



INVITATION TO BID FOR THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF LABORATORY EQUIPMENT

1. The **PHILIPPINE SCIENCE HIGH SCHOOL-CENTRAL MINDANAO CAMPUS**, through the *National Expenditure Program FY 2020* intends to apply the sum of Five Million Four Hundred Thirty Five Thousand Pesos & 00/100 (Php 5,435,000.00) being the Approved Budget for the Contract (ABC) to payments under the contract for **CMC GOODS 19-11-016** for each item. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The **PHILIPPINE SCIENCE HIGH SCHOOL-CENTRAL MINDANAO CAMPUS** now invites bids for procurement of computers for faculty office and makerspace with the following specifications:

ITEM SPECIFICATIONS	QUANTITY/ UNIT	UNIT COST	TOTAL COST
Item 1: Fumehood <ul style="list-style-type: none">✓ for general laboratory purpose✓ External Dimension (WxDxH): 1200mm x 790mm x 1500mm at least✓ rigid double wall design✓ phenolic resin internal liner✓ corrosion-resistant satinless steel airfoil✓ black phenolic resin work surface✓ with electrical outlet, faucet, PP drip cup✓ compliant to ANSI/ASHRAE110/EN14175✓ with sight ducting and ducting job✓ with 5 kVA AVR	2 units	500,000.00	1,000,000.00
Item 2: Fumehood with Scrubber <ul style="list-style-type: none">✓ integrated scrubber must be appropriate at least for: Hydrochloric acid,✓ Sulfuric Acid, Acetic acid, Ammonia, Nitric acid, Aqua Regia, Potassium✓ chloride & Sodium hydroxide✓ polypropylene interior liner✓ ceramic worktop✓ External Dimension (WxDxH): 1200mm x 790mm x 1500mm at least✓ with electrical outlet, faucet, PP drip cup✓ compliant to ANSI/ASHRAE110/EN14175✓ with sight ducting and ducting job✓ with 5 kVA AVR	1 unit	600,000.00	600,000.00
Item 3: Incubator <ul style="list-style-type: none">✓ standard microbiological incubator✓ with forced convection✓ Temperature range: ambient up to 100 °C✓ Temperature variation: 0.2 ± K✓ Heating-up time at least 5 mins✓ Interior volume: 2.1 cu. ft. at least✓ Outer dimensions (W x D x H): 20 x 20 x 25 inch at least✓ with racks and 5 kVA AVR	1 unit	170,000.00	170,000.00
Item 4: Orbital Shaker Incubator <ul style="list-style-type: none">✓ triple eccentric drive with circular orbit✓ clear, scratch-resistant lid for sample viewing✓ monitor temperature and control chamber temperature	1 unit	500,000.00	500,000.00

<ul style="list-style-type: none"> ✓ platform stop when lid is open ✓ variable speed control from 15 to 500 rpm ✓ Temperature range: ambient-15° to 60 °C at least ✓ platform length: 45 cm at least ✓ compliant to UL, cUL, CE ✓ with flask clamps and holder ✓ can handle up to six 2 L flasks ✓ unbalanced load sensor ✓ solid-state DC brushless motor ✓ continuous and time operation from 0.1 hr up to 999 hr ✓ with 5 kVA AVR 			
Item 5: Microcentrifuge <ul style="list-style-type: none"> ✓ angle rotor for 18 x 1.5 mL (2.0 mL) ✓ max volume: 18 x 1.5 mL (2.0mL) at least ✓ max speed: 14000 rpm at least ✓ max RCF: 15.994 x g at least ✓ Dimension (W x H x D): 20 x 18 x 22 cm at least ✓ brushless motor ✓ pre-selected speed directly from 1000 rpm to 14000 rpm at least ✓ pre-selectin time from 1 min to 30 min or continuous ✓ compliant to CE, IEC 61010, and 61010-2 ✓ inclusions are: ✓ microcentrifuge tube (0.6 mL clear pack of 1000), microcentrifuge rack (rack) ✓ reversible with assorted colors, 96 wells for 0.5 mL other side for 1.5/2.0), ✓ cryobox (81-well 1.5/2.0 mL, assorted with lid), storage box (100-well 1.5/2.0 ✓ 2.0 mL assorted with lid microtube storage boxes) 	1 unit	265,000.00	265,000.00
Item 6: Dry Bath <ul style="list-style-type: none"> ✓ Dry Bath ✓ digital dry bath ✓ dual block: 24 x 2.0mL tubes, 24 x 1.4mL tubes ✓ with manual nucleic acid extraction Kits: DNA kit genomic 100 reactions, ✓ RNA Kit cell miniprep system, 50 preps ✓ chemicals provided should be at least 3 to 5 years expiry upon delivery 	1 unit	150,000.00	150,000.00
Item 7: Fluorometer <ul style="list-style-type: none"> ✓ with kits ✓ compatible with all fluorescent assays ✓ automatically display concentration after each measurement ✓ no computer required but can be connected to a computer to transfer data ✓ Dimension (L x W x H): 22.7 x 11.5 x 4.5 cm at least ✓ linear dynamic range: 5 orders of magnitude, assay-dependent ✓ detectors: solid state silicon sensor ✓ "Excitation filters: RED: 640 nm shortpass (wavelengths up to 640 nm) ✓ BLUE: 495 nm shortpass (wavelengths up to 495 nm)" ✓ Emission filters: RED: 660-720 nm, BLUE: 510-580 nm ✓ Calibration type: single-point (blank and standard) ✓ sample tube: thin-walled PCR tubes ✓ automatic sleep mode after 1 hr of inactivity ✓ comes also with Gel loading dye (blue/orange loading dye 3mL[3x1mL]), & ✓ Auxiliary 1: DNA Ladder (1KB DNA-Ladder, 500 µL [100 lanes] 0.1 µg/µL, ✓ Auxiliary 2: Gel Electrophoresis System output voltage/current: 10V to 150V/10-400 mA ✓ gel capacity: 1 large (12.5x12cm), 2 small (12.5x6cm), 4 micro (6x6cm) ✓ Dimension (W x D x H): 20 x 15 x 5 cm at least ✓ chemicals provided should be at least 3 to 5 years expiry upon delivery 	1 unit	300,000.00	300,000.00
Item 8: Gel Documentation System <ul style="list-style-type: none"> ✓ with 302 nm UV transilluminator ✓ with 1 laptop ✓ with 5 MP Scientific grade sensor camera at least 	1 unit	600,000.00	600,000.00

<ul style="list-style-type: none"> ✓ PC connection ready ✓ built-in UV transilluminator, safety shut off switch and viewing port ✓ 20 cm x 24 cm viewing area at least ✓ Auto-exposure with no focus needed to the camera ✓ Dimension: 34.6 x 31.1 x 68.6 cm at least ✓ comes also with: DNA stain 500 µL, PCR Kit master mix: 2x250 reactions, ✓ PCR cleanup kit 50 preps, PCR microcentrifuge tube 0.2 mL thin wall flat cap ✓ clear (non-sterile), and dNTP mix 200 µL ✓ chemicals provided should be at least 3 to 5 years expiry upon delivery 			
<p>Item 9: UV-Vis Spectrophotometer</p> <ul style="list-style-type: none"> ✓ double beam spectrophotometer with variable spectral resolution ✓ double monochromator and cooled double detection ✓ holmium oxide filter for automatic wavelength calibration ✓ quartz coated optics ✓ second cell position for measuring turbid samples ✓ sample compartment (W x H x D): 364 x 185 x 260 mm at least ✓ wavelength range: 190-1100 nm ✓ spectral bandwidth: 1.4 nm ✓ scanning speed: 12000 nm/min ✓ Dimension (W x H x D): 590 x 260 x 690 mm at least ✓ compliant to EMC standards/CE ✓ UV-Resolution: ≥ 1.6 ✓ Wavelength accuracy: ± 0.1 nm ✓ Wavelength reproducibility: ≤ 0.02 nm ✓ Photometric reproducibility: ≤ 0.0005 A ✓ Stray Light: ≤ 0.02 % T ✓ Baseline stability at 500 nm: ≤ 0.0001 (RMS) ✓ Long-term stability at 500 nm: ± 0.0005 A/h ✓ compatible with input power of 220 V and with 5 kVA AVR 	1 unit	550,000.00	550,000.00
<p>Item 10: BOD Refrigerated Incubator</p> <ul style="list-style-type: none"> ✓ Refrigerated incubator for BOD assay ✓ External Dimensions (W x D x H): 820 x 730 x 1185 mm at least ✓ antimicrobial coated ✓ with UV lamp ✓ with inner glass door for viewing/observing of samples ✓ 220 VAC single phase ✓ forced air convection ✓ temperature range: 0 - 100 °C ✓ adjustable fan speed ✓ auto defrosting system ✓ alarms for over-temperature ✓ with 5 kVA AVR 	1 unit	400,000.00	400,000.00
<p>Item 11: Thermohygrometer</p> <ul style="list-style-type: none"> ✓ max barometric pressure (psi): 14.9 ✓ min barometric pressure (psi): 7.25 ✓ barometric pressure resolution (psi): 1 mbar ✓ barometric pressure accuracy (psi): ± 4 mbar ✓ max temperature inside: 65 °C ✓ min temperature inside: 0 °C ✓ temperature resolution inside: 0.1 °C ✓ temperature accuracy inside: ± 0.4 °C ✓ max humidity inside: 95% ✓ min humidity inside: 0 ✓ humidity resolution inside: 0.1% RH ✓ humidity accuracy inside: $\pm 3\%$ RH (5 to 75% RH); otherwise $\pm 5\%$ ✓ max altitude: 8202 ft ✓ min altitude: -328 ft ✓ battery type: AAA ✓ Dimension (H x W x D): 8.3 x 14 x 2.5 cm at least 	5 unit	20,000.00	100,000.00
<p>Item 12: Dehumidifier</p> <ul style="list-style-type: none"> ✓ for laboratory use ✓ compact, digital dehumidifier, 70 pints ✓ portable design ✓ automatic shut-off with bucket full indicator and alarm 	5 unit	50,000.0	250,000.00

✓ loss of power protection with auto restart ✓ automatic defrost			
Item 13: UPS ✓ hybrid UPS with external battery ✓ pure sine wave inverter ✓ configurable input voltage range ✓ configurable battery charging current based on applications ✓ configurable AC/Solar Charger priority compatible to main voltage ✓ or generator power ✓ auto-restart while AC is recovering ✓ overload/over temperature/short circuit protection ✓ rate power: 3 KVA ✓ output voltage: 220 V ✓ External Battery: solar battery, gel type, VRLA Lead Acid, 200 AH, ✓ No need for maintenance	3 units	50,000.00	150,000.00
Item 14: Biosafety Cabinet ✓ Level II ✓ type A2 ✓ with HEPA filter ✓ External Dimension: 1100 x 850 x 1500 mm at least ✓ Airflow velocity (Inflow): 0.50 m/s 105 (fpm) at least ✓ Airflow velocity (Inflow): 0.30 m/s 70 (fpm) at least ✓ Compliant to NSF/ANSI 49 and/or EN 12469 and /or CFDA YY0569 ✓ and /or JIS K3800 ✓ DC ECM motor technology ✓ antimicrobial coating ✓ low noise ✓ with fluorescent and UV light ✓ with 5 kVA AVR	1 unit	400,000.00	400,000.00
Inclusion: <i>provision for demonstration, installation, operating manual, and preventive maintenance</i>			
TOTAL AMOUNT			5,435,000.00

Delivery of the Goods is required one hundred eighty (180) calendar days upon receipt of the Purchase Order. Bidders should have completed, within ten (10) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instruction to Bidders.

- Bidding will be conducted through open competitive bidding procedures using a non-discretionary “pass/fail” criterion as specified in the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184, otherwise known as the “Government Procurement Reform Act”.

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA 5183.

- Interested bidders may obtain further information from Philippine Science High School – Central Mindanao Campus and inspect the Bidding Documents at the address given below during 8am to 5pm only.
- A complete set of Bidding Documents may be acquired by interested Bidders on November 29 – December 23, 2019 from the address below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Six Thousand Pesos Only and 00/100 (P6,000.00) to the PSHS-CMC Cashier.

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

6. The Philippine Science High School-Central Mindanao Campus will hold a Pre-Bid Conference on December 9, 2019, 9AM at Philippine Science High School-Central Mindanao Campus, Nangka, Baloi, Lanao del Norte, which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat at the address below on or before December 23, 2019, 9:00AM. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 18.

Bid opening shall be on December 23, 2019, 9:01AM at PSHS-CMC, Nangka, Baloi, Lanao del Norte. Bids will be opened in the presence of the Bidders' representatives who choose to attend at the address below. Late bids shall not be accepted.

8. The Philippine Science High School-Central Mindanao Campus reserves the right to reject any bid and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.
9. For further information, please refer to:

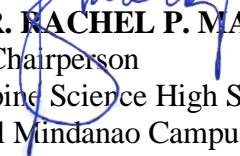
IAN CRIS L. CADILE

Head, BAC Secretariat

Mobile number: 09275159601

iancris2003@yahoo.com

Date of posting: December 29, 2019


ENGR. RACHEL P. MACAMAY
BAC Chairperson
Philippine Science High School-
Central Mindanao Campus
Nangka, Baloi, Lanao del Norte