





## BIOLOGICAL SCIENCES

June 14, 2023

Dr. Beatriz S. Belonias Vice President for Academic Affairs VSU, Baybay City, Leyte

Dear Dr. Belonias,

The Department of Biological Sciences has no funds to purchase equipment. However, most of our equipment for instruction needs replacement or additional units such as our Multiparameter meter, microscopes, refrigerator, and many others. Likewise, we would also like to ask for funds for Floor Mounted Inverter Air conditioner for our Herbarium. Our herbarium is also used for instruction and research purposes.

In this regard, we kindly ask that your office provide us with funds to purchase the following equipment which are very important for us to deliver quality education to our students:

Item	Quantity	Specifications	Estimated Cost/unit	Justification
1) Multiparameter pH/ORP/EC/TDS/ Salinity/DO/Press ure/Temperature Waterproof Meter	1	<ul> <li>A waterproof portable logging multiparameter meter that monitors up to 12 different water quality parameters.</li> <li>Multi-sensors probe allows for the measurement of key parameters including pH, ORP, conductivity, dissolved oxygen, and temperature.</li> <li>The probe transmits readings digitally to the meter, where data points can be displayed and logged.</li> <li>The complete system is simple setup.</li> <li>Backlit graphic LCD Display- features a backlit graphic LCD with on-screen help and the capability to display up to twelve parameters simultaneously.</li> <li>The graphic display allows for the use of virtual keys to provide for an intuitive user interface</li> <li>Waterproof protection-the meter is enclosed in an IP67rated waterproof casing and can withstand immersion in water at a depth of 1m for up to 30 minutes. The probe features an IP68 rating for continuous immersion in water</li> <li>Quick Connect digital Probe-The probe features a quick connect DIN connector that makes a waterproof connection with the meter.</li> <li>Color Coded, Field Replaceable sensors-sensor replacement is quick</li> </ul>	150,000.00	Our DO meter is not working properly anymore. At present, we just borrow from DoPAC and DENR. Many of our thesis students use this equipment for their thesis

## **DEPARTMENT OF BIOLOGICAL SCIENCES**

Visayas State University, PQWV+43 Baybay City, Leyte

Email: dbs@vsu.edu.ph Website: www.vsu.edu.ph

Phone: +63 53 565 0600 Local 1019





- and easy with field replaceable, screw-type connectors that are color-coded for easy sensor port identification
- Auto-sensor recognition- The probe and meter automatically recognize the sensors that are connected. Any ports not used on the probe will not have the parameter displayed or be configurable
- Automatic temperature compensation-Integrated temperature sensor allows for automatic temperature compensation of pH, conductivity and dissolved oxygen measurements
- Automatic Barometric pressure compensation-The meter features a built-in barometer with user selectable units for dissolved oxygen pressure compensation
- Standard or quick calibration-Quick calibration provides a speedy, singlepoint calibration for pH, conductivity, and dissolved oxygen. Standard pH calibration options are available for calibrating up to three points from a selection of five standard buffers and one custom buffer. Conductivity calibration is a single point from six standard selections or one custom standard. Dissolved oxygen calibration is up to two standard points or a single custom point
- GLP Data- includes a GLP feature that allows users to view calibration data and expiration information at the touch of a key. Calibration data includes date, time, buffers/standards used for calibration, and slope characteristics
- Data Logging-Allows users to store up to 45,000 continuous log-on demand samples with logging intervals from one second to three hours
- Intuitive Keypad-The fitted rubber keypad has dedicated keys for power, backlight, up/down arrows, help and alphanumeric characters. The meter also features two virtual soft keys that navigate the user through the configuration of each parameter, meter setup, and logging of data. The interface is intuitive for any user's level of experience.
- Dedicated help key- Contextual help is always available through a dedicated "HELP" key. Clear tutorial

		messages and directions are available on-screen to quickly guide users through setup and calibration. The help information displayed is relative to the setting/option being viewed.  • PC Connectivity- Logged data can be transferred to the Window's compatible PC with the included micro USB cable and software  • Long Battery Life- The display of the meter has a battery icon indicator to show the remaining power. The meter uses four 1.5V AA batteries that provide up to 360 hours of		
	Ψ,	<ul> <li>Rugged Thermoformed Carrying         case- The meter, probe and all         accessories are supplied in a rugged         carrying case designed to provide         years of use. The inside         compartment of the carrying case is         thermoformed to securely hold and         protect all of the components.</li> </ul>		
2) Microscopes	5	<ul> <li>Head: 45° Inclined Binocular, 360° rotation</li> <li>Eyepiece: 10x Wide Field Eyepiece</li> <li>Nosepiece: 4 Position</li> <li>Optical Magnification Range: 40 to 1000x</li> <li>Objectives: 4x, 10x, 40x, 100x</li> <li>Achromatic Optics</li> <li>Mechanical Stage/ Slide Holder: 5.5 x 5.5 inches</li> </ul>	32,000.00	Our microscopes are already very old and many are not functioning well anymore. Some of our units are still for repair.
	×	<ul> <li>Focusing: Coarse and Fine</li> <li>Illumination: Halogen Illumination</li> <li>Dimmer: Yes</li> <li>Body Frame: Metal frame with Gray Finish</li> <li>Weight: Approximately 12.3 lb / 5.5 kg</li> </ul>		

We look forward to your positive response to this request.

Truly yours,

ANALYN M. MAZO Department Head

Approved:

BEATRIZ S. BELONIAS

Vice President for Academic Affairs

Vision: Mission: A globally competitive university for science, technology, and environmental conservation. Development of a highly competitive human resource, cutting-edge scientific knowledge and innovative technologies for sustainable communities and environment.

Charged to STF- Instruction

Page 3 of 3 FM-VSU-03 V2 05-09-2023 No. LQ - 3/- 3N-3