DEPARTMENT OF ENERGY
(Kagawaran ng Enerhiya)
Energy Center, Rizal Drive Bonifacio
Global City, Taguig City, Philippines 1632

RFQ No.	RFQ-02-0101-2022-04-0129- 0525-0055
Purchase Request No.:	02-0101-2022-04-0129

REQUEST FOR QUOTATION

Title of Procurement/End-user	**: CALIBRATION OF GRFTL EQUIPMENT/ INSTRUMENTS**
Mode of Procurement	**: Small Value Procurement (AMP53.9)**
Bidding Terms	**: Per Item**
Delivery Terms/Schedule	**: 60 Days upon receipt of Job Order/ Purchase Order**
Delivery Location Payment Terms	: Department of Energy Main Office, BGC Taguig City : Payment shall be processed within thirty (30) days upon completion of delivery of all items or services, submission of all required documents and issuance of end-user's certificate acceptance.

Please quote your lowest price on the items/s listed below, subject to the compliance with the Terms of Reference and Specifications. Submit the quotation following the format of the Quotation Submission Form (Annex A) in a sealed envelope duly signed by your representative at the Procurement Management Division Office, 3rd Floor DOE Main Building, Department of Energy Rizal Drive, Energy Center-Bonifacio Global City, Taguig City or through email at the following address: bacsecretariat@doe.gov.ph not later than **30 May 2022, Monday at 5:00PM**. LATE SUBMISSION WILL NOT BE ACCEPTED.

Terms of Reference/Specifications			
Item No.	Description/ Specification:	Quantity	Total ABC
1.	**CALIBRATION OF ANALYTICAL BALANCE** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Balance capacity • Adam 250g • Denver 250g • Shimadzu Aux 220g • Acculab 210g • Precisa 200g • Mettler 200g • Sartorius 200g • Sartorius 124g 2. Repeatability of reading 3. Departure from nominal value 4. Off-center loading • Limit of performance	8 UNITS	12,800.00
2.	**CALIBRATION OF TOP LOADING BALANCE** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Balance capacity • Adam – 75 kg • Kern - 30 kg • CHYO - 30 kg 2. Repeatability of reading	3 UNITS	4,800.00

	3. Departure from nominal value 4. Off-center loading • Limit of performance		
3.	**CALIBRATION OF OIL BATH** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at 100°C 2. Calibration must be performed at actual operating conditions 3. Elapsed time for temperature rise from different set points must be determined	1 UNIT	2,600.00
4.	**CALIBRATION OF WATER BATH (1 SET POINT)** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at 80 °C 2. Calibration must be performed at actual operating conditions 3. Elapsed time for temperature rise from different set points must be determined	3 UNITS	4,800.00
5.	**CALIBRATION OF WATER BATH (3 SET POINT)** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at the following set points: • 3 units at 40°C, 50°C and 60°C 2. Calibration must be performed at actual operating conditions 3. Elapsed time for temperature rise from different set points must be determined	3 UNITS	7,800.00
6.	**CALIBRATION OF CALORIMETER** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at 25°C 2. Calibration must be performed at actual operating conditions 3. Elapsed time for temperature rise from different set points must be determined	2 UNITS	18,000.00
7.	**CALIBRATION OF CENTRIFUGE** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration of revolutions per minute (rpm) at 60 °C 2. Calibration must be performed at actual operating conditions	1 UNIT	3,600.00

8.	**CALIBRATION OF CHNS ANALYZER** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at the following settings: • CHN 850°C, 950°C • S 1,350°C (If no available probe: At highest temperature probe available in the industry is accepted) 2. Calibration must be performed at actual operating conditions 3. Elapsed time for temperature rise from different set points must be determined	1 UNIT	29,000.00
9.	**CALIBRATION OF CONDUCTIVITY METER** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration of: • Conductivity probe • Conductivity sensor 2. Calibration at actual operating conditions	2 UNITS	5,800.00
10.	**CALIBRATION OF CARBOLITE AND PRUFER FURNACE** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at five (5) set points (500°C, 750°C, 815°C, 900°C, 950°C) 2. Elapsed time for temperature rise from different set points must be determined	4 UNITS	53,400.00
11.	**CALIBRATION OF NABERTHERM FURNACE** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at three (3) set points (650°C, 815°C, 950°C) 2. Elapsed time for temperature rise from different set points must be determined	2 UNITS	21,500.00
12.	**CALIBRATION OF THERMOLYNE AND DAIHAN FURNACE** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at two (2) set points (525°C, 750°C) 2. Elapsed time for temperature rise from different set points must be determined	2 UNITS	7,200.00
13.	**CALIBRATION OF HYDROMETER**	12 PCS.	22,800.00

	TERMS OF REFERENCE TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration for: • CH-02 and CH-09 (0.7000, 0.7250, 0.7500) • CH-03 and CH-12 (0.8000, 0.8250, 0.8500) • CH-04 and CH-13 (0.8500, 0.8750, 0.9000) • CH-05 and CH-14 (0.9000, 0.9250, 0.9500) • CH-07, CH-10 and CH-11 (0.7500, 0.7750, 0.8000) • CH-08 (0.9500, 0.9750, 1.0000) 2. Calibration must be performed at actual ambient conditions		
14.	**CALIBRATION OF DRYING OVEN 3 SET POINTS** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at the following set points: • 100°C • 125°C • 150°C 2. Calibration must be performed at actual operating conditions 3. Elapsed time for temperature rise from different set points must be determined	2 UNITS	5,200.00
15.	**CALIBRATION OF DRYING OVEN 1 SET POINTS** TERMS OF REFERENCE II. TECHNICAL SPECIFICATIONS: 1. Calibration at the following set points: • Coal Air-Drying Oven 40°C • Jouan Mechanical Oven 110°C • Minimum Free-Space Oven 110°C • Memmert Oven 110°C • Labtech Oven 105°C 2. Calibration must be performed at actual operating conditions 3. Elapsed time for temperature rise from different set points must be determined	5 UNITS	8,000.00
16.	**CALIBRATION OF Ph METER** TERMS OF REFERENCE	3 UNITS	8,700.00

	I. TECHNICAL SPECIFICATIONS: 1. Calibration of: • Probe • Sensor 2. Calibration at actual operating conditions		
17.	**CALIBRATION OF STANDARD MASS** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration of: • Troemner (1 mg, 1 g, 10 g, 2-pc 20 g, 50 g, 100 g) • Stainless (1 g, 200 g)	9 PCS	5,850.00
18.	**CALIBRATION OF TEMPERATURE SENSOR** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at 50°C and 110°C 2. Calibration must be performed at actual operating conditions 3. Elapsed time for temperature rise from different set points must be determined	3 UNITS	6,000.00
19.	**CALIBRATION OF TEST RESISTOR** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at conductivity of 10kOhm 2. Calibration must be performed at actual operating conditions	1 UNIT	2,300.00
20.	**CALIBRATION OF THERMOHYGROMETER** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration of: • Temperature • Relative humidity 2. Calibration at actual operating conditions	11 UNITS	16,500.00
21.	**CALIBRATION OF DIGITAL THERMOMETER** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at 5 set points (20, 40, 50, 60, 80 °C) 2. Calibration must be performed at actual ambient conditions	4 PCS	11,120.00

<table>
<tr>
<td>22.</td>
<td>CALIBRATION OF LIQUID-IN-GLASS THERMOMETER WITH -20 °C

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration of mercury-filled glass thermometer at 5 set points:
1.1.1 Alcohol-filled CT-02 ASTM 6C / IP 2C (-20, -10, -5, 0, 10 °C) partial immersion at 76mm
1.1.2 Mercury-filled CT-03 ASTM 5C / IP 1C (-20, -10, -5, 0, 10 °C) partial immersion at 108mm

2. Calibration must be performed at actual ambient conditions</td>
<td>2 PCS</td>
<td>5,560.00</td>
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<td>23.</td>
<td>CALIBRATION OF MERCURY-FILLED GLASS THERMOMETER (4 SET POINTS)

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration of mercury-filled glass thermometers at 4 set points:

<table>
<tr><td>Thermometer ID</td><td>Thermometer Type</td><td>Set Point</td><td>Length, mm</td><td>Immersion, mm</td></tr>
<tr><td>CT-01</td><td>ASTM 121C-8b</td><td>0, 99, 100, 101 °C</td><td>300 to 310 mm</td><td>Total immersion</td></tr>
<tr><td>CT-16</td><td>ASTM 11C / IP 28C</td><td>0, 99, 100, 101 °C</td><td>305 to 315 mm</td><td>25 mm immersion</td></tr>
<tr><td>CT-09</td><td>ASTM 120C-86</td><td>0, 39, 40, 41 °C</td><td>300 to 310 mm</td><td>Total immersion</td></tr>
<tr><td>CT-11</td><td>ASTM 120C-86</td><td>0, 39, 40, 41 °C</td><td>300 to 310 mm</td><td>Total immersion</td></tr>
<tr><td>CT-12</td><td>ASTM 120C-86</td><td>0, 39, 40, 41 °C</td><td>300 to 310 mm</td><td>Total immersion</td></tr>
<tr><td>CT-14</td><td>ASTM 46C-86</td><td>0, 49, 50, 51 °C</td><td>300 to 310 mm</td><td>Total immersion</td></tr>
<tr><td>CT-17</td><td>ASTM 16C</td><td>50, 100, 125, 150 °C</td><td>390 to 400 mm</td><td>Total immersion</td></tr>
<tr><td>CT-18</td><td>ASTM 34C / IP 21C</td><td>40, 50, 60, 100 °C</td><td>415 to 425 mm</td><td>50 mm immersion</td></tr>
</table>

2. Calibration must be performed at actual ambient conditions</td>
<td>8 PCS</td>
<td>10,400.00</td>
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<tr>
<td>24.</td>
<td>CALIBRATION OF MERCURY-FILLED GLASS THERMOMETER (5 SET POINTS)

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS:

1. Calibration of mercury-filled glass thermometers at 5 set points:</td>
<td>5 PCS</td>
<td>6,500.00</td>
</tr>
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	<table><tr><th>Thermometer ID</th><th>Thermometer Type</th><th>Set Point</th><th>Length, mm</th><th>Immersion, mm</th></tr><tr><td>CT-06</td><td>ASTM 12C</td><td>0, 25, 50, 60, 100 °C</td><td>415 to 425 mm</td><td>Total immersion</td></tr><tr><td>CT-07</td><td>ASTM 12F</td><td>32, 85, 122, 140, 212 °F</td><td>415 to 425 mm</td><td>Total immersion</td></tr><tr><td>CT-08</td><td>ASTM 9C / IP 15C</td><td>0, 35, 50, 70, 100 °C</td><td>285 to 295 mm</td><td>57 mm immersion</td></tr><tr><td>CT-10</td><td>ASTM 9C</td><td>0, 35, 50, 70, 100 °C</td><td>285 to 295 mm</td><td>57 mm immersion</td></tr><tr><td>CT-19</td><td>ASTM 12C</td><td>0, 35, 50, 70, 100 °C</td><td>415 to 425 mm</td><td>Total immersion</td></tr></table> 2. Calibration must be performed at actual ambient conditions		
25.	**CALIBRATION OF TIMER/STOP WATCH 1 CHANNEL** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration at the following set points: • 5', 7', 10', 20', 30', 60'	1 UNIT	2,600.00
26.	**CALIBRATION OF TIMER/STOP WATCH 3 CHANNEL** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration of 3 channels at the following set points: • 5', 7', 10', 20', 30', 60'	4 UNITS	14,400.00
27.	**CALIBRATION OF TIMER/STOP WATCH 5 CHANNEL** TERMS OF REFERENCE I. TECHNICAL SPECIFICATIONS: 1. Calibration of 5 channels at the following set points: • 3', 5', 6', 7', 8', 10'	2 UNITS	9,200.00
	TOTAL		**306,430.00**
	TERMS AND CONDITIONS: 1. Calibration facility must be ISO 17025:2017 accredited by Philippine Accreditation Bureau (PAB). 2. Bid must include service/item not specified in the technical specifications but necessary to undertake the equipment calibration. 3. Calibration must be conducted on-site.		

	4. Uncertainty of measurement must be at least at 95 percent confidence level. 5. Calibration standards traceable to certified reference materials must be used. 6. Service/calibration report must be provided after performing calibration. 7. Certificate of Calibration shall be provided in 5 working days after actual calibration is completed. 8. Bid price should be inclusive of all costs/taxes, etc., attendant to the delivery of service. 9. One hundred percent (100%) payment will be released only upon satisfactory completion of the calibration and issuance of certificate of acceptance. 10. Delivery of Service: Job completion within sixty (60) days upon receipt of Job Order. 11. The successful bidder shall conform to the service needed based on the TOR indicated herewith. 12. The successful bidder shall provide the following additional requirements: • Philgeps registration • Updated Mayor's Permit • Omnibus Sworn Statement		

General Conditions:

1. Quotation shall be valid for sixty (60) days from submission
2. Sample/brochure of the item complying with the Specifications shall be submitted together with the quotation/proposal. Non-submission of actual sample/brochures in the proposal is a ground for disqualification. ***(If applicable)***
3. The following documents shall be attached/included in the submission of proposal/quotation:
   a) Mayor's / Business Permit
   b) PhilGEPS Registration Number/Certificate
   c) Income /Business Tax Return
   d) Omnibus sworn Statement (Annex C)
4. Payment is through LDDAP through a Government Servicing Bank (GSB) and will be processed upon final acceptance of the end users and submission of complete documents. If not a GSB should shoulder all associated Bank Transaction Fee.
5. The Supplier shall clearly state the company name and account name for payment.
6. The price quoted is inclusive of all taxes and other charges.
7. The Supplier shall receive the Notice of Award and Purchase Order/Notice to Proceed within the required time under RA 9184 otherwise the Supplier may be sanctioned under the provision of RA 9184 and its IRR.