

UNIVERSITY OF THE PHILIPPINES BAGUIO
Governor Pack Road, Baguio City

BID BULLETIN NO. 2023-01

**PROJECT: SUPPLY, DELIVERY AND INSTALLATION
OF VARIOUS GENUINE AND BRAND NEW LABORATORY EQUIPMENT
FOR UP BAGUIO
(Bid Reference No. UPB-GOODS-2023-11)**

TO ALL PROSPECTIVE BIDDERS

Please be informed on the clarifications on the following items during the Pre-bid Conference, viz:

1. Changes in Invitation to Bid No. 2

BID DOCS	CLARIFICATION/ SUGGESTIONS FROM PROSPECTIVE BIDDERS	COMPLY/ NOT COMPLY
FROM	TO	
2. The University of the Philippines Baguio now invites bids for the above Procurement Project. Delivery of the Goods is required within Thirty (30) calendar days upon conforme of the Notice to Proceed (NTP)...	2. The University of the Philippines Baguio now invites bids for the above Procurement Project. Delivery of the Goods is required within Sixty (60) calendar days upon conforme of the Notice to Proceed (NTP)...	

2. Changes in Section III: Bid Data Sheet

BID DOCS	CLARIFICATION/ SUGGESTIONS FROM PROSPECTIVE BIDDERS	COMPLY/ NOT COMPLY
FROM	TO	
ITB Clause 5.3 For this purpose, contracts similar to the Project shall be: a. Experience in the supply and delivery of satellite images. b. Completed within five (5) years prior to the deadline for the submission and receipt of bids.	ITB Clause 5.3 For this purpose, contracts similar to the Project shall be: c. Experience in the supply, delivery and installation of various genuine and brand new laboratory equipment. d. Completed within five (5) years prior to the deadline for the submission and receipt of bids.	

3. Changes in Section VI: Schedule of Requirements for items 1 to 9 under column **Delivery/ Period of Service**

BID DOCS	CLARIFICATION/ SUGGESTIONS FROM PROSPECTIVE BIDDERS	COMPLY/ NOT COMPLY
FROM	TO	

Thirty (30) calendar days upon the receipt of the Notice to Proceed	Sixty (60) calendar days upon the receipt of the Notice to Proceed	
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4. Changes in Section VII: Technical Specifications

BID DOCS	CLARIFICATION/ SUGGESTIONS FROM PROSPECTIVE BIDDERS	COMPLY/ NOT COMPLY
FROM	TO	
VARIOUS GENUINE AND BRAND NEW LABORATORY EQUIPMENT, specs as follows;	VARIOUS GENUINE AND BRAND NEW LABORATORY EQUIPMENT, specs as follows;	
<p>(1) Benchtop pH/ORP Meter</p> <p>1 to 3 points calibration</p> <ul style="list-style-type: none"> · Automatic Temperature Compensation · Setup menu contains 5 options · Accuracy: 0.01pH. <p>Features</p> <ul style="list-style-type: none"> • 1 to 3 points calibration with automatic recognition for USA and NIST buffers • Automatic electrode diagnosis helps user decide whether to replace the pH electrode • Automatic temperature compensation ensures accurate readings over the entire range • Auto-Read function senses and locks the measurement endpoint • Setup menu allows setting the pH buffer set, number of calibration points, temperature unit, etc. • Reset function automatically resumes all settings back to the factory defaults • Auto-Read function senses and locks the measurement endpoint • Setup menu allows to set the pH buffer set, number of calibration points, resolution, stability criteria, temperature unit, date and time, etc. • Reset function automatically resumes all settings back to the factory defaults • Expanded memory stores or recalls up to 500 data sets <p>pH Range -1.00-15.00pH Resolution 0.01pH Accuracy ±0.01pH</p>	<p>(1) Benchtop pH/ORP Meter</p> <p>1 to 3 points calibration</p> <ul style="list-style-type: none"> · Automatic Temperature Compensation · Setup menu contains 5 options · Accuracy: 0.01pH. <p>Features</p> <ul style="list-style-type: none"> • 1 to 3 points calibration with automatic recognition for USA and NIST buffers • Automatic electrode diagnosis helps user decide whether to replace the pH electrode • Automatic temperature compensation ensures accurate readings over the entire range • Auto-Read function senses and locks the measurement endpoint • Setup menu allows setting the pH buffer set, number of calibration points, temperature unit, etc. • Reset function automatically resumes all settings back to the factory defaults • Auto-Read function senses and locks the measurement endpoint • Setup menu allows to set the pH buffer set, number of calibration points, resolution, stability criteria, temperature unit, date and time, etc. • Reset function automatically resumes all settings back to the factory defaults • Expanded memory stores or recalls up to 500 data sets <p>pH Range -1.00-15.00pH Resolution 0.01pH Accuracy ±0.01pH</p>	

<p>pH Buffer Options USA(4.01/7.00/10.01),NIST(4.01/6.86/9.18)</p> <p>ORP</p> <p>mV Range $\pm 1999\text{mV}$ Relative mV Range / Resolution 1mV Accuracy $\pm 1\text{mV}$ Calibration Points /</p> <p>Temperature</p> <p>Range 0~105°C/32~221°F Resolution 0.1°C/0.1°F Accuracy $\pm 1^\circ\text{C}/\pm 1.8^\circ\text{F}$ Offset Calibration 1 point, reading $\pm 10^\circ\text{C}$</p> <p>Other Specifications Temperature Compensation 0-100°C, manual or automatic Stability Criteria / Calibration Due Alarm / Slope/Offset Display / Hold Function Manual or auto-endpoint Memory / Communication Interface / Connector BNC,3.5mm jack socket</p> <p>Display Custom LCD(120×60mm)</p> <p>Power Requirements DC9V power adapter</p> <p>Dimensions (W*D*H) 210*205*75mm</p> <p>Weight 1kg</p>	<p>pH Buffer USA(4.01/7.00/10.01),NIST(4.01/6.86/9.18)</p> <p>ORP</p> <p>mV Range $\pm 1999\text{mV}$ Relative mV Range / Resolution 1mV Accuracy $\pm 1\text{mV}$ Calibration Points /</p> <p>Temperature</p> <p>Range 0~105°C/32~221°F Resolution 0.1°C/0.1°F Accuracy $\pm 1^\circ\text{C}/\pm 1.8^\circ\text{F}$ Offset Calibration 1 point, reading $\pm 10^\circ\text{C}$</p> <p>Other Specifications Temperature Compensation 0-100°C, manual or automatic Stability Criteria / Calibration Due Alarm / Slope/Offset Display / Hold Function Manual or auto-endpoint Memory / Communication Interface / Connector BNC and or 3.5mm jack socket</p> <p>Display Custom LCD (at least 120×60mm)</p> <p>Power Requirements DC9V power adapter</p> <p>Dimensions (W*D*H) at least 210*205*75mm</p>	
<p>(2) LED Hot Plate</p> <p>1. Heating temperature range: Room temp.- 550°C, increment 5°C 2. Control accuracy of work plate: $\pm 10^\circ\text{C}$ 3. Safety temperature: 580°C 4. Temperature display: LED 5. Temperature display accuracy: $\pm 1^\circ\text{C}$</p>	<p>(2) LED Hot Plate</p> <p>1. Heating temperature range: Room temp.- up to 550°C, increment 5°C 2. Control accuracy of work plate: $\pm 10^\circ\text{C}$ 3. Safety temperature: 580°C 4. Temperature display: LED 5. Temperature display accuracy: $\pm 1^\circ\text{C}$</p>	

<p>6. External temperature sensor PT1000($\pm 0.5^{\circ}\text{C}$)</p> <p>Description</p> <ul style="list-style-type: none"> •LED screen shows temperature •Max. temperature up to 550°C •Separate safety circuits with fixed safety temperature of 580°C •External temperature control is possible by connecting the temperature sensor (PT 1000) with an accuracy at $\pm 0.5^{\circ}\text{C}$ •Glass ceramic work plate provides excellent chemical-resistant performance and most efficient heat transfer •The “HOT” warning will flash if the work plate temperature is above 50°C even when the hotplate is turned off. <p>Specifications</p> <p>Model HPT-550</p> <p>Work plate dimension [WxD] 184x184mm (7 inch)</p> <p>Work plate material Glass ceramic</p> <p>Heating position 1</p> <p>Heating temperature range Room temp. -550°C, increment 5°C</p> <p>Control accuracy of work plate $\pm 10^{\circ}\text{C}$</p> <p>Safety temperature 580°C</p> <p>Temperature display LED</p> <p>Temperature display accuracy $\pm 1^{\circ}\text{C}$</p> <p>External temperature sensor PT1000($\pm 0.5^{\circ}\text{C}$)</p> <p>Heating warning 50°C</p> <p>Protection class IP21</p> <p>Power 1010W</p> <p>Voltage Frequency 100-120/200-240V, 50/60Hz</p> <p>Heating Power 1000W</p> <p>Dimension [WxDxH] 215x360x112mm</p> <p>Weight 4.5kg</p> <p>Permissible ambient temperature and humidity $5-40^{\circ}\text{C}$, 80%RH</p>	<p>6. External temperature sensor PT1000($\pm 0.5^{\circ}\text{C}$)</p> <p>Description</p> <ul style="list-style-type: none"> •LED screen shows temperature •Max. temperature up to 550°C •Separate safety circuits with fixed safety temperature of 580°C •External temperature control is possible by connecting the temperature sensor (PT 1000) with an accuracy at $\pm 0.5^{\circ}\text{C}$ •Glass ceramic work plate provides excellent chemical-resistant performance and most efficient heat transfer •The “HOT” warning will flash if the work plate temperature is above 50°C even when the hotplate is turned off. <p>Specifications</p> <p>Work plate area at least 50 inch²</p> <p>Work plate material Glass ceramic</p> <p>Heating position 1</p> <p>Heating temperature range Room temp. -up to 550°C, increment 5°C</p> <p>Control accuracy of work plate $\pm 10^{\circ}\text{C}$</p> <p>Safety temperature 580°C</p> <p>Temperature display LED</p> <p>Temperature display accuracy $\pm 1^{\circ}\text{C}$</p> <p>External temperature sensor PT1000($\pm 0.5^{\circ}\text{C}$)</p> <p>Heating warning 50°C</p> <p>Protection class IP21</p> <p>Power 1010W to 1050W</p> <p>Voltage Frequency 220 – 240V</p> <p>Heating Power 1000W</p> <p>Permissible ambient temperature and humidity $5-40^{\circ}\text{C}$, 80%RH</p>	
<p>(3) Light meter, laboratory – grade PPF</p> <p>Authoraging 5 steps and conversion to $\mu\text{mole}/\text{m}^2/\text{s}$ (PPFD: Photosynthetic Photon Flux Density).</p>	<p>(3) Light meter, laboratory – grade PPF</p> <p>Authoraging 5 steps and conversion to $\mu\text{mole}/\text{m}^2/\text{s}$ (PPFD: Photosynthetic Photon Flux Density).</p>	

<p>Integral illuminance measurement and conversion to mole/m²/d (Daily light integral).</p> <p>Luminous intensity measurement.</p> <p>Point - average function.</p> <p>Spectral correction factor function. (include LED)</p> <p>Time-hold function.</p> <p>Dual Display, 4 digit LCD reading.</p> <p>Spectral Sensitivity close to CIE photopic Curve.</p> <p>Accurate and Instant response.</p> <p>Data Hold function.</p> <p>Data memory and read function.</p> <p>Reference value stored for relative or percentage deviation measurement.</p> <p>Ripple measurement for STRAY + LIGHT function.</p> <p>Comparator function.</p> <p>Auto power off function.</p> <p>Backlight display function.</p> <p>Auto datalogging & USB interface.</p>	<p>Integral illuminance measurement and conversion to mole/m²/d (Daily light integral).</p> <p>Luminous intensity measurement.</p> <p>Point - average function.</p> <p>Spectral correction factor function. (include LED)</p> <p>Time-hold function.</p> <p>Dual Display, 4 digit LCD reading.</p> <p>Spectral Sensitivity close to CIE photopic Curve.</p> <p>Accurate and Instant response.</p> <p>Data Hold function.</p> <p>Data memory and read function.</p> <p>Reference value stored for relative or percentage deviation measurement.</p> <p>Ripple measurement for STRAY + LIGHT function.</p> <p>Comparator function.</p> <p>Auto power off function.</p> <p>Backlight display function.</p> <p>Auto datalogging & USB interface.</p>	
<p>(4) Portable DO Meter</p> <p>Specifications</p> <p>O2 Range 0.0 to 19.9 mg/l</p> <p>O2 resolution 0.1 mg/l</p> <p>O2 Accuracy ±1.5% Full Scale</p> <p>Calibration manual on 2 points (zero and slope)</p> <p>Temperature Compensation automatic, from 0 to 30°C</p> <p>Probe MA840 (included)</p> <p>Environment 0 to 50°C / 32 to 122°F; max RH 95%</p> <p>Battery Type 1 x 9V alkaline (included)</p>	<p>(4) Portable DO Meter</p> <p>Specifications</p> <p>O2 Range 0.0 to 19.9 mg/l</p> <p>O2 resolution 0.1 mg/l</p> <p>O2 Accuracy ±1.5% Full Scale</p> <p>Calibration manual on 2 points (zero and slope)</p> <p>Temperature Compensation automatic, from 0 to 30°C</p> <p>Probe (included)</p> <p>Environment 0 to 50°C / 32 to 122°F; max RH 95%</p>	

<p>Battery Life approx. 70 hours of continuous use</p> <p>Dimensions 145 x 80 x 40 mm</p> <p>Weight 220 g (with battery)</p>	<p>Battery Type 1 x 9V alkaline or triple A (included)</p> <p>Dimensions at least 145 x 80 x 40 mm</p>	
<p>(5) Portable pH Meter</p> <p>5-inch LCD display screen.</p> <ul style="list-style-type: none"> · Support for USB communication. · IP65 waterproof. · 1-5 points calibration with Standard Recognition. <p>Description</p> <ul style="list-style-type: none"> · 5-inch LCD display screen. · Multi-reading feature allows auto-read, timed-read and continuous-read. · Automatic/Manual temperature compensation ensures accurate results. · Auto-hold feature senses and locks the measurement endpoint. · Data capacity of up to 500 sets for each parameter (GLP-compliant). · Support for USB communication. · Auto-power off feature effectively extends the battery service life. · Reset feature automatically resumes all settings back to factory default options. · IP65 waterproof. · 1-5 points calibration with standard recognition. · Selectable pH buffer groups, including NIST, DIN, GB. · Automatic electrode diagnosis with pH slope and offset display. <p>Specifications</p> <p>Model PH-P310F</p> <p>Parameters pH/Temp.(mV)</p> <p>pH</p> <p>Range -2.00 to 20.00pH</p> <p>Resolution 0.1, 0.01 pH</p> <p>Accuracy ±0.01 pH</p> <p>Calibration Points Up to 5</p> <p>Standard</p> <p>Customization Yes</p> <p>Standard</p>	<p>(5) Portable pH Meter</p> <p>At least 5-inch LCD display screen.</p> <ul style="list-style-type: none"> · Support for USB communication. · At least IP65 waterproof. · 1-5 points calibration with Standard Recognition. <p>Description</p> <ul style="list-style-type: none"> · At least 5-inch LCD display screen. · Multi-reading feature allows auto-read, timed-read and continuous-read. · Automatic/Manual temperature compensation ensures accurate results. · Auto-hold feature senses and locks the measurement endpoint. · Data capacity of up to 500 sets for each parameter (GLP-compliant). · Support for USB communication. · Auto-power off feature effectively extends the battery service life. · Reset feature automatically resumes all settings back to factory default options. · 1-5 points calibration with standard recognition. · Selectable pH buffer groups, including NIST, DIN, GB. · Automatic electrode diagnosis with pH slope and offset display. <p>Specifications</p> <p>Parameters pH/Temp.(mV)</p> <p>pH</p> <p>Range -2.00 to 20.00pH</p> <p>Resolution 0.1, 0.01 pH</p> <p>Accuracy ±0.01 pH</p> <p>Calibration Points Up to 5</p> <p>Standard</p> <p>Customization Yes</p> <p>Standard</p>	

<p>Recognition NIST, GB and DIN buffers Slope Limit Yes</p> <p>mV</p> <p>Range -2000.0 to 2000.0 mV Resolution 0.1 Accuracy ± 0.3 mV or $\pm 0.1\%$ Temperature Range -5 to 110 °C, 23 to 230 °F</p> <p>Unit °C, °F Resolution 0.1 Relative Accuracy ± 0.2</p> <p>Measurement</p> <p>Reading Mode Auto Read (Fast, Medium, Slow), Timed,</p> <p>Continuous</p> <p>Reading Prompts Reading, Stable, Locked</p> <p>Temp. Compensation ATC, MTC</p> <p>Data management</p> <p>Data Storage 500 results each GLP Features Yes</p> <p>Inputs</p> <p>pH Electrode BNC(Q9)</p> <p>Temp. Probe 4-pin aviation connector</p> <p>Outputs USB PC, printer</p> <p>Display options</p> <p>Backlight Yes Auto Shutdown 300, 600, 1200, 1800, 3600 sec., off IP Rating IP65 Date and Time Yes</p> <p>General</p> <p>Electricity Rechargeable Lithium battery, AC Adapter,</p>	<p>Recognition NIST, GB and DIN buffers</p> <p>mV</p> <p>Range - 0 to 2000.0 mV Resolution 0.1 Accuracy ± 0.3 mV or $\pm 0.1\%$ Temperature Range -5 to 110 °C, 23 to 230 °F</p> <p>Unit °C, °F Resolution 0.1 Relative Accuracy ± 0.2</p> <p>Measurement</p> <p>Reading Mode Auto Read (Fast, Medium, Slow), Timed,</p> <p>Continuous</p> <p>Reading Prompts Reading, Stable, Locked</p> <p>Temp. Compensation ATC, MTC</p> <p>Data management</p> <p>Data Storage 500 results each</p> <p>Inputs</p> <p>pH Electrode BNC</p> <p>Temp. Probe 4-pin aviation connector</p> <p>Outputs USB PC, printer</p> <p>Display options</p> <p>IP Rating at least IP65 Date and Time feature available</p> <p>Electricity Rechargeable Lithium battery, with AC Adapter,</p>	
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100-240V AC input, DC5V output Dimensions 80× 255 ×35 mm Weight 400g	100-240V AC input, DC5V output Dimensions at least 80× 250 × 30 mm	
(6) Stereo Microscope 1. Binocular head, 45° inclined 2. Fluorescent lamp, LED ring light, for more option Specifications Magnification 20X-40X, 10X-80X with optional eyepieces and objectives Eyepiece WF10X/20mm; *Optional Eyepiece: 10X/20mm, 15X/15mm, 20X/10mm Main Body Binocular head, 45° inclined, 360° rotatable, Interpupillary Distance adjustment: 54-76mm; Diopter adjustment: ±5 diopters Objective Shifting and doubling objective combination 2X/4X, 1X/2X, 1X/3X Focusing Mount Focusing mount with vertical working distance 50mm Stand Pole stand, for more options * Illumination Fluorescent lamp, LED ring light, for more option	(6) Stereo Microscope 1. Binocular head, 45° inclined 2. Fluorescent lamp, LED ring light Specifications Magnification 20X-40X, 10X-80X Eyepiece WF10X/20mm Eyepiece: 20X/10mm Main Body Binocular head, 45° inclined, 360° rotatable, Interpupillary Distance Focusing mount with vertical working distance 50mm Adjustable stand pole or column *Illumination LED light, incident light and transmitted light	
(7) Water Bath Temperature Range (°C): RT+5~100; RT+5~95 2- Temperature Fluctuation (°C): ±0.5 3- Temperature Uniformity(°C): ±0.5 Feature: 1. Microprocessor control with timing and temperature correction function. 2. The shell is made of high-quality steel plate, surface coated.	(7) Water Bath Temperature Range (°C): RT+5~100 Temperature Fluctuation (°C): ±0.5 Temperature Uniformity(°C): ±0.5 Feature: 1. Microprocessor control with timing and temperature correction function. 2. The shell is made of high-quality steel plate, surface coated.	

<p>3. The chamber, frame and top cover are made of stainless steel.</p> <p>4. Between the inner and outer space, are filled with high-quality insulation materials, anti-corrosive, and good appearance.</p> <p>5. LCD display</p> <p>Specifications</p> <p>Temperature Range (°C) RT+5~100</p> <p>Temperature Fluctuation (°C) ±0.5</p> <p>Temperature Uniformity(°C) ±0.5</p> <p>Power Supply 220V /50Hz</p> <p>Power Rating(W) 2000±10%</p> <p>Chamber Size (W×D×H)cm 50×30×20</p> <p>Volume(L) 30</p> <p>Package Size (W×D×H)cm 87×47×47</p> <p>Net/Gross Weight(kg) 12.5/22</p>	<p>3. The chamber, frame and top cover are made of stainless steel.</p> <p>4. Between the inner and outer space, are filled with high-quality insulation materials, anti-corrosive, and good appearance.</p> <p>5. LCD display</p> <p>Specifications</p> <p>Power Supply 220V /50Hz</p> <p>Power Rating(W) at least 1500±10%</p> <p>Volume Capacity (L) at least 30</p>																					
<p>(8) Water Quality Testers</p> <p>Professional TDS test, EC test, temperature test and pH test; 4 in 1 water quality test kit. pH meter resolution is 0.01 pH measurement range is 0.-14 pH. TDS meter ranges from 0-9990 ppm, conductivity ranges from 0-9990 us/cm, EC ranges from 0-9990 us/cm. working temperature of pH meter 0-60C. Display: LCD display</p>	<p>(8) Water Quality Testers</p> <p>Professional TDS test, EC test, temperature test and pH test; 4 in 1 water quality test kit. pH meter resolution is 0.01 pH measurement range is 0.-14 pH. TDS meter ranges from 0-9990 ppm, conductivity ranges from 0-9990 us/cm, EC ranges from 0-9990 us/cm. working temperature of pH meter 0-60C. Display: LCD display</p>																					
<p>(9) Hotplate with stirrer</p> <table><tr><td>Controls (Digital/Analog)</td><td>Analog</td></tr><tr><td>Min Speed (RPM)</td><td>150</td></tr><tr><td>Max Speed (RPM)</td><td>1500</td></tr><tr><td>Min Temp Range (°C)</td><td>50</td></tr><tr><td>Max Temp Range (°C)</td><td>450</td></tr></table> <p>5 - 10 L stir capacity</p> <p>Features:</p> <p>Stir from 100 to 1500 rpm on each stirring position with individual controls</p> <p>Plate size: 6” (15.24 cm) x 6” (15.24 cm)</p> <p>Solid ceramic heater surface for excellent chemical resistance</p>	Controls (Digital/Analog)	Analog	Min Speed (RPM)	150	Max Speed (RPM)	1500	Min Temp Range (°C)	50	Max Temp Range (°C)	450	<p>(9) Hotplate with stirrer</p> <table><tr><td>Controls (Digital/Analog)</td><td>Analog</td></tr><tr><td>Min Speed (RPM)</td><td>150</td></tr><tr><td>Max Speed (RPM)</td><td>1500</td></tr><tr><td>Min Temp Range (°C)</td><td>50</td></tr><tr><td>Max Temp Range (°C)</td><td>450</td></tr></table> <p>5 - 10 L stir capacity</p> <p>Features:</p> <p>Stir from 100 to 1500 rpm on each stirring position with individual controls</p> <p>Plate size: at least 6” (15.24 cm) x 6” (15.24 cm)</p> <p>Solid ceramic heater surface for excellent chemical resistance</p>	Controls (Digital/Analog)	Analog	Min Speed (RPM)	150	Max Speed (RPM)	1500	Min Temp Range (°C)	50	Max Temp Range (°C)	450	
Controls (Digital/Analog)	Analog																					
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Corrosion resistant models for aggressive chemicals. 12" tops only Milled flat cast aluminum tops for even heating in 6" x 6" Efficient 400 watt heaters Powerful 1400 watt heaters	Corrosion resistant	
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All other provision of the bidding documents which are not affected shall remain in effect. For guidance and information of all concerned.

Date Issued: 05 September 2023

SGD

Prof. JOEL M. ADDAWE
BAC Chairperson