

Purchase Order
INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE

Appendix 61

Supplier: INSTRUMIX SUPPLIER, INC	P.O. No.: GIAE-PO-2023-12-1507 (STD)
Address: Unit 433/434 CityLand Pasong Tamo Tower 2210 Don Chino Roces Ave. Makati City	Date: December 11, 2023
TIN:	Mode of Procurement: PB

Gentlemen: Please furnish this Office the following articles subject to the terms and conditions contained herein:

Place of Delivery: STANDARDS AND TESTING DIVISION	Delivery Term: 90 CD
Date of Delivery:	Payment Term:

Stock/Property No.	Unit	Particulars	Quantity	Unit Cost	Amount
		SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF ONE (1) UNIT HIGH PERFORMANCE LIQUID			7,577,000.00
		<p>ITEM/DESCRIPTION SHIMADZU HIGH PERFORMANCE LIQUID CHROMATOGRAPHY SYSTEM WITH ACCESSORIES General : <ul style="list-style-type: none"> With automated support functions utilizing digital technology, such as Analytical Intelligence (AI), that enable higher productivity and maximum reliability. Supports the acquisition of high quality, reproducible data for both routine and demanding applications Auto-diagnostic and recovery: <ul style="list-style-type: none"> Equipped with auto-diagnostic for trapped bubbles and recovery has the ability to monitor baseline changes and pressure fluctuations to check for abnormalities. When it detects an unusual fluctuation, it can automatically pause the analysis, purge the flow path, and restart analysis once it has confirmed recovery to normal pressure. Flow Control : <ul style="list-style-type: none"> Equipped with smart flow control that automatically increase the flow rate gradually to the set point without creating start-up protocols </p>			
1 Unit		<p>SHIMADZU SOLVENT DELIVERY UNIT MODEL: LC-40D Pumping method Parallel-type double plunger (approx. 10 µL/1 stroke) Allowable maximum pressure 44 MPa Flow rate settings range 0.0001 – 5.0000 mL/min (1.0 – 44 MPa) 5.0001 – 10.0000 mL/min (1.0 – 22 MPa) Flow rate accuracy 1% or ± 2 µL/min, whichever greater (under specified conditions) Flow rate precision ±0.06% RSD or 0.02 min SD, whichever greater Gradient mode Quaternary low-pressure gradient Gradient range of set concentrations 0 to 100% (0.1% step) Gradient concentration accuracy ± 0.5% (under specified conditions) Wetted materials SUS316L, Hastelloy® C, PEEK, PTFE, Sapphire, Ruby</p>			
1 Unit		<p>SHIMADZU ON-LINE DEGASSER MODEL: DGU-40S Number of degassed solvents 5 Degassed flow line capacity 400 µL/1 line Dimensions [mm], weight W 260 × D 500 × H 72, 4 kg Operating temperature range 4 to 35°C Power supply Supplied from solvent delivery unit</p>			
1 Unit		<p>SHIMADZU COLUMN OVEN MODEL: CTO-40C Temperature control type Forced air circulation Temperature control range Room temperature – 10°C to 100°C Temperature accuracy ± 0.5°C Temperature precision ± 0.05°C Containable column size and Number Up to 250 mm L. column × 6 or 300 mm L. column × 3</p>			
1 Unit		<p>SHIMADZU AUTOSAMPLER MODEL: SIL-40C Injection method Total-volume injection (standard) Allowable maximum pressure 44 MPa Injection volume 0.1 to 100 µL Linearity ± 1% (5 µL injection, n = 20) Injection cycle time ≤ 0.9999 s Samples for processing ≤ 6.7 seconds Injection volume reproducibility RSD 1.0% (0.5 to 0.9 µL), RSD 0.5% (1.0 to 1.9 µL), RSD 0.25% (2.0 to 4.9 µL), RSD 0.15% (More than 5.0 µL), RSD < 0.5% (typically, 0.5 µL), RSD < 0.25% (typically, 1.0 µL), 0.0025% (without rinse), 0.0005% (with rinse, typically) Carryover Standard equipment Dip rinsing outside the needle and injection port rinsing Standard equipment Sample cooler temperature setting range 4 to 45°C (Room temperature needs to be less than 30°C and humidity needs to be less than 70% to set 4°C) Wetted material SUS316L, DLC, PEEK, GFP, PTFE, FEP, ETFE, sapphire, ceramics, PPS, PFKM Available pH range 1 to 14 Dimensions [mm], weight W 260 × D 500 × H 280, 17 kg</p>			
1 Unit		<p>SHIMADZU PHOTODIODE ARRAY DETECTOR Model SPD-M40A Light source Deuterium (D2) lamp, Tungsten lamp Number of diode elements 1024 Wavelength range 190 to 800 nm Wavelength accuracy ± 1 nm Wavelength reproducibility ± 0.1 nm Slit width 1.2 nm, 8 nm Spectral resolution ≤ ± 1.4 nm Drift ≤ 0.4 × 10⁻³ of AU/h (under specified conditions)</p>			

EMAILED

Recipient: _____
 Date: 12-22-24 Time: _____

Purchase Order
INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE

Supplier: INSTRUMIX SUPPLIER, INC	P.O. No.:	GIAE-PO-2023-12-1507 (STD)
Address: Unit 433/434 CityLand Pasong Tamo Tower 2210 Don Chino Roces Ave. Makati City	Date:	December 11, 2023
TIN:	Mode of Procurement : PB	

Gentlemen: Please furnish this Office the following articles subject to the terms and conditions contained herein:

Place of Delivery: STANDARDS AND TESTING DIVISION	Delivery Term : 90 CD
Date of Delivery:	Payment Term :

Stock/ Property No.	Unit	Particulars	Quantity	Unit Cost	Amount
	1 Unit	<p>Noise $\leq 4.5 \times 10^{-6}$ AU (under specified conditions)</p> <p>Linearity 2.5 AU (under specified conditions)</p> <p>Standard flow cell Optical path length: 10 mm, Cell volume: 12 μL, Pressure: 12 MPa</p> <p>Cell temperature control range Available pH range Dimensions [mm], weight Operating temperature range Power supply</p> <p>19 to 50°C, 1°C Step 1 to 13 W 260 x D 500 x H 140, 10 kg 4 to 35°C AC 220 V, 180 VA, 50/60 Hz</p> <p>SHIMADZU SPECTROFLUOROMETRIC DETECTOR Model: RF-20AXS</p> <p>Light source :Xenon lamp Low-pressure mercury lamp</p> <p>Wavelength range :200 to 750 nm Spectral bandwidth :20 nm Wavelength accuracy ± 2 nm Wavelength precision ± 0.2 nm S/N :Water Raman peak S/N = 2000 Low background S/N = 12000</p> <p>Range of cell temperature control :Room temperature - 10°C to 40°C, 1°C step Cell :Standard conventional cell: volume 12 μL, maximum pressure 2 MPa</p> <p>Sampling rate :Max. 100 Hz (Single wavelength mode) Function :Simultaneous measurement of four wavelengths, Wavelength Scanning</p>			
	1 Unit	<p>SHIMADZU DIFFERENTIAL REFRACTIVE INDEX DETECTOR MODEL: RID-20A</p> <p>Measurement range :1 to 1.75 RIU Noise $\leq 2.5 \times 10^{-9}$ RIU Drift $\leq 1 \times 10^{-7}$ RIU/h Range :A mode: 0.01×10^{-6} to 500×10^{-6} RIU P, L-mode: 1×10^{-6} to 5000×10^{-6} RIU Response :0.05 to 10 sec, 10 steps Polarity - Change :Available Zero adjustment :Auto zero, Optical zero, Fine zero Maximum flow rate :20 mL/min Range of cell temperature control :30 to 60°C Cell :Volume 9 μL, Maximum pressure 2 MPa Sampling rate :Max. 50 Hz Dimensions [mm], weight :W 260 x D 420 x H 140, 12 kg Operating temperature range :4 to 35°C Power supply :AC 220 V, 150 VA, 50/60 Hz</p>			
	1 set	<p>System Controller/ reservoir tray, Model SCL-40</p> <ul style="list-style-type: none"> - Connecting all UHPLC modules to the software - system controller features a touch panel and allows the user to control the instrument and carry out analysis preparation directly without the need for a PC. A graphical UI makes the controller easy to use. - Connection via Ethernet - Offers 8 Fiber Optic ports for controlling other system components - 2 events - PC-SSN A/D boards can be installed - All legacy 20- and 30-Series components may be connected. 			
	1 set	<p>Mobile Phase Monitor (MPM-40)</p> <p>Shimadzu's new Mobile Phase Monitor (MPM) is an accessory offering gravimetric monitoring of the mobile phase remaining on an instrument. The MPM is a vendor neutral solution that can be used on nearly any HPLC system. When the remaining mobile phase reaches a user-specified level, the MPM will automatically stop the batch to ensure the system is not run dry.</p>			
	1 unit	<p>SHIMADZU FRACTION COLLECTOR Model: FRC-10A</p> <p>Maximum Flow Rate 150 mL/min Fractionation Mode Configured through a combination of basic mode (initial parameter mode) and time program mode (14 parameters) fully automated analytical fraction collector automated collection of peaks on time-based mode/peak based mode or combination of both, and manual with automated calibration of the delay volume</p> <p>Compatible Containers and Quantities</p> <p>Rack No. 2A 64 fractions Test tubes, D18X110S 20 mL, 100pcs Rack No. 5 120 fractions Test Tube, D10XL75 2- 3.5 ML 350 pcs. Rack No. 1 144 fractions Test tubes (pp), 2- 4 mL, 250pcs W 260 x H 280 x D 320 mm, 18.5 kg</p> <p>Size and Weight</p>			
	1 Set	<p>SHIMADZU LC WORKSTATION LabSolutions™ Chromatography Software</p> <ul style="list-style-type: none"> • Extract the Smallest of Shoulder Peaks The i-PeakFinder tool can automatically recognize peaks even in complex chromatograms with high noise, and accounts for baseline drift for higher integration accuracy. • The i-PDEA II function can quantify peaks that cannot be completely separated by a column. Separate peaks by simply specifying the time and wavelength in LabSolutions. • Consistent Peak Splitting Manually setting the baseline for fused peaks is time-consuming, and the peaks may be split differently depending on the user. • Dynamic Range Extension Function for accurate Calibration i-DREC is a new analytical method that significantly extends the dynamic range. It enables the analysis of high-concentration compounds without diluting them, and ensures a correct calibration curve <p>Inclusion of other accessories required to operate the system:</p> <p>1 set 6-position 7-port valve 2 sets method development HPLC column with 3 different column packings with inclusion of application note for quantitation of phytochemical compounds and guard column 1 set HPLC C18 Columns (3 pieces/set) with guard columns (column length: 150mm, internal diameter: 4.6mm; particle size: 3.5μm) 2 sets flavonoid analytical standards: quercetin ($\geq 95\%$ purity, 10g/bot), kaempferol (97.0%, 500mg) 1 set basic tools for maintenance and troubleshooting 1 set vacuum filtration system for solvent with pump 3 packs membrane filter (nylon, 0.2 μm) for filtration system, 100 pcs/pk 10 packs 100 pcs/pk HPLC vials (1.5 or 2 ml, clear, with writing area and graduation) with cap, septa (PTFE/silicone), and two pcs vial racks 2 packs nylon syringe filter (pore: 0.20 μm, diameter: 25 mm), 1000 pcs/pk 2 sets glass syringe (5 mL, borosilicate glass), 10 pcs/set 2 sets media bottle for mobile phase (1 L, clear, borosilicate glass), 4pcs/set</p>			

Purchase Order
INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE

Appendix 61

Supplier:	INSTRUMIX SUPPLIER, INC	P.O. No.:	GIAE-PO-2023-12-1507 (STD)
Address:	Unit 433/434 CityLand Pasong Tamo Tower 2210 Don Chino Roces Ave. Makati City	Date:	December 11, 2023
TIN:		Mode of Procurement:	FB

General Terms:
Please furnish this Office the following articles subject to the terms and conditions contained herein:

Place of Delivery: STANDARD AND TESTING DIVISION
Delivery Term: 90 CD
Date of Delivery:
Payment Term:

Stock/Property No.	Unit	Particulars	Quantity	Unit Cost	Amount
	1 set	media bottle (1 L, amber, borosilicate glass), 4pcs/set			
	1 set	solvent safety bottle caps kit (4pcs/set)			
	1 pc	deuterium lamp (spare)			
	2 pcs	HPLC waste receiving container (applicable to polar and nonpolar solvents) with capacity 4L			
	2 sets	heavy duty extension cord (6 outlets and cable length 5 m, with switch and circuit breaker)			
	1 set	10 kVA Uninterruptible Power Supply (UPS) with 30 mins back up time			
	1 set	10 kVA AVR			
	1 set	copy of all operating and service manual in English			
	1 set	equipment table Worktop: Solid phenolic resin electron beam cured and double-sided surface, heat/acid/chemical/stain resistant with antibacterial properties, 10 years guarantee scratch/impact/wear resistant, Easy to clean suitable for contact with food. Certification on Greenguard, SEFA 3, ISO Certification 9001 & 14001, test for antibacterial resistance and NSF with Chemical Resistant Rating of 0 (No Effect) to 1 (Excellent) according to SEFA 3 specially on reagent like Acetone, Ethyl ether, benzene, hydrofluoric acid, sulfuric acid, nitric acid, etc., and ASTM Test of worktop physical properties. Thickness and Color: 20 mm, Black, beveled edge. Base/Frame: 3"x2" Steel Square Bar Epoxy powder coated paint Finish with heavy duty leveling bolt. Load capacity: 300 kg			
	1 set	laboratory chair Ergonomic chair with glides and foot ring Seat height adjustment: 550 to 800 mm and backrest height adjustment Twin castors for hard floors and chrome plated steel parts Upholstery: Synthetic leather cushion-washable, resistant to disinfectant and easy to care Conforms to the following standards: GMP compatible Air Cleanliness class according to DIN EN ISO 14644-1 DIN 68877			
	1 set	Dehumidifier Capacity: 20L/ 24 Hours Humidity Adjusted Range: 40%-90% Refrigerant: R-134A With Carbon Filter With LED Display With Drains to Keep Continuous Drainage Function Includes Operation Manual in English			
	1 set	Portable Fume Extractor Ductless hood with digital display; Ducts 2 System flow: <2.5x150 m ³ /h Air velocity: <2.5x11 m/s Filtering efficiency: 0.3 um, >99.9% Noise: <60 dB Dimensions: (mm): 350-450 x 200-250 x 350-450 Weight: ~15kg Voltage: 110V/220V, Power: 200W			
	1 set	Laptop OS: Windows 10 Professional Processor: Intel Core i7 at least 11th Gen Memory: 16GB RAM Storage: 500 GB NVME SSD + 1TB HDD Video card: RTX 3050 Display: 15.6-Inch LCD or LED, FHD Resolution Connector ports: HDMI interface; USB 3.0 port With high resolution built-in camera (1280x720) Connection: wifi 6, With laptop bag and wireless mouse			
	1 set	Printer All-in-One Printer, Fax, Wi-Fi Connectivity capable of Printing A4 and Legal Document Size Copy Capability: Black and White, Color Automatic Document Feeder: 35 pages Stand Alone Copying: Yes Printer - Supported OS: Windows 10 Includes 1 bottle each of ink (black, magenta, cyan and yellow)			
	1 set	Scanner - File formats: TIFF, PDF, JPEG Computer desktop Processor: i5 OS: windows 10 pro RAM: 16 GB; ROM: 2 TB SSD 27 inches monitor includes MS Office (Word, Excel, Powerpoint) lifetime license computer accessories which include to wired mouse, wired keyboard, router, UPS and AVR (wattage depending on the computer requirement)			
<p>Warranty: Five (5) years warranty on parts and services of the HPLC system annual Preventive Maintenance included in the warranty for 5 years maintenance kits included during preventive maintenance</p> <p>On-site Training: Operational training: training on operation, data analysis, troubleshooting with the assigned application chemist Inclusion of necessary reagents/supplies needed for the operational and application training such as standards (1 set of quercetin; >95% purity, 10g/bot, and kaempferol, 297.0%, 500 mg), mobile phase (1 set), syringe filter (1 pack), etc. Training: Application training with a foreign expert on method development and optimization of flavonoids using HPLC; include application note on the analysis of 2 flavanol Others: compounds in plants (specifically quercetin and kaempferol) power requirement: 220 V@ 60 Hz</p>					
				Less: VAT	338,258.97
				EWT	67,651.79
				TOTAL:	7,577,000.00
					405,910.76
					7,171,089.24

(Total Amount in Words): Seven Million One Hundred Seventy One Thousand Eighty Nine Pesos & 30/100

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one percent for every day of delay shall be imposed on the undelivered item/s.

Conform: *[Signature]* Very truly yours, *[Signature]*
 Signature over Printed Name of Supplier: **JEREMY R. MANDAYAO**
 Signature over Printed Name of Authorized Official: **DR. ANNABELLE V. BRIONES**
 Director

Fund Cluster: **SMARTER ONE-LAB FOR INDUSTRY 4.0 THROUGH TRAINING, CALIBRATION, EDUCATION, AND DISCOVERY (ONELAB FOR TED)**
 Funds Available: *[Signature]*
 Signature over Printed Name of Chief Accountant/Head of Accounting Division/Unit Accountant II: **PATRICIA ASHLEY M. MONDOZA**

OIS/BURS No.: **PO-202312 2582**
 Date of the OIS/BURS: **07/23/24**
 Amount: **7,577,000.00**