purpose		
23	Standards / certificates		Weight Calibration standards with certificates should be supplied		
			Temperature Calibration standards should be supplied		
			Developed under ISO 9001. Designed and tested to be in compliance with the legal requirements for Laboratory analytical instruments.		
24	Warranty		At least 3 years warranty		
25	Operational Gasses		High Purity (99.99%) Nitrogen Cylinder with dual stage regulator		

		High Purity (99.99%) Oxygen Cylinder with dual stage regulator		
26	Gas Purification Filters	Moisture / Hydrocarbon filter for above Gas		
27	Essential documentation qualification / services criteria for evaluation	Printed literature for the instrument manufacturer should be attached with the offer (All specifications requested should be highlighted and tagged for evaluation reference). In the event of all technical features not mentioned in the broacher instrument manufacture should confirm availability of features on their letter head		
		Should provide a latter of authority from the manufacture, certifying that the local agent in Sri Lanka. Offers not carrying authentic letter of authority will be rejected. Instrument should be a fully workable system. If any other accessory, consumable is needed for completed operation supplier must quote for required accessories, consumables and chemicals		
		Supplier should provide documentation evidence for providing after sales service for 5 years and regular checkup for five years.		

		Manufactures independently provide a written confirmation that they will provide their services and support even they change the local agent in Sri Lanka. This letter should be signed by the most senior and empowered manager responsible for Sri Lankan Market. Closest support center of the manufacturer and contact person details need to be attached to the tender.		
		One set of operation manual and method manual, in the English language		
		The supplier must agree to provide necessary spare parts at least for 7 years after installing the instrument.		
		In order to get the maximum usage of the instrument manufacturer should agree to offer its technical advice free of charge.		
28	Training	Complete training for operation, maintenance and calibration of instrument should be provided by the local Agent/Manufacturer at installation site. Trainer should have sufficient knowledge on technology as well as sample preparation.		

Specifications

Procurement Plan for Goods - AHEAD RIC – Department of Chemistry, Faculty of Science,
University of Ruhuna

Credit/Grant Number: RIC round 2 No. 18

AHEAD/RA3/RIC/RUH/SCI/Carbon char/GOODS/20	Supplying of Analytical Balance	Quantity = 1
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Specifications of Analytical Balance

No	Specifications	Requirements	Bidders compliance	
			Yes/ No	If "No" indicate your offer
1	Country of origin	Manufacturing country should be Japan, Europe, or USA		
2	Brand	Please specify		
3	Model	Please specify		
4	Weighing Capacity	Up to 220 g		
5	Readability	0.0001 g (0.1 mg)		
6	Repeatability	0.0001 g (0.1 mg)		
7	Stabilization Time(s)	Less than 4.0 seconds (Approx)		
8	Linearity ±	0.0002 g (0.2 mg)		
9	Units	g, mg		
10	Level indicator	Yes		
11	Operational procedure manual	Yes (should be provided in English)		
12	Tarring	Tarring up to full range		
13	Weighing pan	Weighing pan Material – Stainless Steel Weighing pan Diameter – 80-90 mm		
14	Weighing chamber	Weighing Chamber Height at least 225 mm		
15	Display	Large high-contrast LCD display for maximum ease of reading		
16	Calibration	Internal, with built in motorized calibration weight and Should be able to do external calibration using suitable weight		
17	Leveling	Level indicator on the balance for quick & easy leveling		
18	Draft shield	Draft Shield should be Transparent, Easy to clean with sliding top & side		

		doors		
19	Operational conditions	Balance Operating Temperature +10 to +40°C		
20	Power Supply Voltage	220V- 240V , 50/60hz AC		
21	Anti-theft lock	Anti-theft locking and below balance weighing should be possible		
22	Automatic Shut-Off	Yes		
23	Warranty	One year or more comprehensive		

Specifications

Procurement Plan for Goods – AHEAD RIC – Department of Chemistry, Faculty of Science,

University of Ruhuna

Credit/Grant Number : RIC Round 2 No. 18

Project Name : AHEAD/RA3/RIC/RUH/SCI/Carbon Char

AHEAD/RA3/RIC/RUH/SCI/Carbon Char/ OVAA 16-1, 16-2, 16-3	Supply & Installation of lab scale pyrolysis unit	Quantity = 1
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Goods / 21

No	Specifications	Requirements	Bidders Compliance	
			YES/ NO	If 'No' indicate your offer
01	Make	Please specify		
02	model	Please specify		
03	Country of manufacture	Please specify		
04	Adjustable temperature	More than 800 °C		
05	Temperature control Unit	Should be PID heating controller with the programmable		
06	Temperature sensitivity	Minimum ± 3 °C		
07	Heating Rate	Min 1 °C/min- max 10 °C/min		
08	Temperature measurement parameters	<ul style="list-style-type: none"> • Protected N-type thermocouple inside of furnace • External temperature measurement feature from the reactor zone • Low external surface temperature (R.T. + 40 °C) 		
09	Reactor Internal Volume	2L - 5 L		
10	Reactor Made	One-piece high temperature and corrosion-resistant stainless steel materials		
11	Reactor furnace system	<ul style="list-style-type: none"> • Should have high-quality fiber insulation • External temperature measurement feature from the reactor zone 		
12	Heating element	Should be a FeCrAl alloy (Kanthal A1)		

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 Deputy Director - Procurement
 Department of Chemistry
 Faculty of Science
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 Matugama, Sri Lanka

13	Condensing container	Should be cooled		
14	Gas section	<ul style="list-style-type: none"> • Manual gas flow meter • Gas-tight feature • Adjustable reactor gas inlet • Minimum 3 pcs gas condensing traps • Stainless steel wire sample filter 		
15	Observation functions	<ul style="list-style-type: none"> • Need to set and observe real temperature • Reactor chimney temperature 		
16	loading Facility	<ul style="list-style-type: none"> • Lid of the furnace and reactor opens from the top • Able to resume the program after the power failure 		
17	Control setting of Display	Should be a control major key function (temperature, saving, programming, alarm)		
18	Electrical Connection	<ul style="list-style-type: none"> • 230 V/ 50 Hz <p>Note: If power supplies higher than 230 V/ 50 Hz, should be provided to power line from the main switch board.</p>		
19	Security features	<ul style="list-style-type: none"> • Audiovisual warning alarm • System protection for high-temperature 		
20	Dimensions [Inner Diameter x Depth (mm)]	Maximum 200 x300		
21	warranty	Comprehensive 1 year		
22	Delivery time	8-10 weeks		

Documentation

Manufacture product catalogues with requested information should be supplied

Manufacture authorization for the bidder to represent the given brand

User reference list should be attached

Bidder should have good aftersales facility with trained technicians and parts available locally to carry out any service/ repair immediately

Mr. R. C. ...
 Deputy Director ...
 Department of ...

Specifications

**Procurement Plan for Goods – AHEAD RIC- Department of Chemistry, Faculty of Science,
University of Ruhuna**

Credit/Grant Number: RIC round 02 No. 18

AHEAD/RA3/RIC/RUH/SCI/Carbon char/ GOODS/13	Supply and installation of Miller for 200 micro meter	Quantity = 1
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No.	Specifications	Requirements	Bidders compliance	
			Yes/ No	If “No” indicate your offer
1	Country of Origin	Please specify		
2	Brand	Please specify		
3	Model	Please specify		
4	Manufacturer Authorization	Bidder should submit manufacturer’s authorization certificate for quoted brand direct from Manufacture		
5	Application	For preparing samples in fine powder form before further processing		
6	Controller	Should be Digital and programmable		
7	Feed size of sample	Grains \leq 8mm		
8	Final Fineness	Around 1 μ m		
9	Maximum loading capacity	20 kg or above		
10	Minimum loading capacity	1 – 5 kg		
10	Safety features	Instrument should have stainless steel safety hood and opening		

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		protection during run.		
11	Accessories	Jar and balls type – Tungsten carbide, Zirconium oxide or porcelain		
		25 mL or more		
12	Rotation speed	50 – 500 rpm or better		
13	Timer	24 hours or more than that		
14	Power voltage	All component should operate on 230 V ± 10%, 50 Hz		
15	Warranty	3 years warranty		
16	Essential documentation qualification / services criteria for evaluation	Printed original literature from instrument manufacturer should be attached with the offer. All requested specifications should highlight and tag for easy reference		
		Letter of Authority from instrument manufacturer should be accompanied with the tender document by the certifying local agent in Sri Lanka. Offers not carrying authentic letter of authority will be rejected.		
		Complete set of operation and maintenance manuals should be available		
		Installation and commissioning of the instrument should be done by the local agent		
		One set of all the documents containing warranty certificates,		

Dr. R. C. ...
 Deputy ...
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Specifications for Laboratory Chemicals

**Procurement Plan for Goods - AHEAD RIC – Department of Chemistry, Faculty of Science,
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Credit/Grant Number: RIC round 2 No. 18

AHEAD/RA3/RIC/RUH/SCI/Carbon char/OVAA 08	Column 09	Purchasing of Chemicals
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- Supplier should attach **Manufacture authorization letter** issued by chemical manufacture.
- All chemicals should carry Batch no, lot no and expiry date and be able to trace independently by the user. Relevant **Material safety data sheets (MSDS) and Certificate of Analysis (COA)** should be supplied on demand with the goods.
- Local agent should have system of make sure the **proper environment conditions** throughout the process from import to deliver the chemicals to end-user. Please provide the Details of the storage facility with address of the stores.
- The bidder shall furnish documentary evidence to prove Average profitability of Last 3 years should not be less than quoted chemical value. Bidder shall provide the audited financial report approved by professional Audited firm.

Item No.	Name of the chemical	Grade	Package size	Quantity	
1	n-octane	Reagent Grade, 98%	2.5 L	4	

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